

# ANZAHPE 2023

TURNING TIDES  
Navigating the Opportunities

## ABSTRACT BOOK



**ANZAHPE**

Australian & New Zealand  
Association for Health  
Professional Educators

YEAR  
ANNIVERSARY  
**50**<sup>th</sup>

**GOLD COAST, QUEENSLAND | 26 - 29 JUNE 2023**

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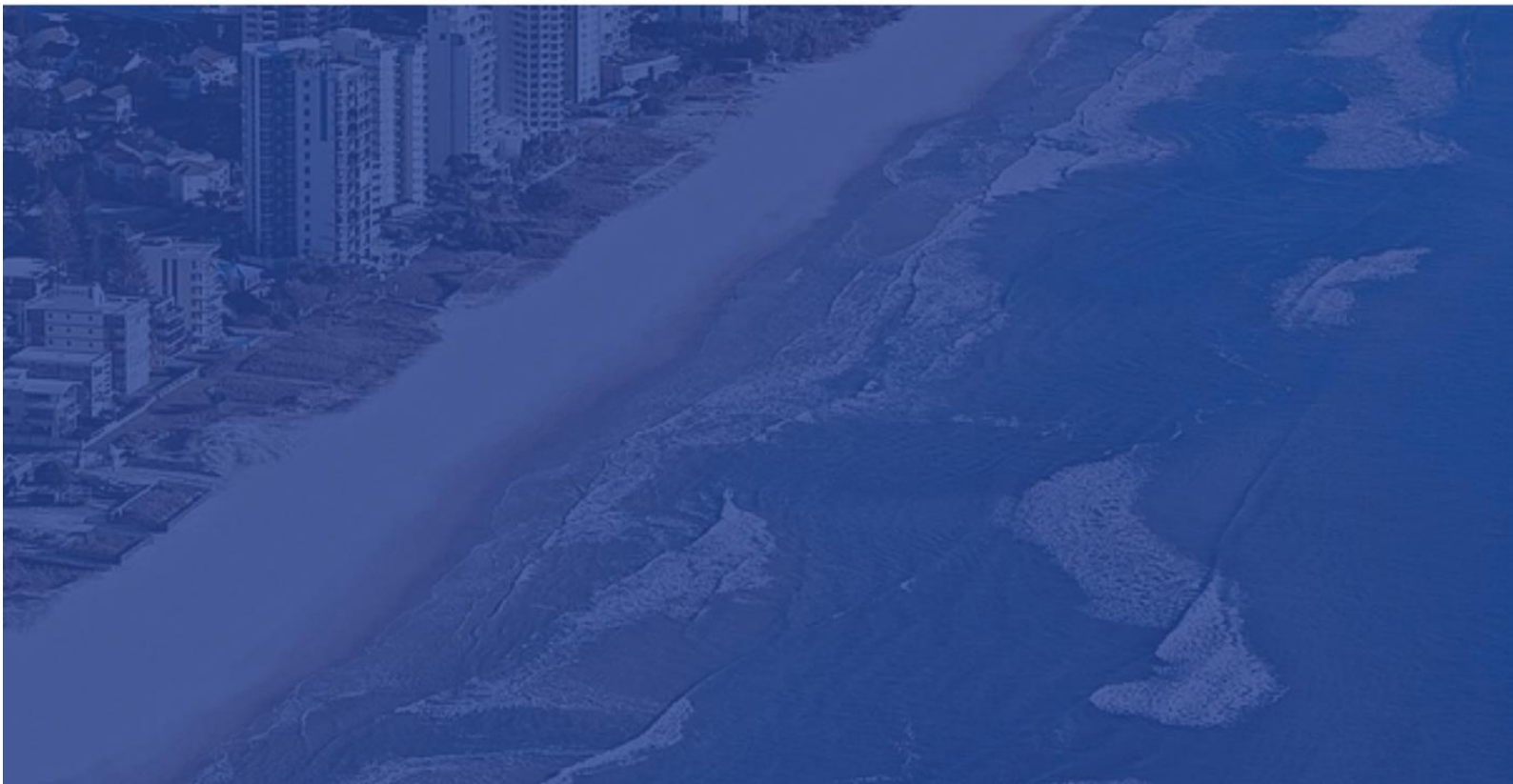


# ANZAHPE 2023

TURNING TIDES  
Navigating the Opportunities

## PROGRAM

PRE-CONFERENCE  
Monday 26 June 2023



### Decolonising, co-constructing, co-designing and Indigenising health curriculum

Dr Kelly Menzel<sup>1</sup>, Dr Kate Odgers-Jewell<sup>2,3</sup>, Miss Myria Cano-Hall<sup>2</sup>, Associate Professor Dianne Reidlinger<sup>2</sup>, Professor Dawn Bennett<sup>2</sup>

<sup>1</sup>Gnibi College of Indigenous Australian Peoples, Southern Cross University, Lismore, Australia, <sup>2</sup>Bond University, Robina, Australia, <sup>3</sup>Northern New South Wales Local Health District, Murwillumbah, Australia

#### Introduction/Background

Cultural respect is essential in delivering health services to people from all backgrounds and is especially required in the context of the unacceptably poor health outcomes experienced by Australia's Aboriginal and Torres Strait Islander population.<sup>1</sup> It is widely recognised that health providers' attitudes and behaviours towards Aboriginal and Torres Strait Islander Peoples can either undermine or enable better health outcomes.<sup>1</sup> Cultural capability is necessary for all health providers, not just those wanting to work in Aboriginal and Torres Strait Islander health or in rural and remote areas.<sup>1</sup> Decolonisation seeks to reverse and remedy the lack of cultural safety experienced by many First Australians in the health system through direct action and by privileging and listening to the voices of First Australians. The responsibility for quality healthcare for Aboriginal and Torres Strait Islander Peoples should be shared across the health system, requiring all university graduates to be equipped with the necessary knowledge, skills, and cultural capabilities to work across all Australian socio-cultural contexts.<sup>2</sup>

#### Purpose and outcomes

According to the Aboriginal and Torres Strait Islander Health Curriculum Framework ('the Framework'), it is essential that higher education providers utilise safe and effective pedagogical approaches that create space for students to develop cultural capabilities by engaging in transformational learning processes.<sup>1</sup> This workshop will introduce participants to the Framework, describe an approach to co-construct, co-design, and co-deliver First Nations health curriculum, and apply yarning, an Indigenous manner of conversation, as a pedagogical approach to encourage learner-centredness, reciprocity, reflexivity, and the development of cultural capability.

#### Issues for exploration

How can universities partner with First Nations communities to co-design strength-based curriculum in meaningful, culturally appropriate, and reciprocal ways?

How can non-Indigenous and First Nations educators facilitate learning experiences in partnership to ensure that the pedagogy of First Nations curriculum is based on intercultural and collaborative practice principles?

How can yarning be utilised as a pedagogical approach to emphasise learning 'from' and 'with' rather than 'about' First Australians, and decolonise health curriculum?

What work do non-Indigenous allies/educators need to do at the cultural interface?

#### Outline of workshop activities

We will begin the session by introducing 'the Framework' and describing yarning as a pedagogy, including the principles of yarning (15-20 mins). We will then pose a question to participants and engage them in a yarn (60 mins). We will finish the session by discussing next steps and how participants could integrate yarning into their teaching (10-15 mins).

#### References

1. Department of Health (2016), Aboriginal and Torres Strait Islander Health Curriculum Framework. Canberra: Australian Government Department of Health.
2. Anderson, LM, Scrimshaw, SC, Fullilove, MT, Fielding, JE & Normand, J 2003, 'Culturally competent healthcare systems: a systematic review', American Journal of Preventive Medicine, vol 24(3S), pp. 68-79.

### **Mitigating for the unintended and undesired consequences of programmatic assessment**

**Dr Mike Tweed<sup>1</sup>, Professor Anna Ryan<sup>2</sup>**

<sup>1</sup>University of Otago, Wellington, New Zealand, <sup>2</sup>University of Melbourne, Melbourne, Australia

#### **Introduction/Background**

A programmatic system of assessment is focused on authentic assessment for learning. The longitudinal design and collation of data by attribute is intended to address known issues with more traditional assessment approaches. Longitudinal use of multiple assessment data points with decreased focus on single high stakes assessments should increase student engagement and reduce failure to fail. A focus on authentic assessment for learning, supports an individualised approach and provides more timely feedback relevant to clinical practice. The rigour of progression decisions is improved with information from authentic assessment data points, collated over time and attribute, reflecting ongoing learner development and the holistic competencies required for clinical practice.

However, such changes can lead to unintended and undesired consequences including an increased assessment workload, increased student anxiety, unlimited opportunities to meet standards, feedback complexity overwhelming learners; data complexity overwhelming staff, and devaluing individual assessments.

#### **Purpose and outcomes**

This workshop will focus on the unintended and undesired consequences arising from transitions to more programmatic approaches to assessment. We will present the existing evidence, our own lessons learned and provide a forum for participants to consider and plan mitigations for unintended and undesired consequences of such transitions.

During the session participants will discuss and share: unintended and undesired consequences of a move to more programmatic systems of assessment; tried and potential strategies to mitigate these consequences; and will develop an initial plan for mitigation of unintended and undesired consequences in their own contexts.

#### **Questions for discussion**

What unintended and undesired consequences have been experienced?

What has been learnt from mitigations put in place to try to reduce the impact of these consequences?

#### **Outline of workshop activities**

Following introductions, the presenters contrast the ideas of intended versus unintended and undesired consequences of changes to more programmatic systems of assessment.

Participants will then identify and discuss experienced and theoretical unintended and undesired consequence. These consequences will be grouped as evolving from: longitudinal use of multiple assessment data points, focus on authentic assessment for learning, collation of data by attribute for decision making, and other aspects.

The groups will discuss the nature of each of these consequences and explore the mitigations that have been tried, or could be tried, sharing with the wider group.

The workshop will conclude with the presenters summarising participants' contributions including unintended and undesired consequences, mitigations attempted (both successful and those less so), and potential mitigations yet to be tested.



## Workshop 3

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### **Educational Design Research: Charting new waters to bridge the theory-practice gap in health professions education**

**Associate Professor Elizabeth Devonshire<sup>1</sup>, Associate Professor Helen Wozniak<sup>2</sup>, Professor Wendy Hu<sup>3</sup>, Dr Christy Noble<sup>2</sup>**

<sup>1</sup>The University Of Sydney, Sydney, Australia, <sup>2</sup>The University of Queensland, Brisbane, Australia,

<sup>3</sup>Western Sydney University, Sydney, Australia

#### **Introduction/Background**

Research in medical and health professions education offers many challenges. It occurs in complex learning environments, is contextually varied, and involves an array of stakeholders. Also, research outcomes often fail to have a significant impact or build theoretical understanding about health professions education. Bridging the gap between research and practice, creating impacts that build theoretical understandings, and generating outcomes that can be adopted to new contexts, are often cited as limitations<sup>1</sup>. To meet these challenges, Educational Design Research (EDR) is a practical approach for investigating wicked educational problems that simultaneously enables the following outcomes: development of creative solutions; refinement of educational theories; and dissemination of transferable learning design principles<sup>2</sup>.

#### **Purpose and outcomes**

The purpose of the workshop is to enable participants to *navigate* the EDR approach and *learn the ropes* for investigating wicked educational problems. Participants will learn about the 3 phases of EDR, when it is an appropriate approach and create an outline of an EDR project to address a particular challenge in a specific practice setting.

#### **Issues for exploration OR Questions for discussion**

In small groups, participants will engage in a simulated health professions education challenge to learn and apply the three-stage process of EDR. From immersion in this challenge, they will experience first-hand EDR in action and gain the tools needed for application of this research methodology in their own educational context.

#### **Outline of workshop activities**

Initially participants are briefly introduced to the three phases of EDR: analysis and exploration, design and construction, and evaluation and reflection. In their small groups they adopt the role of a stakeholder and discuss the EDR research scenario. Through highly interactive debate they follow the EDR process and learn how EDR can be used to research an identified challenge. The simulated EDR project will unfold during the workshop with participants experiencing the initial phases of EDR and the decisions that need to be made during the research process. Additional examples of EDR will be provided to demonstrate the flexibility of the research methodology and in the final segment of the workshop participants will be directed to resources to assist them to plan their own EDR project.

#### **References:**

1. Thomas, A., Gruppen, L.D., van der Vleuten C., Chilingaryand, G., Amarie, F. & Steinert, Y. (2019). Use of evidence in health professions education: Attitudes, practices, barriers and supports. *Medical Teacher*, 41(9), 1012-1022.
2. McKenney, S., & Reeves, T. C. (2021). Educational design research: Portraying, conducting, and enhancing productive scholarship. *Medical Education*, 55(1), 82-92.

## Masterclass 1

### **ANZAHPE-AMEE Essential Skills in Clinical Teaching (ESME CT)**

#### **Course Summary**

Teaching in the clinical environment is defined as teaching and learning focussed on, and usually directly involving, patients and their problems. The clinical environment includes inpatient, ambulatory, conference room settings, hospital or community settings, each with their own distinct challenges. The ESME CT Course is intended for clinicians of any discipline who teach undergraduate and postgraduate trainees in a variety of clinical settings as well as trainees who teach near peers. Clinical teachers have a dual role in medicine, to provide patient care and to teach. In acknowledgment of the complexity of clinical teaching, the educational strategies will employ a non-prescriptive behavioural approach to enhancing teaching skills. Participants will learn to select effective teaching strategies while considering variables such as the content, the learners, and the context. Teachers at all levels of experience and expertise can benefit from an organized review of their teaching while learning from their peers.

#### **Course faculty:**

Dr. Subha Ramani, MBBS, PhD, FAMEE (ESME CT Course Lead); AMEE President; Associate Professor of Medicine, Harvard Medical School; Adjunct Professor, Massachusetts General Hospital Institute for Health Professions; Director, Program for research, innovations and scholarship, Department of Medicine, Brigham and Women's Hospital; Assistant Director, Global perspectives and community, Brigham Education Institute; Boston, MA, USA

Dr. James Kwan, MBBS, BSc (Hons), MMed (ClinEpi), MHPE, MRCSEd, FACEM, FRCEM, FAMS; Senior Consultant, Department of Emergency Medicine, Tan Tock Seng Hospital; Chair, Core Curriculum and Education Committee, International Federation for Emergency Medicine; Adjunct Associate Professor, Yong Loo Lin School of Medicine, National University of Singapore, Singapore; Adjunct Asst. Professor, Emergency Medicine, Lee Kong Chian School of Medicine

Dr. Kichu Nair AM, MBBS, MD ( Newcastle ) FRACP, FRCP, FAMEE, FANZHPE; Professor and Associate Dean , School of Medicine, Newcastle ; Director of Centre for Medical Professional Development, Newcastle; Director, Educational Research, Health Education and Training Institute of NSW, Sydney . He is the Associate Editor in Chief of the Journal HETI, NSW of Advances in Medical Education and Practice. Prof Nair is the Chair of the Workplace Based Assessment Development Group of the Australian Medical Council .

Dr. Ruth Hew MBBS, BA, FACEM, MSc(Clin.Epi.); Emergency Physician and Director of Emergency Medicine Training, Sunshine Hospital, Western Health, Melbourne, Australia; Director of Network Emergency Medicine Education (Western Health)

## **Learning outcomes:**

### **By the end of this course, participants will be able to**

- Apply adult learning principles in analysing and enhancing own clinical teaching skills
- Learn to select the right strategy for different clinical teaching situations (inpatient or ambulatory settings, levels of learners, content to be taught such as history taking, physical examination, clinical reasoning etc)
- Gain comfort and confidence in teaching learners when patients are present, whether ward, ambulatory or conference room settings (bedside teaching)
- Apply core principles of time-efficient teaching in busy clinical work environments
- Understand and apply direct observation to assess learners' knowledge, skills and attitudes directly related to patient care
- Reflect on and practice skills for effective feedback

## Workshop 4

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### Co-designing clinical placement models that enhance student learning and service delivery

**Associate Professor Gillian Nisbet<sup>1</sup>, Associate Professor Merrolee Penman<sup>1,2</sup>**

*<sup>1</sup>The University of Sydney, Sydney, Australia, <sup>2</sup>Curtin University, Perth, Australia*

#### **Introduction/background:**

Allied health is in the unique position of needing to actively source placements across multiple sectors in an extremely competitive environment where allied health programs seem to be proliferating on a daily basis! Furthermore, different priorities between key stakeholders can be a source of tension when developing and facilitating student placements. Service providers need to ensure safe, high quality patient/ client services are maintained; universities need to ensure quality immersive student learning experiences that develop graduates who are work-ready; students want to develop their specific professional competencies; and patients want positive quality care experience. This workshop will share what we have learnt through a collaborative research project founded on a partnership between a health service provider and university to co-design placement models that identified the most appropriate service caseload, supervision structure and learning opportunities for students. This co-design approach was successful in generating mutual benefit for service providers, universities, students and patients and has utility for innovative placement design for all health professions.

#### **Purpose and outcomes:**

This workshop is an opportunity for both service provider and university staff involved in planning and supporting student placements to explore opportunities for co-designing innovative student placements within their workplace that generate mutual benefit. By the end of the workshop, participants will have a toolkit of evidence-based strategies to co-design student placement models that enhance service provision whilst simultaneously providing authentic student engagement in innovative service delivery.

#### **Issues for exploration or questions for discussion:**

Workshop participants will explore experiences, challenges and success in co-designing clinical placement models. Specific discussion points will include: (i) identify areas of practice where students could be more engaged, and could contribute to enhancing service provision (ii) explore the factors that contribute to positive learning experiences for students and quality service delivery and inherent tensions between the two, (iii) design placement models that benefit both student learning and service delivery, and (iv) recognise how to develop and support health/faculty partnerships.

#### **Outline of workshop activities**

This interactive workshop will draw on findings from a recent multi-site research project and participants' experience and expertise to explore the benefits and challenges of co-designing student placements. Following an interactive discussion, participants will have the opportunity to work in small groups to identify how this may apply to their own work and education contexts and develop strategies that can be implemented following the workshop.

## Workshop 5

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### **Making the most of opportunities to give feedback on learners' communication skills in clinical practice**

**A/Prof Conor Gilligan<sup>1</sup>, Miriam Grotowski<sup>1</sup>**

*<sup>1</sup>University of Newcastle, Australia*

#### **Introduction/Background**

Recent years have seen a plethora of literature emerge relating to the importance of, and providing recommendations for, giving feedback to learners in medical education. Our recent Cochrane review<sup>1</sup> reinforces the importance of specific, personalised feedback as the most important factor in improving medical students' interpersonal communication skills. However, students are rarely directly observed in their communication with patients in clinical practice, and therefore rarely receive feedback on their communication skills. Further, there is often a disconnect between the communication skills training (CST) delivered in classroom settings, and that modelled and reinforced in clinical settings.<sup>2</sup> Exploration of the gaps between the content of patient encounters and case presentations has shown that social history, patient perspective, and communication quality are not often conveyed in case presentations, heightening the difficulty of any feedback focus on these areas.

While CST has become ubiquitous in medical and other health professional curricula, the CST to which supervising clinicians and clinical educators were exposed was varied and often minimal. While teaching communication skills during clinical training is important in order to reinforce communication skills learned in formal courses and develop new skills, clinical supervisors can find this task challenging to accomplish. This workshop will explore 'informal' clinical communication teaching opportunities such as role modelling, observation and responding to patient presentations as well as more formal approaches using learners' immediate clinical experiences.

#### **Purpose and outcomes**

The main goal of this workshop will be to provide educators with approaches for delivering brief, focused and constructive feedback on learners' communication skills in clinical placement settings. The workshop will use experiential learning approaches to role-model and provide opportunities to practice key skills.

#### **Issues for exploration OR Questions for discussion**

What do I focus on when I feel as though an entire patient encounter could have been improved?

How can I provide feedback when the patient is present?

How can I give feedback if I have only observed the students' presentation and not the patient encounter?

#### **Outline of workshop activities**

10 minutes – introductions and understanding of participants' learning needs

10 minutes – discussion of key communication skills and consultation elements which can form the basis of feedback, and discussion of simple feedback structures/approaches

60 minutes – practice with role-play and feedback. All learners have an opportunity to take part at least one level of the meta-feedback experience.

10 minutes – wrap-up and take-home messages

#### **References**

1. Gilligan C, Powell M, Lynagh MC, Ward BM, Lonsdale C, Harvey P, James EL, Rich D, Dewi SP, Nepal S, Cro' HA, Silverman J. Interventions for improving medical students' interpersonal communication in medical consultations. Cochrane Database of Systematic Reviews 2021, Issue 2. Art. No.: CD012418. DOI: 10.1002/14651858.CD012418.pub2.
1. Rosenbaum, ME and Axelson, R. Curricular disconnects in learning communication skills: what and how students learn about communication during clinical clerkships. Patient Educ Couns 2013 Vol. 91 Issue 1 Pages 85-90

# Workshop 7

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## Using Theory in Health Professions Education Research and Scholarship

**Associate Professor Koshila Kumar<sup>1</sup>, Professor Wendy Hu<sup>2</sup>, Dr Christy Noble<sup>3</sup>**

<sup>1</sup>Flinders University, Australia, <sup>2</sup>Western Sydney University, <sup>3</sup>The University of Queensland

### **Introduction/background:**

Theory can be understood as a specific set of ideas or a lens that can be used to examine and explain phenomena in health professions education (HPE). It is a powerful tool that can enhance the quality of research and scholarship and support the transfer of educational innovations into practice across contexts. Yet, using theory in HPE research and scholarship is not easy and requires support<sup>1,2</sup>.

### **Purpose and outcomes:**

This workshop aims to demystify educational theory and theory use for early career researchers and those new to HPE research and scholarship (including students, educators, clinicians). Workshop participants will be supported to:

2. Articulate their views about theory and how theory can be used in teaching and learning projects
  1. Identify commonly used theories in HPE research and scholarship
  2. Outline key considerations for selecting, appraising, and using theory

### **Issues for exploration or questions for discussion:**

This workshop will cover common issues related to selecting and using theory, including:

- What theory is
- How theory can add value to HPE research and scholarship
- Which theories are relevant to HPE
- How to justify selection of a theory and align choice of theory with paradigm and methodology
- How to use a selected theory including when it should be used
- How to write up theory within scholarly reports and papers

### **Outline of workshop activities**

The presenters will draw on their experiences of using theory and helping students, teachers and clinicians to engage with theory, to guide workshop participants. A combination of activities, including brief presentations, case study analysis, small and whole group reflective and discussion activities will be used to build on participants' prior experiences and understandings of theory. The presenters will provide examples of theory use and guide participants through these. Participants are invited to bring questions or problems related to the use of theory from their own learning and teaching projects to provide a basis for discussion, analysis, and feedback.

### **References**

1. Kumar, K., Roberts, C., Finn, G. M., & Chang, Y. C. (2022). Using theory in health professions education research: a guide for early career researchers. *BMC Medical Education*, 22(1), 601.
2. Nimmon, L., Paradis, E., Schrewe, B., & Mylopoulos, M. (2016). Integrating theory into qualitative medical education research. *Journal of Graduate Medical Education*, 8(3), 437-438.

## Workshop 8

**Presenters: A/ Prof Jodie Copley FoHPE Deputy Editor, FoHPE Editorial Board members: Tim Wilkinson, Simone Gibson, Louisa Remedios**

### **Writing for Publication Workshop**

#### **Introduction**

This workshop is part of the regular program at ANZAHPE conferences. The Association is keen to assist its members in developing academic writing skills. In particular it seeks to encourage and upskill early career academics. The workshop is led by Editorial Board members of the Association's journal, *Focus on Health Professional Education* (FoHPE).

#### **Aims**

- Assist participants in getting their message across in publications, by working on small samples of text
- Provide feedback and advice on an issue related to a particular paper
- Learn about the reviewing and publishing process, using FoHPE as a case example

#### **Activities**

The workshop will be focused on the needs of the participants. The participants will be required to bring along a piece of their own writing to the workshop, typically a title and abstract for work they hope to publish. A mixture of short presentations and small group work will be used.

**Facilitators:** The FoHPE Editor and Associate Editors

## Workshop 9

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### Working with Simulated Participants in Health Professions Education: sharing best practice, tools, and frameworks

Dr Jessica Stokes-Parish<sup>1</sup>, Mrs Karenne Marr<sup>1</sup>, Associate Professor Suzanne Gough<sup>1</sup>

<sup>1</sup>Bond University, Australia

#### Background

Simulated Participants (also described as simulated patients or standardised patients) have long been established in health professions education as an opportunity to create authentic learning environments and prepare learners<sup>1</sup>.

#### Purpose and outcomes

This workshop will invite participants to share their experiences of working with Simulated Participants (SPs). The workshop will suit academics with and without experience working with SPs. Facilitated workshop activities will focus on several key areas: i) theory informing working with SPs, ii) sharing tools available to assist the benchmarking SP Programs<sup>1</sup>, iii) practical tips for embedding SPs in their workplace<sup>2</sup>.

We will share tools to enable participants to plan, develop, integrate, delivery and evaluate simulated participant involvement in health professions education<sup>2</sup>.

#### Issues for exploration OR Questions for discussion

In this workshop, we will explore a) the role of simulated participants in health professions education, b) compare theories relevant to simulated participants, c) identify the key elements of quality simulated participant programs for benchmarking, d) apply the concepts of psychological safety to activities involving simulated participants.

#### Outline of workshop activities

This collaborative workshop will engage participants to explore the history and theory of simulated participants and take away practical tools to apply in their place of work. The workshop will be facilitated by experienced faculty (academic researchers together with simulated participants) who will use strategies and activities such as: i) small group learning, ii) self-assessment and Simulated Patient Common Framework<sup>2</sup> tools, iii) SMART goal setting, and iv) reflection activities.

Participants will be invited to continue the workshop conversations by joining the '**Simulated Participant HTAG**'. The purpose of this HTAG is to develop a network of both education professionals and simulated participants to learn with and from one another. This is a group that can share knowledge and experiences about working with SPs and is open to those who already work with simulated participants or those who wish to work with SPs in the future.

The outcomes of this HTAG include but are not limited to:

3. Sharing knowledge and outcomes of working with simulated participants.
  - Increasing collaboration between SPs and educators from different universities.
  - Improving and expanding the way in which simulated participants are included in teaching methods.
  - Encouraging discussion around training, governance and quality assurance when working with SPs.

#### References

1. Stokes-Parish, J., Alsaba, N., & Marks, R (2022). Simulated Participant Methodology. Simulation Podcast. <https://research.bond.edu.au/en/publications/simulated-participant-methodology>
2. Gough, S., Greene, L., Nestel, D., Hellaby, M., MacKinnon, R., Natali, A., Roberts, S., Tuttle, N., & Webster, B. (2015). Simulated Patient Common Framework. Health Education England North West and Manchester Metropolitan University. [http://www.ewin.nhs.uk/sites/default/files/SP%20Common%20Framework%20and%20Checklist\\_ersion%20for%20websites.pdf](http://www.ewin.nhs.uk/sites/default/files/SP%20Common%20Framework%20and%20Checklist_ersion%20for%20websites.pdf)

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***



## Masterclass 2

### **Masterclass 2: ANZAHPE-AMEE Essential Skills in Health Professions Education Leadership and Management (ESMELead)**

#### **Course Summary**

The ANZAHPE-ESMELead Masterclass introduces key aspects of leadership and management for health professions educators who wish to develop a deeper understanding of leadership and management theory so they can improve their leadership skills and approaches to be more effective. The half-day workshop is theory informed, practice driven, context specific, highly interactive, supportive and fun.

**Who should participate in this course:** This course is for anyone (at any level) involved in health professions education who wants to learn more about leadership and management in health professions' education (in the academic or clinical setting) and explore the evidence base to help them become more effective leaders, managers and followers.

#### **Course faculty:**

**Professor Judy McKimm MBA, MA (Education), BA (Hons), SFHEA, FAcadMed, FAMEE** Professor of Medical Education, Chester Medical School, UK; Emeritus Professor of Medical Education, Swansea University, UK; Visiting Professor, King Saud University, Kingdom of Saudi Arabia. Former Dean of Medical Education Swansea University; Pro-Dean, Health & Social Practice, Unitec New Zealand, and Director of Undergraduate Medicine, Imperial College London

**Honorary Associate Professor Paul Jones RGN, BSc (Hons), PGDip (Adv Practice)**, Honorary Associate Professor, Swansea University Medical School, Former Programme Director, Graduate Entry Medicine programme, Swansea University Medical School

**Professor Kirsty Forrest** MBCHB, BSc Hons, FRCA FAcadMed, MMed, FANZCA, Professor of Medical Education and Dena of Medicine Bond University, Gold Coast, Australia. Executive Member and Treasurer of the Medical Deans of Australia and New Zealand (MDANZ) and Chair of the Medical Education Collaborative Committee.

**Associate Professor Jo Bishop BSc (Hons), PhD, PGCertEd** is the current ANZAHPE president, Associate Dean, Student Affairs and Service Quality for the Faculty Health Sciences and Medicine Bond University, Gold Coast, Australia as well as the Curriculum Lead for the Bond Medical Program.

#### **Learning outcomes**

Through participating in the masterclass, delegates will be able to:

- Demonstrate understanding of leadership in contemporary health professions education
- Define key concepts relating to educational leadership, management and followership
- Explore strategies for leading and managing change
- Apply this learning to their own practice and context

## Workshop 10

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### **Vulnerability in Medicine Tutorials – minimising power differentials, building relationships & championing self-care**

**Dr Michaela Kelly<sup>1</sup>, Dr Alison Green<sup>1</sup>, Dr Johanna Lynch<sup>1</sup>, Dr Penny Mainstone<sup>1</sup>, Associate Professor Nancy Sturman<sup>1</sup>**

<sup>1</sup>*The University of Queensland, Herston, Australia*

#### **Introduction/Background**

The *Vulnerability in Medicine* (ViM) tutorial program was developed to provide protected time and a psychologically safe space for third and fourth-year medical students at The University of Queensland to debrief and consider challenges in the doctor-patient relationship and clinical workplace. It is also a forum for tutorial participants to engage in the medical humanities and creative arts and focus on self-care. We minimise student-teacher power-differentials in these tutorials by having tutors undertake exactly the same tasks as the students (Kelly, et al., 2022).

#### **Purpose and outcomes**

The purpose of this workshop is to allow participants to experience some components of a Vulnerability in Medicine tutorial. Our target audience will be clinical teachers engaged in teaching medical or other health professional students in the clinical workplace. Most of this workshop will consist of discussion and sharing perspectives in a small peer group setting.

#### **Issues for exploration OR Questions for discussion**

Several issues will be explored focusing on therapeutic relationships, clinical workplace challenges and self-care. Participants will be encouraged to engage in the medical humanities and creative arts and experience the tutorial as our tutors and students do.

#### **Outline of workshop activities**

A brief introduction to the concept of the Vulnerability in Medicine (ViM) program will be provided. This will include the context, purpose and design of the tutorials. The participants will then be divided into small groups of approximate 6-9 to experience several components of a ViM tutorial. The tutorial will commence with an introductory activity and a health and wellbeing check-in. Tutorial tasks will be randomly allocated to participants to lead the group discussion surrounding a thought-provoking question, a brief excerpt from literature written by a doctor, a clinical workplace scenario and sharing of something from the humanities or creative arts valued by a participant that resonates with their concept of vulnerability or what being a health professional means to them. The session will close with a brief reflection by one of the workshop facilitators. Our hope is that participants will enjoy the discussion and be enriched by the perspectives of their peers.

Kelly, M. et al., 2022. Things we are expected to just do and deal with': Using the medical humanities to encourage reflection on vulnerability and nurture clinical skills, collegiality, compassion, and self-care.. *Perspect Med Educ*, 11 (<https://doi.org/10.1007/s40037-022-00724-w>), pp. 300-304.

### **LGBTQI+-inclusive Health Professions Education – Producing meaningful change in the learning environment through faculty development**

**Dr Eleonora Leopardi<sup>1</sup>, Dr Graeme Horton<sup>5</sup>, Melodie Van Wyk<sup>1,4</sup>, Dr Katie Wynne<sup>1,2</sup>, Dr Katie Bird<sup>1,2,3</sup>**

<sup>1</sup>Joint Medical Program, School of Medicine and Public Health, University of Newcastle, Newcastle, Australia, <sup>2</sup>Hunter New England Local Health District, , Australia, <sup>3</sup>University of Newcastle Medical Society, University of Newcastle, Newcastle, Australia, <sup>4</sup>University of New England's Medical Students' Association, University of New England, Armidale, Australia, <sup>5</sup>University of Newcastle, Australia

#### **Introduction/Background**

LGBTQI+ individuals suffer greater health risks than cisgender and heterosexual individuals, including higher prevalence of mental health conditions, cardiovascular disease, and alcohol, tobacco and substance use. Furthermore, stigma and discrimination hinder access to healthcare. To address this, adequate training of healthcare professionals is paramount. Unfortunately, LGBTQI+ health issues are poorly addressed in medical curricula, with calls being made for curricular reform. Although curricular reform is essential, the existence of hidden and informal curricula in learning environments must be acknowledged and addressed for changes to the formal curriculum to be effective. In the context of LGBTQI+ health issues, many medical educators themselves are unaware of the nuances of this topic and are not only unable to train the students in providing gender-informed and inclusive care, but also often fail to reinforce or inadvertently undermine the content of the dedicated teaching sessions in the formal curriculum. Within the Joint Medical Program's LGBTQI+-inclusive Health Professions Education initiative, the Inclusivity Training (IT) has been developed. The IT informs educators of critical challenges in LGBTQI+ health and empowers them to transmit relevant knowledge to medical students, demonstrate positive role modelling and inclusivity throughout interpersonal exchanges.

#### **Purpose and outcomes**

In this workshop, we will run our Inclusivity Training, and discuss the structure and overall goals of the LGBTQI+-inclusive Health Professions Education initiative, which are adaptable to other contexts and institutions. We aim to provide an example of our approach, focused on sustainability and consultation with numerous stakeholders in the LGBTQI+ community and the student associations.

#### **Issues for exploration OR Questions for discussion**

At the end of the workshop, participants will be able to: describe the importance of appropriate language around sex, gender identity, sexuality; describe the impact of heteronormativity and cisnormativity on queer people in accessing support from institutions, including healthcare; incorporate LGBTQI+ health issues in their teaching; describe the importance of informal and hidden curricula in reinforcing formal curriculum content.

#### **Outline of workshop activities**

The Inclusivity Training begins with a brief assessment of participants' knowledge, guiding the workshop towards areas they are not already familiar with. The body of the session alternates brief didactic moments (presentation of the Gender Unicorn, introduction of heteronormativity and cisnormativity) with active full- and small-group activities: personal reflections, role-playing scenarios, and planning of delivery of PBL/TBL activities to elicit LGBTQI+ learning. A presentation of the JMP's initiative and discussion of its adaptability to other institutions will conclude the session.

## Workshop 12

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### Speed Mentoring: Nurturing the future leaders of ANZAHPE

**Dr Megan Anakin<sup>1</sup>, Julie Ash<sup>2</sup>, Ben Canny<sup>3</sup>, Charlotte Denniston<sup>4</sup>, Elizabeth Molloy<sup>4</sup>, Adrian Schoo<sup>2</sup>, Joanna Tai<sup>5</sup>**

*<sup>1</sup>University Of Otago, Dunedin, New Zealand, <sup>2</sup>ANZAHPE,, <sup>3</sup>University of Adelaide, Adelaide, Australia,*

*<sup>4</sup>University of Melbourne, Melbourne, Australia, <sup>5</sup>Deakin University, Melbourne, Australia*

#### **Introduction/Background**

The Australian and New Zealand Association for Health Professional Educators (ANZAHPE) promotes the career development of health professionals, educators, students, and researchers. This mentorship is founded on a culture of inclusion that involves sharing our knowledge and experiences of practice and research in a supportive environment.

#### **Purpose and outcomes**

This workshop aims to nurture those with an interest in the scholarship of health professions education to have quick fire conversations with ANZAHPE members with experience in mentorship. Outcomes of this workshop will be for participants to (1) reflect on their career goals, (2) enhance their awareness of the breadth of expertise among ANZAHPE members available to support career development in health professions education, and (3) engage in discussions with colleagues about topics or experiences relevant to their career development.

#### **Issues for exploration OR Questions for discussion**

Topics for discussion will include: (1) Leadership: How to support high performing teaching and learning teams, partnerships and innovations, (2) Faculty development: How to foster a culture of scholarship of learning and teaching in your workplace, (3) Career development: What to consider when changing direction, (4) Initiating scholarship: How to incorporate evaluation and research into busy teaching roles, (5) Well-being: How to establish and maintain work/life balance or goals, (6) Networking: Why connecting with colleagues is important.

#### **Outline of workshop activities**

In this workshop, participants will be provided with a 10-minute introduction to the mentoring scheme, and the structure of the workshop itself. Participants will be provided with an overview of how mentorship is a core function of ANZAHPE and will gain an understanding of the ethos and process of 'speed mentoring'. Participants will select three from the listed six topics for discussion and will rotate through three small group conversations facilitated by a mentor. Each conversation will be allotted 20-minutes. The workshop will close with a 10 minute wrap-up to share insights and allow participants to identify a goal for action for both mentoring as a process and their career development.



# **ANZAHPE 2023**

**TURNING TIDES**  
Navigating the Opportunities

## **PROGRAM**

**DAY ONE**  
**Tuesday 27 June 2023**



# Plenary 1

Dr Subha Ramani, Harvard Medical School

## **Inclusive educational excellence: Balancing belonging and uniqueness**

Subha Ramani, MBBS, MPH, PhD, FAMEE

Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA

### **Introduction/Background**

Health professions educators benefit greatly from belonging and contributing to communities of practice with shared interests, passion and goals. However, complete like-mindedness may not maximally enrich these educational communities or allow its members or the team to reach their maximum potential. A framework for inclusive pedagogy may be a valuable strategy to nurture multicultural communities of teachers and learners and forge partnerships and collaborations across geographical boundaries. Inclusion in education could be defined as bringing together individuals at multiple career stages from multiple professions and disciplines, with varied skillsets, approaches to a task or problem, opinions, cultural backgrounds and ideas to the table whether it is curriculum or program design, research and scholarship or leadership. As globalisation in health professions education flourishes, it is essential that educational initiatives move away from how-to recipes for increasing knowledge and skills to enhancing curiosity and respect for a variety of perspectives, humility in seeking knowledge from others, and a safe space to engage in these conversations.

### **Purpose/Objectives**

1. Conceptualise an inclusion framework to nurture multicultural communities of practice in health professions education (HPE)
2. Analyse concepts of optimal distinctiveness theory and the tensions of balancing belonging and uniqueness within educator communities
3. Discuss practical strategies to maximise inclusive excellence in HPE

### **Issues/Questions for exploration OR Ideas for discussion**

1. How can educational leaders model respect and curiosity for a variety of perspectives even if they contradict their own?
2. How can educational institutions design an interdisciplinary roadmap for inclusive educational excellence?

### **References**

1. Nadarajah V, Ramani S, Findyartini A, Sathivelu S & Nadkar A (2023): Inclusion in global health professions education communities through many lenses, *Medical Teacher*, DOI: 10.1080/0142159X.2023.2186206.
2. Leonardelli GJ, Pickett CL, Brewer MB. 2010. Optimal distinctiveness theory: a framework for social identity, social cognition, and intergroup relations. *Adv Exp Soc Psychol.* 43: 63–113.

## 1A Symposium

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### Using CHAT and change labs to tackle intern wellbeing at a systems level

**Professor Andrew Teodorczuk<sup>1,2,3</sup>, A/Professor Alison Ledger<sup>2,4</sup>**

*<sup>1</sup>Metro North, Brisbane, Australia, <sup>2</sup>Faculty of Medicine, UQ, Brisbane, Australia, <sup>3</sup>School of Medicine and Dentistry, Griffith University, Southport, Australia, <sup>4</sup>Academy for Medical Education, UQ, Brisbane, Australia*

#### **Introduction/Background**

Managing one's own wellbeing is central to being a safe doctor. When interns enter clinical practice with variable degrees of preparation for practice, self-care is "taught" and effective approaches to improve resilience are shared. However, in the face of long work hours, multiple competing priorities, dealing with complex interprofessional tensions and trying to preserve patient empathy, it is unclear what impact, if any, these well-intentioned suggestions may have. In the context of these challenges, the individual focus of "resilience" can be perceived as offensive rather than nurturing or developmental.

Therefore, there exists a need not only for individual learning processes but also systems level learning to create more supportive, safe and welcoming environments for interns.

#### **Purpose/Objectives**

The purpose of the symposium is to highlight a need to rethink the way we approach wellbeing in the intern space, showcase the power of Cultural Historical Activity Theory (CHAT) and Change Labs in other settings and to help inform the development of a research program underpinned by Activity theory that may lead to meaningful change.

#### **List of presentations**

Andrew Teodorczuk – Lets CHAT about intern wellbeing

This presentation will outline the need for new research approaches such as CHAT to tackle the wicked problem of burnout. Being an intern is the highest risk time in terms of developing burnout. We know this is because interns are grappling with making the right decisions in the face of greater responsibility. Numerous approaches from mindfulness to building connections and reflective journaling have been proposed to help develop resilience. However, the reality of the challenge is that given the greater degree of system pressures, these approaches, though necessary, are insufficient. Cultural Historical Activity Theory is an educational research approach that can lead to Bateson level three learning at a systems level. It has been applied to help develop through multivoiceness approaches to improve dementia and delirium education. As yet it has not been used as a lens to explore intern wellness and arguably there is a case for such application.

Alison Ledger – Enabling expansive learning through a change lab

Alison will introduce an interventionist research approach called change laboratory, which uses the conceptual tools of CHAT and enables workers to collectively create and test out new practices. She will share experiences gained as both a change lab facilitator and participant, to demonstrate the power of change laboratory methodology in valuing multiple perspectives and fostering dialogue and reflection. The conditions needed for a successful change lab in clinical workplaces will also be introduced, including time and space, buy-in and participation from a variety of relevant stakeholders. Symposium attendees will be invited to consider how a change laboratory may support change beyond the individual and team level and achieve systems level change related to interns' wellbeing.

#### **Discussion: Issues/questions for exploration OR Ideas for discussion**

1. What value may CHAT and change labs have in terms of researching systems level learning in healthcare originations?
2. What activity systems lend themselves to study a Change Lab in the intern wellbeing space?
3. What research question related to intern wellness can CHAT help explore?

### **The Morbidity and Mortality meeting in paediatrics: an important interdisciplinary learning opportunity**

**Ms Emma Jeffs<sup>1,2,3</sup>**, Professor Clare Delany<sup>1,2</sup>, Professor Fiona Newall<sup>1,2</sup>, Associate Professor Sharon Kinney<sup>1,2</sup>

<sup>1</sup>The Royal Children's Hospital, Parkville, Australia, <sup>2</sup>The University of Melbourne, Parkville, Australia, <sup>3</sup>The Women's and Children's Health Network, North Adelaide, Australia

#### **Introduction**

Acknowledged as an important opportunity for education and learning, the Morbidity and Mortality meeting uses case-based presentation and discussion within the local clinical team. The goal is to improve patient care by examining patient deaths, adverse events or rare and interesting cases. Given the varied specialty settings and different professional disciplines and experience levels of attendees, it is unsurprising that the type of learning sought and realised is dynamic and movable. This research explores the goals and experience of Morbidity and Mortality meeting attendees using Qualitative Case Study Methodology, and we aim here to present goals relevant to the interdisciplinary learning potential of the meeting.

#### **Methods**

Qualitative Observations (n=32) of Morbidity and Mortality meetings in six departments were paired with semi-structured interviews with meeting attendees (n=44). The goals of the meeting were explored in interviews, in addition to the experience of attendees. Interviews and observations were transcribed and analysed using Braun and Clarke's thematic analysis.

#### **Results**

Engagement and interest of meeting attendees were promoted through case-based learning using contemporary patients. Attendees sought to learn clinical information about patients, but also professional skills such as how to approach team disagreement, and how to determine professional behaviour standards. Collaboration and exposure to clinical expertise were considered beneficial in providing a unique, rich, and dynamic learning environment. The interdisciplinary relationships visible in the meeting were influential in how comfortable nurses and junior medical staff felt to contribute, and some strategies to include these voices more equitably were suggested and observed.

#### **Discussion**

The way in which Morbidity and Mortality meeting attendees seek to learn is multifaceted and complex. The meeting provides a rich environment to collaborate and to learn, and this research maps some of the nuance and complexity to deepen the understanding of the unrealised and realised educational potential of the forum.



## Can we advance interprofessional education by leveraging the power of accreditation?

**Margo Brewer**<sup>1</sup>, Lyn Gum<sup>2</sup>, Megan Anakin<sup>3</sup>

<sup>1</sup>Curtin University, Perth, Australia, <sup>2</sup>University of South Australia, Adelaide, Australia, <sup>3</sup>University of Otago, Christchurch, New Zealand

### Introduction/Background

Interprofessional education has become more fragmented following the pandemic despite global workforce shortages and greater population health needs. Accreditation is a powerful driver for interprofessional education in pre-registration and health service settings (Azzam et al. 2022). However, accreditation requirements vary for among health professions, institutions, and regional jurisdictions. As a result current accreditation standards use different descriptions for practitioners' scope of practice, how clinical teams deliver care in health settings, and how to configure learning opportunities.

### Aim/Objectives

The aim of this session is to engage in dialogue with three members of the Australasian Interprofessional Practice and Education Network (AIPPEN) leadership group about the role accreditation has in driving further advancement in interprofessional education in Australasia.

### Discussion

We will describe the impact of accreditation on interprofessional education and identify key issues arising from this situation. We will provide an overview of the concept of interprofessionality and outline a framework for discussing interprofessional education (D'Amour & Oandasan, 2005). We will invite participants to share ideas about the role accreditation has in driving further advancement in interprofessional education in their institution specifically, and Australasia more generally.

### Issues/Questions for exploration OR Ideas for further discussion

What are the opportunities for addressing accreditation standards related to interprofessional education?

### References

- Azzam, M. B., Girard, M.-A., Andrews, C., Bilinski, H., Connelly, D. M., Gilbert, J. H. V., Newton, C., & Grymonpre, R. E. (2022). Accreditation as a driver of interprofessional education: the Canadian experience. *Human Resources for Health*, 20(1), 1–65. <https://doi.org/10.1186/s12960-022-00759-4>
- D'amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of interprofessional care*, 19(sup1), 8-20.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Interprofessional mobile paediatric screening service: A novel Nurse Practitioner supervisory model

**Mrs Alicia Bell**<sup>1</sup>, Jill Williams<sup>1</sup>, Dr Lauren Lines<sup>1,2</sup>, Dr Sarah Hunter<sup>1,2</sup>, Dr Louisa Matwiejczyk<sup>1</sup>, Dr Claire Baldwin<sup>1</sup>

<sup>1</sup>Flinders University, Bedford Park, Australia, <sup>2</sup>Caring Futures Institute, Bedford Park, Australia

### Introduction/Background

Access to quality interprofessional paediatric developmental screening in areas of socioeconomic disadvantage, and the need to develop interprofessional practice (IPP) competencies in health professional students necessitated the expansion of a novel mobile nurse practitioner led service. Up to three mixed discipline students travelled with the supervising nurse practitioner to early learning centers to conduct standardized assessments (Brigance), incorporating collaborative documentation, recommendations, and service liaison. The project aimed to determine if the placement model supported students' IPP confidence and understand the key elements impacting student development of IPP.

### Methods

A multi-methods observational study invited students to complete pre and post placement surveys (ISVS-21; median (min-max)), and a post placement semi-structured interview (thematic analysis). The literature informed and piloted interview guide sought students' understanding and experience of IPP, shared travel, and the supervision model.

### Results

Thirteen students aged 20-26 from physiotherapy (n=5), occupational therapy (n=4), nutrition/dietetics (n=2) and nursing (n=2) participated in 3-7 visits. ISVS-21 mean scale scores were 5.1 (3.9-5.7, n=12) pre-placement and 6.1 (5.0-6.8, n=8) post-placement; 10/21 and 21/21 items scored  $\geq$  'a fairly great extent' in pre- and post- surveys respectively. Students' interprofessional socialisation and readiness improved (n=7, Wilcoxon test  $p=0.018$ ); Interview analysis (n=12) demonstrates that all students appropriately explain IPP, positively perceive the experience as unique, beneficial, building confidence and knowledge. The travel conversations, scope of practice, scaffolding of IPP learning and supervisor attributes contributed to the student's experiences.

### Discussion

This proof-of-concept study demonstrated that small-scale, highly intentional IPP experience in a mobile, community-based, nurse practitioner led service, alongside conventional discipline placement, achieves meaningful learning. The challenges and benefits of IPP were authentically perceived by students in a complex socio-community context. Further research may explore 1) longer-term impacts on students' IPP, 2) placement model replication, scalability, and expansion to therapies, and 3) increased client, family, and system outcomes.

## The role of fun in interprofessional education

Mrs Bronwyn Maddock<sup>1</sup>, Professor Pēteris Dārzinš<sup>1,2</sup>, Associate Professor Fiona Kent<sup>1</sup>

<sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>Eastern Health, Melbourne, Australia

### Introduction

Interprofessional interventions are commonly evaluated by the achievement of education outcomes, with little understanding of how the interventions contribute to learning. Not all IPE generates the desired student learning outcomes. Awareness of how outcomes are generated could assist educators design more effective IPE.

### Methods

A realist evaluation of IPE for final year medical and nursing students was undertaken. Realism is a theory-driven research method focused on exploring causation to understand how mechanisms function in various social contexts to generate outcomes. Initial program theories were drawn from social identity theory and contact theory. Quantitative (n=2136) and qualitative (n=14) data were synthesised to develop a refined program theory explaining, *what works, for whom, in what circumstances and why?* Findings were aligned to theory providing further understanding of results.

### Results

The educational value of fun was identified as a key mechanism contributing to learning outcomes. Other novel mechanisms that generated the desired student learning outcomes included; interdependence, embodiment, identifying with other professions, and multiple meaningful interactions. Additional, less novel, mechanisms included; insight and application, scaffolding, challenging, giving and receiving feedback, role clarification, rapport development, reflection and observation. Purposefully incorporating fun into teaching and learning activities can optimise the effectiveness of IPE by reducing student apprehension interacting with another profession, contributing to improving student relationships and creating a safe learning environment.

### Discussion

Incorporating fun and other key learning design into IP interventions seems likely to enhance the effectiveness of IPE. Examples of how to integrate the five key mechanisms into the learning design of IPE programs will be shared. Enhanced programs have the potential to improve collaborative practice, reduce health-care error, and reduce stereotypical perceptions and barriers among healthcare teams

## Allied healthy interprofessional simulation to target communication and conflict management

**Associate Professor Jodie Copley**<sup>1</sup>, **Dr Romany Martin**<sup>2</sup>, Dr Clare Dix<sup>1</sup>, Associate Professor Anne Hill<sup>1</sup>, **Dr Roma Forbes**<sup>1</sup>, Associate Professor Allison Mandrusiak<sup>1</sup>, Dr Adriana Penman<sup>1</sup>, Dr Niru Mahendran<sup>1</sup>, **Dr Freyr Patterson**<sup>1</sup>, Mrs Sarah Davies<sup>1</sup>, Dr Jacqueline Jauncey-Cooke<sup>1</sup>, Mrs Kelly Hooper<sup>1</sup>, Dr Cheryl Collins<sup>1</sup>

<sup>1</sup>The University Of Queensland, Brisbane, Australia, <sup>2</sup>The University of Tasmania, Hobart, Australia

### Introduction

Literature regarding simulation for learning interprofessional collaborative practice (IPCP) indicates a need to include a range of health professions and to focus on students' development of team communication and conflict resolution skills in day-to-day healthcare delivery. This study evaluated the impact of interprofessional simulation for occupational therapy, physiotherapy, dietetics, and nursing students on interprofessional collaboration competencies, specifically collaborative communication and conflict resolution during day-to-day interactions, and their intention for IPCP during placement.

### Methods

A series of simulations featuring the potential for interprofessional conflict and involving explicit coaching on communication and conflict resolution were conducted. A single cohort pre-test post-test design included the Students' Perceptions of Interprofessional Clinical Education Revised (SPICE-R), the Interprofessional Collaborative Competencies Attainment Survey (ICCAS), and an open response survey question on future intended practice.

### Results

A total of 237 students participated in the simulation experience. Overall scores and scores on all IPCP competencies in the ICASS and SPICE-R improved for all professions post-simulation, with communication showing the greatest improvement and conflict and team functioning a 75% improvement. Open-ended responses indicated students' intentions to pursue self-leadership in IPCP.

### Discussion

An interprofessional simulation with explicit pre-simulation coaching for collaborative communication and opportunities for conflict resolution improved IPCP competencies and encouraged students to initiate IPCP when on placement in the practice setting. IP simulation focusing on daily health professional interaction, without standardised patients necessarily present, is a cost effective way of contributing to IPCP skill development for whole student cohorts prior to placement.

## How do new health professionals draw on their pre-graduation interprofessional learning in real collaborative practice settings?

Ms Nicole Shaw<sup>1,2</sup>, Dr Sherryn Evans<sup>1</sup>, Mrs Catherine Ward<sup>1</sup>, Dr Gary Rogers<sup>1</sup>  
<sup>1</sup>Deakin University, Geelong, Australia, <sup>2</sup>Barwon Health, Geelong, Australia

### Introduction

Deakin University has offered an online Interprofessional Education (IPE) unit to students studying clinical healthcare professions in the Faculty of Health since 2009. The unit provides the opportunity for healthcare students to learn about, from and with each other to improve their knowledge and skills in healthcare collaboration and ultimately the quality of care they will provide as health professionals.

The aim of this study was to explore how health professionals draw on university interprofessional learning activities as they experience real collaborative practice in healthcare settings.

### Methods

Using an Interpretative Phenomenological Analysis (IPA) methodology, clinicians/ graduates of the IPE unit, were invited to participate in a semi-structured interview on zoom.

Interviews were conducted, recorded, transcribed and then analysed following the principles of IPA.

### Results

Three occupational therapists, a doctor, a psychologist, a social worker, a medical imaging technician participated. Data analysis is currently in its early phase and further findings are expected to be reported in June. To date, when reflecting on positive and less positive collaborative practice experiences, participants reflected on five key themes related to collaborative practice: their roles and responsibilities, communication, relationships, patient centred care and wider health care systems.

### Discussion

Preliminary analysis of the data indicates participants identified important components to effective collaborative practice that directly linked to university studies; in particular the importance of roles and responsibilities and the value and impact of communication in collaborative practice.

Reflections on the importance of relationships and patient centred care were strong themes. Although participants did not overtly link this back to their studies, these topics are explicitly taught.

Topics covered in the IPE unit at Deakin contribute directly and indirectly to what graduates see as important components to effective workplace collaborative practice.

It is hoped this information can inform future IPE curriculum design and delivery.

### Organisational capacity building for student placements in Australia

**Mrs Kirsty Pope<sup>1</sup>**, Dr Linda Barclay<sup>1</sup>, Associate Professor Fiona Kent<sup>2</sup>

<sup>1</sup>*Department of Occupational Therapy, Monash University, Frankston, Australia,* <sup>2</sup>*Education portfolio, Faculty of Medicine, Nursing and Health Sciences, Monash University, Clayton, Australia*

#### **Introduction/Background**

Due to a shortage of practice placements for allied health students in Australia and internationally, increasing practice placement capacity has been the focus of international scholarship for many decades. Previous studies have explored ways to address placement shortages in the context of increasing student numbers, often focusing on models of supervision and the ratio of students to educator. Little research provides information regarding organisational frameworks and processes involved in decision making around accommodating students on placement. These are contextual factors which may influence the capacity of an organisation to take students, more so than evidence of effectiveness of supervision models.

#### **Aim/Objectives**

To illustrate, and promote discussion on, factors which positively impact organisational placement capacity building.

#### **Discussion**

This presentation will outline the findings of doctoral research to date. Appreciative Inquiry methodology guided interviews with 15 participants involved in student placements from across Australia. Appreciative Inquiry is an extended action research approach which aims to discover 'the best of what is', what energises people and what they most care about, to produce shared knowledge and motivation for action (Lewis et al., 2016). From initial analysis of each interview, a summary of positive organisational frameworks and processes was created and discussed at a positive change consortium attended by 12 of the 15 participants. Further in-depth analysis of interview and positive change consortium transcripts informed key themes of factors which enable student placement capacity building.

#### **Ideas for further discussion**

The discussion of the research findings to date will consider how this information could be utilised, and identify ways in which placement capacity building strategies can be developed and implemented within multiple organisations. The discussion can also consider the use of Appreciative Inquiry as a methodology.

Lewis, S., Passmore, J., & Cantore, S. (2016). *Appreciative Inquiry for Change Management: Using AI to Facilitate Organizational Development*. London: Kogan Page, Limited.

## Indigenising our curriculum: Indigenous learning principles as accessible learning

**Ms Katherine Rae<sup>1</sup>**

<sup>1</sup>*University of Canberra, Canberra, Australia*

### **Introduction/Background**

Yunkaporta's (2009) 8 Ways of Learning focus on using teaching and learning strategies based on Indigenous pedagogical approaches. These strategies are incorporated into teaching spaces across Australia, from primary to tertiary education, as a framework assisting with the Indigenisation of the curriculum. Our university has embraced this call for all disciplines and faculties. Recent changes in professional competencies requirements in Occupational Therapy Discipline highlight the need to provide culturally safe services. As a result, students need to understand different ways of teaching and communicating.

### **Aim/Objectives**

Demonstrate the incorporation of multiple Indigenous pedagogies to create an accessible learning environment in introductory units for first-year students.

### **Discussion**

Mapping different learning activities using Yunkaporta's (2009) 8 Ways ensured a variety of teaching strategies were used and encouraged creative thinking over the semester. Learning maps throughout the unit demonstrated the linkages within the content and the 8 Ways. The introduction of Yarning Circles to tutorials allowed students to build reflection skills and share thoughts about their learning. Including Indigenous history and culture in class activities and case scenarios increased cultural awareness for non-Indigenous students and supported students when working with people from diverse backgrounds.

### **Ideas for further discussion**

The incorporation of Yunkaporta's (2009) 8 ways into teaching provides an accessible learning space, allowing for many different styles of learning and encouraging independent and critical thinking. Structuring lesson plans around these principles challenges educators to incorporate numerous pedagogical techniques into their course designs.

### **Reference**

Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface*. [doctoral thesis]. James Cook University.

## The processes adopted in making career decisions by doctors

**Associate Professor Joy Rudland**<sup>1</sup>, Professor Phillipa Poole<sup>2</sup>, Professor Tim Wilkinson<sup>1</sup>, Professor Mark Thomson-Fawcett<sup>1</sup>, Dr Sarah Rennie<sup>1</sup>

<sup>1</sup>University Of Otago, New Zealand, <sup>2</sup>University of Auckland, , New Zealand

### Introduction/Background

Career choice may be influenced by preferred geographical location, career prospects or experiences at undergraduate<sup>1</sup> or postgraduate levels. There is little work on the process of making choices.

### Aim/Objective

This study explores the processes adopted by doctors deciding on a career.

### Methods

By comparing career intentions on medical graduation with those at PGY5, we identified three groups: any **consistent career aspiration; changed career choice** (away from, or towards, surgery); **no specific career aspirations**. Doctors from PGY6-11 completed Zoom semi-structured interviews which were analysed inductively using grounded theory.

### Results

Over 40 doctors were interviewed. Career development had three distinct phases; ignorant idealism, moving to realism with the last phase of pragmatism. Approaches adopted were '**elimination**' and or '**endorsement**'. Each was informed by '**experience opportunities**'. The elimination strategy was preferred by doctors who were unclear about career choice; eliminating choices based on experience or on occasions reinstating choices

The endorsement approach justified decisions already made. This was the preferred strategy for those who were consistent in their career choice.

Experience opportunities were often serendipitous, informing the elimination or endorsement approach. These included the experience of the specialty, role models, lifestyle, and autonomy and control. Lifestyle preferences, and autonomy and control became more important with time.

### Discussion

Choosing a career is a complex process and is not defined by one approach. To promote themselves, a specialty should know the most positive and enduring influencer is how the individual is treated. Those with a strong preference to pursue a career, may adopt a misplaced endorsement approach, that may not be best suited to their attributes.

### Issues/Questions for exploration OR Ideas for further discussion

Given work force demands, what role should an educational provider play in promoting career choice? Are approaches on deciding on a career similar for other health professions?

### References

1. CLELAND, J. A., JOHNSTON, P. W., ANTHONY, M., KHAN, N. & SCOTT, N. W. 2014. A survey of factors influencing career preference in new-entrant and exiting medical students from four UK medical schools. *Bmc Medical Education*, 14.



## ANZAHPE LEAPS into action... Development!

**Simone Ross**<sup>1</sup>, Professor Tarun Sen Gupta<sup>1</sup>, A/Prof Peter Johnson<sup>1</sup>

<sup>1</sup>James Cook University, Townsville, Australia

### Introduction

Leadership education and training has been recommended for medical schools for more than 20 years. The Leadership Education for Australasian health Professional Students (LEAPS) framework has been developed for medical schools. The LEAPS framework has been created using transformative leadership and has student leadership skills development for all healthcare stakeholders, including students themselves, their patients, their patients' families and carers, and colleagues.

### Methods

The mixed methods multiphase study design included surveys, interviews, and a focus group. Questions asking about the teaching of leadership were organised by the five Health LEADS Australia Framework domains of *Leads Self, Engages with Others, Achieves Outcomes, Drives Innovation, and Shapes Systems*. As the Health LEADS Australia Framework does not provide competencies, each of these five domains were further categorised with leadership competencies as described in the book 'Leading and Managing Health Services: An Australian Perspective'.

The participant groups and method of data collection were as follows: A survey to academics/Deans in Australasia medical school, interviews with Australian Medical Student Association, a focus group with Queensland Rural Generalist Pathways, and a survey to PGY4+ graduates of the MBBS at James Cook University. Participants were provided with a table of leadership competencies and asked to select where these competencies should be taught in the medical continuum (from student to senior doctor, or a mix).

### Results

Competencies selected by >50% of all participants for leadership training in medical school were collated into leaderships domains of: emotional agility for long-term resilience; learning agility for high performance; relationships with patients, families, and carers; and relationships with colleagues

### Discussion

This framework transforms these important medical student leadership competencies to further cement learners' current mental models or to experience a shift in their worldview about leadership learning, healthcare, and the health system.

## Perceptions of the newly recruited nurses working in a Singapore mental health hospital on the role of a Standardized Patient in a psychiatric emergency training programme: a qualitative approach

**Mr Jia Wang<sup>1</sup>**

*<sup>1</sup>Institute of Mental Health, Singapore, Singapore*

### **Introduction**

It is essential to equip newly recruited nurses who work in a psychiatric hospital with knowledge and skills to manage a psychiatric emergency, yet no local studies were done to examine this. This study aimed to explore the perception and feeling of the newly recruited nurses towards the role of a Standardized Patient (SP) in a psychiatric emergency training programme in a Singapore mental health hospital.

### **Methods**

Qualitative method of phenomenology was adopted. Nineteen participants were interviewed during semi-structured focus group interviews. Thematic analysis was done for the transcription of the audio-recorded data.

### **Results**

Four themes emerged from the qualitative data: SP benefits, SP limitation, real identity, involvement of debrief. Findings revealed that the feedback from the participants about the benefit of SP was overwhelmingly positive, they felt SP helped them gain confidence in managing a psychiatric emergency, build foundation of mental health nursing, improve communication skills in a safe environment. All participants (100%) preferred SP approach instead of traditional training method; most participants (74%) preferred the real identity of SP not to be revealed beforehand in order to maximize the learning effect, and majority (79%) also felt SP should be involved in the debrief session. The main limitation of the use of SP as reported by participants was psychological anxiety.

### **Discussion**

SP is an effective methodology in teaching newly recruited nurses about fundamental knowledge of mental health nursing, particularly, the communication skills with the patients, the interview skills, as well as the de-escalation skills in a safe and controlled environment. It also helped the nurses understand the patients better and enabled them to engage with the patients more effectively. Further studies could look into how to design the case scenarios more carefully, and explore strategies to address learners' concerns and anxieties arose from participating in the SP interview.

## **Albertina Sisulu Executive Leadership Programme in Health (ASELPH Fellowship), South Africa: a blueprint for successful leadership programmes**

**Professor Sophy Van Der Berg-Cloete**<sup>1</sup>, Professor Eric Buch<sup>2</sup>

<sup>1</sup>University of Pretoria, Pretoria, South Africa, <sup>2</sup>University of Pretoria, Pretoria, South Africa

### **Aim**

The criticism about leadership programmes is that the training has not had the desired effect of equipping leaders with the necessary skills. The ASELPH Fellowship tried to distinguish itself through its curriculum content and teaching approaches and it was important to establish whether it had the desired effect. The study formed part of the assessment of the ASELPH Fellowship, enhancing leadership skills of executive leaders in SA. The students' perceptions of the Fellowship curriculum content, strengths and benefits, weaknesses and areas needing improvement, teaching approaches/pedagogies, mentoring and assessments was also assessed.

### **Methods**

A quasi-experimental study design was used, with pre-post assessments of performance, competencies and programme perception of students in the ASELPH Fellowship. A 360° assessment (including their supervisors, peers and subordinates) of 14 competencies and 56 performance indicators was done. The thematic content analysis approach was used to summarise key themes and reflections.

### **Results**

There was a right balance between class time, self-directed and online learning. More interaction, peer-learning in class, case-based method, more case-studies and the e-Learning approach were favoured. Faculty, venue, assessments and mentoring in leadership were crucial.

### **Discussion:**

The ASELPH Fellowship training incorporated many experiential learning and practical scenarios. Other than the traditional didactic lectures, the ASELPH Fellowship has introduced blended learning, including case studies, eLearning, case vignettes, problem-solving exercises, interactive classroom, mentoring, practical workplace assignments and exposure to experts in the healthcare environment. Assessments & mentorship formed part of the uniqueness of the training. The findings of this study serves as a blueprint and add to the limited number of research studies on the effectiveness of leadership training.

### **Key words**

Leadership training, assessment, blended learning, case-based, mentorship

### **Issues/questions for exploration or ideas for discussion:**

1. How to ensure that leadership training makes a difference and has an impact on the community
2. The important role of assessment and mentoring

### **Incorporating Artificial Intelligence (ChatGPT) Technology in Health Professional Education**

**Mr Christopher Snell<sup>1</sup>, Mr Paul Kemel<sup>1</sup>**

*<sup>1</sup>Federation University Australia, Churchill, Australia*

#### **Introduction/Background**

As technology continues to advance, the use of artificial intelligence (AI) in education has become increasingly prevalent. ChatGPT, a large language model developed by OpenAI, has the potential to revolutionize the way health professional education is delivered. The ability to generate human-like text, answer questions and engage in conversation can provide new opportunities for student engagement, assessment, and feedback. However, with new technology comes new challenges, and educators must be prepared to navigate these challenges and embrace the opportunities that ChatGPT presents. Authors Note: this abstract was written by ChatGPT.

#### **Purpose/Objectives**

In this PeArLs, we will discuss the use of ChatGPT in health professional education and explore ways to best embrace it. We will share our experience of integrating ChatGPT into our own health professional education program at Federation University Australia and facilitate a discussion on the challenges and opportunities that ChatGPT presents. Participants will be invited to share their own experiences and ideas for using ChatGPT in health professional education.

#### **Issues/Questions for exploration OR Ideas for discussion**

What are the benefits and limitations of using ChatGPT in health professional education?

How can ChatGPT be used for student engagement, assessment, and feedback?

What strategies can be implemented to ensure that students are prepared to navigate the challenges and embrace the opportunities that ChatGPT presents?

## Navigating the implementation of programmatic assessment at an Australian medical school: riding the wave

A/Prof Laura Gray<sup>1</sup>, Dr Jemma Skeat<sup>1</sup>, Dr Karen D'Souza<sup>1</sup>

<sup>1</sup>Deakin University, , Australia

### Background

The concept and pedagogical underpinnings of programmatic assessment are now well known and widely accepted within health professions education. However, many programs have found *implementation* of programmatic assessment challenging within their own context. The Doctor of Medicine team at Deakin have developed, implemented and continue to evolve a programmatic approach to assessment across the final two years of our course. Along the way, we have grappled with many of the enabling and inhibiting factors to successful programmatic assessment. Implementing our innovative program of assessment and learner support required a strategic change management approach, encompassing the need to build and shape a new culture and philosophy of assessment, feedback and learning. Taking the perspective of a complex adaptive system, the team progressively built stakeholder awareness, buy-in and acceptance, factoring in multiple clinical sites and a distributed and diverse network of clinical educators with varying levels of familiarity with educational theory. The program continues to evolve as we reflect and revise, , working directly with both students and clinicians and using elements of co-design to support this. At all points, sustainability and flexibility was kept front and centre, and the team has gathered some important insights into the possibilities and pitfalls of implementing programmatic assessment.

### Purpose

The objective of this session is to explore the lessons learned from the implementation of programmatic assessment within the Deakin Doctor of Medicine, including factors which have helped and hindered, and to consider how these apply within the local context of participants.

### Questions for exploration

What policy and procedural constraints and enablers exist at your institution? How can you address these?  
What shifts may be needed to the culture and aims of your program?  
How can you design for and evaluate feasibility and acceptability?  
How can you consider sustainability and ongoing development?

## **The future role of healthcare mentors and coaches in navigating workplace culture**

**Dr Romany Martin**<sup>2</sup>, Dr Tim Wilkinson<sup>1</sup>, Dr Dale Sheehan<sup>1</sup>

<sup>1</sup>University of Otago, Christchurch, Christchurch, New Zealand, <sup>2</sup>School of Health Sciences, The University of Tasmania, Launceston, Australia

### **Introduction/Background**

As part of the 50<sup>th</sup> Anniversary celebrations ANZAPHE is publishing a collection of papers based on the organisation's values and that look forward to the next 50 years. A group of 11 authors from seven organisations and two countries have collaborated on coaching and mentoring as part of ANZAHPE's value of nurturing. In this presentation we invite comment and discussion on the future roles and nature of coaching and mentoring in HPE.

### **Aim/Objectives**

To explore the roles of mentors and coaches and how these might adapt over the next 50 years towards assisting a novice to understand the culture within their own workplace, to enable them to function, survive, and thrive within this context.

### **Discussion**

We further propose that the respective roles of mentors and coaches will become increasingly distinct from each other, to optimise the support that is available for new health professionals, educators, and researchers as they enter the workforce and prepare for lifelong learning and scholarship.

### **Issues/Questions for exploration OR Ideas for further discussion**

What are the future roles and nature of coaching and mentoring in HPE and for ANZAHPE fellows?

## Listening Together: Non-Indigenous educators developing praxis towards critical allyship

**Associate Professor Alison Francis-Cracknell<sup>1</sup>, Dr Julia McCartan<sup>1</sup>**

*<sup>1</sup>Monash University, Clayton, Australia*

### **Introduction/Background**

Health professions accreditation standards require the inclusion of Aboriginal and Torres Strait Islander cultural safety curriculum which addresses topics such as racism, privilege and settler colonisation. However, evidence indicates that educators often feel ill-equipped to teach these challenging topics. Two non-Indigenous health professional educators with settler standpoints have recently been undertaking doctoral research in this area. Findings suggest that non-Indigenous educators need to share the workload of implementing effective curriculum that contributes to healthcare without racism but require support to implement evidence-informed pedagogy.

### **Aims/Objectives**

The aim of this presentation is to describe a pilot community of practice and shared learning model designed to support ongoing educator critically reflexive praxis. This model specifically targets non-Indigenous health professional educators and involves challenging conversations about their contested position in delivering culturally safe health professional education.

### **Discussion**

Since 2020, 15 lunchtime sessions have been held, reaching 30 active participants within nine different professions across the Faculties of Medicine, Nursing and Health Sciences, Education and Science. The usual format of a session is as follows: revising a shared statement of intent, introducing the theme, activities (e.g. a reading, video, or news article), breakout group activities, and group feedback. During each session we foreground Aboriginal and Torres Strait Islander Peoples' perspectives and scholarship. Topics have included NAIDOC and National Reconciliation Week themes, The Voice, and concepts such as critical allyship, challenging settler colonialism in the academy, being an anti-racist educator, and truth-telling.

### **Ideas for further discussion**

This process has revealed pros, cons and tensions arising when non-Indigenous health professional educators critically reflect on their positionality and how it intersects with higher education. Doing this ethically and responsibly requires critique and de-centring of non-Indigenous epistemologies. We continue to grapple in this contested space where unresolved tensions remain.

## “Culture forces me to become a different doctor” – International Medical Graduates in New Zealand

**Mariska Mannes**<sup>1</sup>

<sup>1</sup>*University of Otago, New Zealand*

### **Introduction**

Using a lens of cross-cultural code-switching, we aimed to understand the professional and cultural differences that impact IMGs on their journey to practise effectively and remain in New Zealand.

### **Methods**

The research used a constructivist framework applying the method of theory-informing inductive analysis. Face-to-face interviews with IMGs were undertaken to identify the degree to which their experience could be explained via psychological challenges (authenticity, competence, and resentment) due to cross-cultural code-switching.(1)

### **Results**

Interviews (n=14) found there was an expectation for IMGs to code-switch. As one IMG shared "I didn't know how much it was going to be about starting again, I felt that my background as a [doctor] would be much more important and useful. I found here that I use only a small, tiny part of what I was previously, and I have to build a whole new personality, a whole new way of treating clients, a whole new way to interact with doctors, a whole new way to understand what my role is within the society, everything's different." The greater the cultural and professional difference of IMGs compared to New Zealand, the greater the intensity of psychological challenges experienced when switching. IMGs received minimal support, making it difficult to overcome psychological challenges, especially the competence challenge, leading to frustration and feelings of vulnerability.

### **.Discussion**

A sense of losing one's identity, or part of it, is real for most IMGs, and the angst it causes should not be underestimated. IMGs are confronted with many differences that, for some, have implications on their deeply held beliefs. These deeply held beliefs make cross-cultural code-switching more stressful, resulting in IMGs feeling vulnerable and isolated. Explaining the cultural differences that cause psychological challenges through a lens of cross-cultural code-switching offers new insight. Comprehensive programmes must be created addressing these challenges and included partly in orientation and in ongoing training.

1. Molinsky A. Global dexterity: how to adapt your behavior across cultures without losing yourself in the process: Boston, Massachusetts : Harvard Business Review Press; 2013.



## Navigating the opportunities to embed lived experience and consumer voice into education and training within health systems.

**Dr Samantha Sevenhuysen<sup>1</sup>, Mr Stuart Wall<sup>1</sup>**, Ms Michelle Daniel<sup>1</sup>, Ms Joy Davis<sup>1</sup>, Mr James Bonnamy<sup>2</sup>

<sup>1</sup>Peninsula Health,, Australia, <sup>2</sup>Monash University, , Australia

### Introduction/background

The notion of people-centred and integrated health services puts informed and empowered people at the centre of the health system (WHO, 2015). The impetus to ensure a people-centred approach within health systems also extends to the education and training of healthcare workers. Ongoing global developments in people-centred health systems have seen an increasing focus coproduction of knowledge and collective accountability that shifts focus to the consumer (WHO, 2015). While educational design and learning and teaching approaches have evolved over the decades, the predominant voices remain those of expert academics, educators and clinicians rather than those with lived experience as consumers and carers (Brand & Dart, 2022).

### Purpose/Objectives

We aim to gather those with experience and/or interest in consumer involvement in education and training within health systems to share strategies, experiences, barriers, and successes for partnering with consumers in education design and delivery.

The authors have three examples to share with participants to generate discussion:

1. Implementation of an Alcohol and Other Drugs (AOD) lived experience role partnering with an AOD educator to co-design, co-produce and co-deliver education and training
2. Consumer co-design and co-production of an organisation-wide person-centre care online training module
3. Consumer co-delivery of training in the consumer simulated patient program

### Issues, questions & ideas for exploration and discussion

How are consumers and those with lived experience involved in education in your health system?

What are the barriers and challenges to partnering with consumers and those with lived experience in education design and delivery?

What strategies have enabled and supported consumer partnership in education design and delivery?

How do you support educators and consumers to collaborate on education design and delivery?

What further guidance and evidence would you appreciate to better engage consumers and those with lived experience in the design and delivery of education and training?

What are your top tips/advice for successful partnerships with consumers in the design and delivery of education and training?

### References

World Health Organisation (2015) WHO global strategy on people-centred and integrated health services

[https://apps.who.int/iris/bitstream/handle/10665/155002/WHO\\_HIS\\_SDS\\_2015.6\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/155002/WHO_HIS_SDS_2015.6_eng.pdf)

Brand, G., & Dart, J. (2022). The hunter and the lion: Amplifying health care consumers' voices in health care education. *Medical Education*, 56(7), 693.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Exploring the barriers and enablers to quality clinical placements in physiotherapy at a teaching hospital using an implementation science approach

**Miss Joanna Hargreaves<sup>1</sup>**, Dr Peter Window<sup>1,2</sup>, Mrs Simone Leslie<sup>1</sup>, Dr Michelle Cottrell<sup>1,2</sup>, Mrs Ashlee Snoswell<sup>1</sup>, Assoc Prof Shaun O'Leary<sup>1,2</sup>

<sup>1</sup>Physiotherapy Department, Royal Brisbane and Women's Hospital, Brisbane, Australia, <sup>2</sup>School of Health and Rehabilitation Sciences, University of Queensland, Brisbane, Australia

### Introduction

This study aimed to explore perceptions of physiotherapy clinical education adherence to indicators of quality in a single physiotherapy department at a metropolitan teaching hospital, and to conceptualise the barriers and enablers to achieving quality in clinical placements in this context using the Consolidated Framework for Implementation Research.

### Methods:

A mixed-methods sequential explanatory study design was undertaken at a metropolitan hospital in Queensland as a case in point. Current practise was assessed against indicators of quality using a standardised survey (Clinical Placement Quality Survey – Educator) administered across the physiotherapy department (n=28) [1]. Survey findings were explored in focus groups and semi-structured interviews with stakeholders including clinical educators, department management, and university placement coordinators (n=19). Data was analysed using an inductive thematic analysis approach, and sub-themes were mapped to relevant Consolidated Framework for Implementation Research constructs.

### Results:

Survey data indicated that the lowest perceived performance was in the quality indicator domain of 'effective collaboration' (61%). When explored further three main themes were identified: (i) training in clinical education skills is essential but currently focusses on assessment; (ii) the clinical educator role is perceived as having low value; and (iii) opportunities exist to develop current internal and external supports for clinical educators.

### Discussion

Barriers to meeting indicators of quality at this site were described using the domains of the Consolidated Framework for Implementation Research. These included the perceived burden of the clinical educator role (intervention characteristics), a mismatch between university expectations and actual operational support provided (outer setting), perceived low value and a lack identity for the clinical educator role (inner setting), and limited training for developing educational skills (individual characteristics). Findings from this study have informed a multi-pronged strategy implemented at the study site, which focus on role redesign, engaging clinical educators in training, and collaboration with university coordinators.

### References

1. Hargreaves, J., K. Kirwan, and P. Thomas. *Development of a clinical educator survey tool for determining clinical placement quality: Validity and reliability of the CPQS-E tool (Clinical Placement Quality Survey – Educator)*. 2016 [cited 17/6/2022; Available from: [https://qheps.health.qld.gov.au/\\_data/assets/pdf\\_file/0026/2507561/ceti-16-17-rbwh-report.pdf](https://qheps.health.qld.gov.au/_data/assets/pdf_file/0026/2507561/ceti-16-17-rbwh-report.pdf)].

## Beyond mere respect: New perspectives on dignity for healthcare workplace learning

**Professor Lynn Monrouxe<sup>1</sup>**, Ms Christiane Klinner<sup>1</sup>, Dr Amani Bell<sup>1</sup>, Dr Gillian Nisbet<sup>1</sup>, Associate Professor Merrolee Penman<sup>2</sup>

<sup>1</sup>The University of Sydney, Sydney, Australia, <sup>2</sup>Curtin University, Perth, Australia

### Introduction

Although interest in workplace learning that promotes dignity in healthcare is growing, little is known about how different professional groups' stakeholders conceptualise this. In workplace learning, there are frequently substantial and enduring consequences for those who are affected by dignity breaches. How we understand dignity influences our experiences and behaviours. It is therefore crucial to know how stakeholders perceive dignity to prevent abuses of students' dignity during workplace learning.

### Methods

We conducted narrative interviews (n=51) with students, placement educators, and university workplace learning personnel from seven allied health professions using a social constructionist viewpoint. We explored and developed themes using the 5-step Framework Analysis, uncovering variances and commonalities among stakeholder groups.

### Results

Through analysis of participant narratives, we were able to isolate eight unique yet linked characteristics of dignity: dignity as respect, dignity as self-x (the relationships we have with ourselves), dignity as feeling safe, dignity as understanding otherness, dignity as supporting others, dignity as equality, dignity as professionalism, and dignity as belonging. Although mutual respect and a culture of respect were present only in academic participants' talk, dignity as respect was identified across all participants. The other seven aspects all offer significant elements that deepen our comprehension of the concept of dignity.

### Discussion

Our study confirms previous research by showing that stakeholders do not have a clear, positive conceptualisation of dignity in workplace learning. It contributes uniqueness in two ways: by recognising aspects of dignity that call for thoughtful action beyond regard for others and by highlighting a conflict between dignity as professionalism and dignity as equality. To resolve this tension and emphasise that active care, team integration, and expert support are essential components of dignified behaviour within workplace learning, we propose modifying the current ideas of dignity in workplace learning.

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### Findings from the ENHANCE survey: Medical specialty training research requirements may result in “poor quality unsupervised box ticking research”

**Dr Paulina Stehlik**<sup>1,2</sup>, Dr Caitlyn Withers<sup>3,4</sup>, Dr Rachel Bourke<sup>2</sup>, Prof Adrian Barnett<sup>5</sup>, Dr Caitlin Brandenburg<sup>2,6</sup>, Dr Christy Noble<sup>7</sup>, Professor Paul Glasziou<sup>1</sup>, Professor Ian Scott<sup>7,8</sup>, Dr Alexandra Bannach-Brown<sup>9</sup>, Professor Mark Morgan<sup>1,10</sup>, Dr Gerben Keijzers<sup>1,2,3</sup>, Dr Hitesh Joshi<sup>2</sup>, Dr Kirsty Forrest<sup>1,2</sup>, Dr David Pearson<sup>2,11</sup>, Dr Emma Veysey<sup>12,13</sup>, Dr Thomas Campbell<sup>14,15</sup>, Professor Sharon Mickan<sup>1</sup>, Professor David Henry<sup>1,2</sup>

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#### Background/rationale

Most specialty training colleges require medical trainees to undertake research. Supporting trainee doctors to undertake mandatory research projects takes significant effort from several stakeholders including trainees, supervisors, medical education personnel, and research and laboratory staff. It also requires considerable resourcing from their training institutions. Our previous work showed that college-set research requirements for medical specialty trainees often focus on project completion rather than research skills development, and this may incentivise poor quality research. We conducted an online survey to investigate the quality of trainee experiences and research outputs.

#### Methods

In April-December 2021, we surveyed current and recent-past trainees across all specialty training colleges in Australia and Aotearoa/New Zealand. We used purposive sampling via college communications, colleagues, conferences, and social media, supplemented by snowballing.

Participants were asked about their college-mandated research experiences, including number of required projects; how the research question was generated; what resources they had access to; and whether they conducted a literature review before starting their project, developed a protocol, involved consumers, or made the results publicly available.

#### Results

372 trainees from all 16 major colleges participated.

41% generated their own research question, and 75% conducted a literature review. 8% involved consumers but none were involved in developing the research question.

56% felt they had the knowledge and skills to conduct research, and 28% felt they had access to educational resources to address knowledge gaps. 52% of trainees designed their projects on their own with little or no input from others.

49% of projects remain unpublished.

#### Conclusion

Our findings show that a large proportion of the future medical workforce require better access to research training, resources, and supervision. Lack of published outcomes from the research efforts of trainees may indicate research waste and warrants further investigation.

## **A concept model for First Nations' cultural safety in general practice consultations: a framework for development of assessment**

**Dr Kay Brumpton**<sup>1,2,3</sup>, Dr Rebecca Evans<sup>2,5,6</sup>, **Dr Raelene Ward**<sup>4</sup>, Mr Henry Neill<sup>2</sup>, Dr Hannah Woodall<sup>1</sup>, A/Prof Lawrie McArthur<sup>2,7</sup>, **Prof Tarun Sen Gupta**<sup>2</sup>

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### **Introduction/Background**

Assessment of cultural safety in general practice consultations for First Nation patients is complex. Assessment needs to be based on community derived definitions of cultural safety. As such cultural safety must be determined by First Nations peoples. However, current community-derived definitions of cultural safety are very broad, and whilst describing cultural safety, do not provide specific, or measurable attributes to guide registrar assessment. This risks GP registrar “knowing, doing and being” culturally safe care being intangible.

Assessment must also be considerate of defined components of cultural safety, educational theory, and how social, historical, and political determinants of health and well-being impact upon the cultural safety of a consultation. Given this complexity, we assume that no single method of assessment will be adequate to determine if general practice registrars are demonstrating or delivering culturally safe care. As such, we propose that development and assessment of cultural safety can be conceptualised using a model that considers these variables. Our model provides a framework to both demonstrate and explore the complexity of cultural safety within a general practice consultation.

### **Purpose/Objectives**

In this session, we will present a conceptual model of cultural safety that can frame the development of an assessment tool and demonstrate the complexity of cultural safety to general practice trainees.

### **Discussion: Issues/questions for exploration OR Ideas for discussion**

We want to consider how the model might be further adapted to both demonstrate the complexity of cultural safety and shape the development of an assessment tool for cultural safety in general practice consultations.

## The transition from failure to success for multiple repeaters in a high-stakes medical specialist exam

**Mary Pinder**<sup>1,2</sup>, Professor Sandra Carr<sup>1</sup>, Dr Charlotte Denniston<sup>3</sup>, Dr Brid Phillips<sup>1</sup>

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### Introduction

The assessment process to become a specialist with the College of Intensive Care Medicine includes a final high-stakes examination, with written, oral and clinical components, and a pass rate between 35-65%. Failing has devastating effects on trainees, affecting job prospects, home life, mental and physical wellbeing and, potentially, visa status. Some trainees fail the exam multiple times before passing. Research exploring behaviours enabling exam repeaters to transition from failure to success is lacking. The study aim was to understand how intensive care trainees make this transition in the hope this information could serve as a resource for exam preparation and trainee support.

### Methods

Qualitative study using grounded theory methodology. Participants who had failed the FCICM exam multiple times before succeeding were recruited by open invitation sent to all CICM Fellows and trainees. After informed consent they took part in a semi-structured, one-on-one Zoom interview. The interviews were recorded, de-identified, transcribed into text and coded. Data also included memos and College exam reports. Data collection and analysis happened contemporaneously to identify emerging themes.

### Results

Interviews were conducted with eleven participants. The move from failure to success related to professional identity formation. Participants needed to acknowledge their competence as an intensive care clinician at the required standard. This was achieved by reconstructing their sense of self, exploring and acknowledging failure; and exam preparedness, becoming 'match-fit'.

### Discussion

Exam success may be equated with sporting prowess. Candidates need the requisite skills and ability (learning), combined with effective coaching, an understanding of the rules of the game, and mental, physical and emotional wellbeing to perform under pressure. Unsuccessful candidates need time to process the emotions of grief and loss and rebuild their sense of self. Remediation for exam repeaters should include counselling and psychological support, and wellbeing advice, as well as effective learning strategies.

## Exploring the Nexus between Employment, Supervisory Relationships and Trainee Assessment in GP Training Practices

**A/prof Nancy Sturman<sup>1</sup>**, Dr Sophie Vasiliadis, Dr Samia Toukhsati, Ms Carla Taylor

<sup>1</sup>*Royal Australian College Of General Practitioners, East Melbourne, Australia*

**Introduction:** Australian GP trainees and supervisors work together in training practices which are predominantly small businesses operating on fee-for-service models. Practices employ trainees, and some supervisors are also practice owners. Trainees contribute to practice income and workflow, and the demand from practices currently exceeds the supply of new trainees. These factors contribute to some complex power dynamics in training practices. Recent medical education literature has highlighted the importance of reducing power imbalances during work-based assessment (WBA). We explored the power dynamics at play when supervisors directly employ trainees, and identified strategies to mitigate any negative impacts on work-based assessment and learning.

**Methods:** Focus group discussions were conducted using a semi-structured discussion guide, and audio-recorded with a total of 51 participants, including trainees, recent RACGP Fellows, supervisors, practice managers and medical educators. Transcripts were transcribed professionally, coded descriptively and analysed inductively using qualitative descriptive analysis.

**Results:** Diverse impacts of supervisor employment status were reported, and included minimal impact, foregrounding the business aspects of practice, opportunities to learn useful workplace skills, and increasing the supervisor-trainee power differential. Some trainees reported being reluctant to admit mistakes or seek ad hoc assistance from employer-supervisors. Power dynamics also affected other practice staff, and disgruntled trainees had a negative impact on the work environment and practice reputation. Trainees identified a tendency to supervisor leniency bias in WBA. Strategies to mitigate these impacts included allocating employer and supervisor roles to different people, and using external clinician assessors. Alternative trainee employment models were debated.

**Discussion:** Participants had diverse experiences of power dynamics, and their impacts on the learning and working environment of training practices. A leniency bias may impact on the fairness and defensibility of WBA. Several strategies may mitigate negative impacts, although there was no generally accepted proposal for modifying the current business model of Australian GP training.

## Riding the wave of Workplace-based Assessment (WBA): Navigating the ACCLAiM WBA collaboration

**Dr Rashmi Watson<sup>1</sup>, Dr Karen D'Souza<sup>2</sup>, Dr Nidhi Garg<sup>3</sup>, Professor Bunmi Malau-Aduli<sup>4</sup>, Dr Shannon Saad<sup>5</sup>, Dr Robyn Stevenson<sup>6</sup>, Professor Stephen Tobin<sup>7</sup>**

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### Introduction

The Australasian Collaboration for Clinical Assessment in Medicine (ACCLAiM) is a collaborative venture between 18 medical schools in Australia and New Zealand, focussing on benchmarking clinical graduate outcomes and providing quality assurance on clinical assessment. ACCLAiM, as an established clinical assessment community of practice, is well recognised for collaborating on OSCEs, and during 2022 established a WBA working group to develop a set of 10 core clinical tasks to be assessed by WBA for implementation as a benchmarking pilot across the collaboration in 2023. These 10 tasks and the process for running the WBA benchmarking project resulted from a yearlong series of meetings and collaborative discussions between key assessment leads and medical educators across Australia and New Zealand. Whilst nearly all medical schools utilise WBA in their suite of clinical assessment, benchmarking WBA across two nations is novel and required robust change management principles to design and implement this pilot project.

### Methods

Application of WBAs at one university site as an early pilot.

### Results

N/A

### Discussion

1. To discuss the process of developing a community of practice around the ACCLAiM-WBA benchmarking exercise.
2. To explore the change management processes which were used in this project as a model for other institutions to consider in implementing a program of clinical assessment.
3. To highlight the early findings and key learnings in the early phase of the WBA pilot.



## **Entrustable professional activities (EPAs) within competency-based healthcare education: a systematic review of global implementation across healthcare professions**

**Mr Prashant Jhala**<sup>1</sup>, Associate Professor Arvin Damodaran<sup>1</sup>, Mr Toby Wilcox<sup>1</sup>, Miss Tayla Douglas<sup>1</sup>, Professor Annette Katelaris<sup>1</sup>, Associate Professor Ben Taylor<sup>1</sup>, Professor Adrienne Torda<sup>1</sup>

<sup>1</sup>*University of New South Wales, Kensington, Australia*

### **Introduction**

EPAs translate competencies into discrete units of clinical practice that can be entrusted to a trainee once they have demonstrated competence. While they have been used mostly during clinical placements, the ideal assessment strategy is unknown. The purpose of this review is to determine how EPAs have been implemented across entry level health profession curricula, and what assessment methodologies have been utilised.

### **Methods**

An electronic search of the global literature was conducted across medicine, pharmacy, physiotherapy, optometry, exercise physiology and dietetics. Articles were screened by at least two authors and were included if they articulated where EPAs were included in their curriculum and described the assessment methodology.

### **Results**

Twenty of 752 articles were included, published within North America, Europe and Australia in medicine, pharmacy and dietetics. Within the North American medical literature, half of the studies incorporated EPAs into clerkships only, while the other half were either pre-clerkship, within final year simulations, or unclear. Within the European medical literature, EPAs were incorporated from 3rd year clerkships onwards, during final year clinical placements or OSCEs. Pharmacy and dietetics introduced EPAs into final year and early practice placements. Most studies involved multiple assessment points, often through workplace-based assessments (WBAs). Additional methods included clinical exams, simulations or written assessment tasks. Decisions varied across programs including summative and formative and utilised various assessor ranging from supervising clinicians during placements, to clinical competency committees consisting of academic faculty.

### **Discussion**

EPAs were most utilised during clinical placements only and often assessed by supervisors through multiple WBAs. The ideal method and implementation strategy is unknown and various professions have utilised different methods. Further research should review what assessment tasks should be used to make entrustment decisions and whether EPAs are useful in the pre-clinical phase or if their utility is most valuable as a form of workplace-based assessment.

### **An interprofessional learning community for clinical educators: Findings from a feasibility study**

**Dr Tim Clement<sup>1</sup>**, Dr Rosie Shea<sup>1</sup>, Keryn Bolte<sup>1</sup>, Dr Leonie Griffiths<sup>1</sup>, Associate Dean Elizabeth Molloy<sup>1</sup>

<sup>1</sup>University of Melbourne, Australia

#### **Introduction**

We have previously described a novel professional development activity for general practice clinical educators – a video club – where groups of clinical educators meet over time to explore their educator role using video-recordings of their teaching<sup>1</sup>. We speculated about the value of altering the learning design by making the group interprofessional and using a broader range of authentic teaching artefacts as triggers for discussions about teaching and learning. We called this new intervention an Interprofessional Learning Community (IPLC) and asked an overarching question, ‘Can this intervention work?’

#### **Methods**

We conceptualised the research as a feasibility study<sup>2</sup>, which was implemented in an Australian rural health service, initially recruiting eight clinical supervisors from six disciplines. The IPLC met for one hour, once a month, for six months. We collected data from multiple sources: video-recordings of the meetings, facilitator reflections, and post-intervention interviews.

#### **Results**

We found that some clinical supervisors wanted to participate in this form of professional development, thought that the intervention was acceptable to them, could be fitted into their work schedule, and was well-suited to clinical supervisor professional development. The artefacts supported an inquiry stance into supervisory practice and encouraged the supervisors to experiment with their teaching practices. Permitting a range of artefacts generated a focus on ‘highly significant’ events rather than a focus on the commonplaces of teaching. Disentangling the benefits of learning in groups from the affordances of learning in an interprofessional group was challenging. Participants expressed positive views about the intervention’s interprofessional nature.

#### **Discussion**

There is more work to be done to judge whether this is a cost-effective way to provide professional development for clinical supervisors, but there is a mounting body of evidence to support it as an effective option for the professional development for clinical educators.

#### **References**

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2. Orsmond GI, Cohn ES. The Distinctive Features of a Feasibility Study: Objectives and Guiding Questions. *OTJR: Occupation, Participation and Health*. 2015;35:169-177.

## Difficult teaching events: Clinical educator experiences and strategies

**Dr Kiah Evans<sup>1</sup>**, Di Carmody<sup>1</sup>, Professor Sandra Carr<sup>1</sup>

<sup>1</sup>*University of Western Australia, Crawley, Australia*

### Introduction

Whilst best practice and challenges experienced by learners in clinical settings have been explored comprehensively in the literature, little is known about educators' perspectives of teaching in difficult clinical situations. This study explores the phenomena of teaching in difficult clinical situations as they are experienced by interdisciplinary clinical educators.

### Methods

Participants were 26 postgraduate students enrolled in an elective unit called 'Clinical Teaching and Supervision' (2020–2022). They completed a written assessment where they reflected on a difficult clinical teaching experience, provided an explanation of the factors that contributed to the difficult event and proposed strategies that could be used in similar circumstances. Students were from medical, nursing, dental or allied health backgrounds, and they described difficult teaching events that occurred in both hospital and community settings. Ethics approval was obtained to qualitatively analyse the assessment submissions using a template approach.

### Results

Difficult teaching events occurred within concurrent journeys of the learner and educator, where each brought their own competencies and personal factors to the situation, and both had the potential to experience learning and personal growth as a result. Difficult teaching events comprised three phases – before, during and after – each with specific educational strategies utilised and suggested. Three overarching themes spanned the phases: (1) gap between utilised and suggested strategies; (2) importance of safe learning environments; and (3) preference for efficient strategies.

### Discussion

Continuing education has the potential to provide clinical educators with strategies to address the inevitable difficult teaching events they will encounter when teaching in clinical settings, along with strategies to minimise the potential for these difficult teaching events occurring and/or causing harm. This study provides a framework for clinical teaching that includes a toolbox of efficient strategies to use before, during and after difficult teaching events to turn the situation into a positive teaching encounter.

## **Innovative program delivery in graduate health professions education: promoting excellence and collaboration**

**Associate Professor Simone Gibson<sup>1</sup>**

<sup>1</sup>*Monash University, Melbourne, Australia*

### **Introduction/Background**

The roles of clinical educator, scholar and academic are becoming increasingly recognised as essential for the future of the health professions to deliver safe and effective care. Graduate programs in health professions education (HPE) provide knowledge, skills and networks to promote educational leadership<sup>1</sup>. With pandemic lockdowns, the increased uptake of online learning offered new opportunities to innovate and expand our postgraduate degrees in HPE and Clinical Simulation, previously offered as a hybrid learning design.

### **Aim/Objectives**

We aim to describe the development of Monash University HPE and Clinical Simulation programs and online approaches used to promote learning, collaboration and educational leadership, and to discuss the opportunities and challenges of fully online programs.

### **Discussion**

New fully online programs were designed to continue to deliver learning outcomes, promote interprofessional learning, create opportunities for students to apply concepts and build collaborations. Best practice pedagogical concepts for remote learning were adopted. Online activities included virtual microteaching sessions, story-based discussion forums, podcasts, drop-in sessions and utilisation of contemporary online learning tools. Practice-based assessment enabled students to apply learning authentically. Through the development process, we used an Action Research approach to gather data from diverse stakeholders<sup>2</sup>.

Professional development in health professions education must continue to adapt to the needs of future educators. Online learning provides increased access and flexible learning. An interactive, purposeful online curriculum with engaging and dynamic learning activities can provide rich collaborative and practical opportunities for students to apply knowledge and create meaningful future educational careers.

### **Issues/Questions for exploration OR Ideas for further discussion**

Although stakeholders appreciated the increased access fully online programs offer, there was concern relationship and networking was compromised. How do we balance this?

### **References**

<sup>1</sup> Ara Tekian, Trudie Roberts, Helen P. Batty, David A. Cook & John Norcini (2014) Preparing leaders in health professions education, *Medical Teacher*, 36:3, 269-271, DOI: 10.3109/0142159X.2013.849332

<sup>2</sup> Herbert Altrichter (2005) The role of the 'professional community' in action research, *Educational Action Research*, 13:1, 11-26, DOI: 10.1080/09650790500200274

## Emotion, time, learning, change: How medical students and doctors make sense of difficult feedback encounters.

**Dr Joanne Hilder**<sup>1</sup>, Prof Elizabeth Molloy<sup>2</sup>, Prof Anna Ryan<sup>2</sup>, Prof Christopher Watling<sup>3</sup>, A/Prof Leonie Griffiths<sup>2</sup>

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### Introduction

While we know that challenging feedback can be profound (Urquhart et al., 2014), we have little understanding about what medical students and doctors 'do' with difficult feedback information. This may be especially true in situations where feedback conversations challenge learners, either by stirring strong emotion or by presenting them with information that conflicts with their self-concept. This study aimed to explore the characteristics of difficult feedback experienced in the medical setting and to learn how medical students and doctors make sense of these experiences over time.

### Methods

This study used a narrative approach. Survey responses were collected from 32 doctors and 48 medical students describing a time they received feedback which they found difficult. Narratives were explored using both framework and narrative analysis.

### Results

Doctors were the most common source of feedback in the study, but patients, nurses, and peers also provided challenging feedback. The feedback context, content, exchange and associated affect were factors that made the feedback encounter difficult. Feedback conversations generated a range of emotions which often changed overtime from shock and distress to gratitude and understanding. A shift in perspective often followed after conversations with mentors, friends, or peers, and a period of reflection. Participants reported that difficult feedback led to improvements in knowledge, practice, and understanding of feedback processes (both positive and negative). However, negative outcomes such as reduced confidence or disrupted professional-identity were also reported.

### Discussion

This research suggests that medical students and doctors need time and support from colleagues to fully understand and process difficult feedback encounters. It is important to recognise that the moment of receiving feedback is just the beginning of a learning process. Educators and colleagues can help learners identify strategies, processes and supports to achieve productive outcomes from difficult feedback experiences.

## Experiences of teaching online and identity as a clinical educator

**Dr Akhil Bansal<sup>1</sup>**, Ms Emma Bartle, Dr Elie Matar, Kiah Evans, Wendy Hu, Tyler Clark, Sandra Carr, Annette Burgess

<sup>1</sup>University of Sydney, Australia

### Introduction/Background

Health professional programs have had to incorporate online learning strategies into their curricula more than ever during the COVID-19 pandemic. While a large body of research on elearning innovations exists, this tends to focus on learner satisfaction, attitude, knowledge and skill, or professional identity formation of learners(1, 2). There is a paucity of literature on how the sudden shift to online and virtual learning has influenced the practice and identity formation of clinical educators(3, 4)

### Aim/Objectives

In 2022, we received a multi-institutional ANZAHPE research grant to explore the contextual and motivational factors influencing the experiences, teaching practice and identity formation of clinicians as educators. One of the research objectives is to explore how both online faculty development and teaching experiences shape the identity formation of clinical educators, and how this compares with face-to-face experiences.

### Discussion

All alumni from 2017-2022 of the well-established University of Sydney and the University of Western Australia faculty development programs in health professions education have been invited to participate in in-depth interviews (n=approximately 1,200), exploring their transition from clinician to educator. Interviews are in progress, with an anticipated sample size of 48 clinicians across hospital and university settings.

Addressing this research objective is of relevance as we move on from the pandemic, and institutions need to make program-level decisions whether to continue with virtual approaches for their faculty development programs for clinical educators. These programs rely on clinicians to teach, be role models and inspire the next generation of safe and competent health professional students and trainees, capable of adapting with changes to clinical practice. The design of faculty development programs needs to support clinicians to adapt and develop as educators in this new teaching paradigm.

### Issues/Questions for exploration OR Ideas for further discussion

We will report on findings from data analysis, commencing in February 2023, on the relationship between teaching online and identity formation of clinical educators.

### References

1. Wang H, Yang M. Influence of Professional Identity on the E-Learning Adaptability Among Chinese Nursing Students During COVID-19. *Front Public Health*. 2021;9:754895.
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3. Ortega MAC, Marchese VG, Zarro MJ, Film RJ, Shipper AG, Felter C. Digital and blended curriculum delivery in health professions education: an umbrella review with implications for Doctor of Physical Therapy education programs. *Physical Therapy Reviews*. 2022;27(1):4-24.
4. Christensen MK, Nielsen KS, O'Neill LD. Embodied teacher identity: a qualitative study on 'practical sense' as a basic pedagogical condition in times of Covid-19. *Adv Health Sci Educ Theory Pract*. 2022;27(3):577-603.

## Translating faculty development for Clinical Educators into practice: The real impact!

**Dr Emma Bartle**<sup>1</sup>, Dr Akhil Bansal<sup>2</sup>, Professor Annette Burgess<sup>2</sup>, Dr Tyler Clark<sup>2</sup>, Dr Kiah Evans<sup>1</sup>, Dr Elie Matar<sup>2</sup>, Professor Wendy Hu<sup>3</sup>, Professor Sandra Carr<sup>1</sup>

<sup>1</sup>The University of Western Australia, Perth, Australia, <sup>2</sup>The University of Sydney, Sydney, Australia, <sup>3</sup>Western Sydney University, Sydney, Australia

### Introduction/Background

Translating clinical education training from faculty development programs into healthcare settings is a continuing challenge. Research evidence is missing on the longer-term outcomes of faculty development programs, notably on the contextual and motivational factors which make faculty development outcomes sustained and impactful. This evidence could inform effective program design and direct where institutional investment in educational resources should be targeted. It has been proposed that indicators of successful faculty development programs include positive changes in workplace practices and development of professional identity as clinical educators (1,2).

### Aim/Objectives

In 2022, we received a multi-institutional ANZAHPE research grant with a research aim to explore the influence of contextual and motivational factors on clinical educators' practice and professional identity formation as they translate learning from university-based faculty development programs into their workplaces.

### Discussion

Interpretive phenomenological analysis is being applied to in-depth interview data from alumni who graduated from faculty development programs at The University of Sydney and The University of Western Australia between 2017-2022. Analysis from an expected 22 interviews with clinical educators across hospital and university settings is being undertaken.

The longer-term impact of faculty development programs is relevant to universities and healthcare institutions; both rely on clinicians to teach, be role models and inspire the next generation of safe and competent health professional students and trainees.

### Issues/Questions for exploration OR Ideas for further discussion

We will report on our findings and explore the extent to which sustainability of the clinician educator role depends on robust identity formation, and how it can be strengthened by faculty development, and contextual and motivational facilitators.

### References

1. Steinert Y, Mann K, Anderson B, Barnett BM, Centeno A, Naismith L, Prideaux D, Spencer J, Tullo E, Viggiano T, Ward H, Dolmans D. A systematic review of faculty development initiatives designed to enhance teaching effectiveness: A 10-year update: BEME Guide No. 40. *Med Teach*. 2016;38(8):769-86. doi: 10.1080/0142159X.2016.1181851.
2. Triemstra JD, Iyer MS, Hurtubise L, Poeppelman RS, Turner TL, Dewey C, Karani R, Fromme HB. Influences on and Characteristics of the Professional Identity Formation of Clinician Educators: A Qualitative Analysis. *Acad Med*. 2021;96(4):585-591. doi: 10.1097/ACM.0000000000003843.

## 2A – Symposium

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### Shared sovereignty – Aboriginal, Torres Strait Islander and Māori health in medical school standards

**Mr Daan Verhoeven<sup>1</sup>, Ms Belinda Gibb<sup>1</sup>, Ms Kirsty White<sup>1</sup>**

<sup>1</sup>*Australian Medical Council, Canberra, Australia*

#### **Introduction/Background**

The Australian Medical Council (AMC) sets national standards for medical education and training. The AMC Review of Accreditation Standards for Primary Medical Programs (medical schools standards review) began in 2021. A key feature of the review has been a shared sovereignty process for developing Aboriginal, Torres Strait Islander and Māori health and cultural safety related content. This process acknowledges the right to self-determination for Aboriginal and/or Torres Strait Islander and Māori Peoples. Under the shared sovereignty process, development of the text of these standards is led by a group of Aboriginal and/or Torres Strait Islander and Māori experts and stakeholders. The AMC Aboriginal, Torres Strait Islander and Māori Committee oversees the work of this group and works with the Medical School Accreditation Committee to draft the wording of standards to be recommended to the Medical Board of Australia for final approval.

#### **Purpose/Objectives**

In this Symposium session, AMC staff who have worked on the medical school standards review will share the challenges and successes of the shared sovereignty process. Participants will have the opportunity to ask questions of the panel and discuss how they might adjust their own practice to create safer policymaking processes when there is impact on Aboriginal and/or Torres Strait Islander and Māori people.

#### **List of presentations**

Presenter name: Belinda Gibb (AMC Manager, Indigenous Policy and Projects)

Presentation title: The importance of Aboriginal and/or Torres Strait Islander and Māori leadership

Description: Aboriginal and/or Torres Strait Islander and Māori health should be practiced, taught and assessed in a culturally safe way by all practitioners. To achieve cultural safety, First Nations people must be able to identify and obtain what they need, rather than what non-Indigenous people want.

Presenter name: Daan Verhoeven (AMC Manager, Medical School Assessments)

Presentation title: Making space for Aboriginal and/or Torres Strait Islander and Māori leadership

Description: The AMC is a non-Indigenous organisation with established mainstream governance structures. To ensure an authentic process acknowledging self-determination in the medical school standards review, AMC has had to shift its processes and moreover, its thinking.

Presenter name: Kirsty White (AMC Director, Accreditation and Standards)

Presentation title: The future of Aboriginal and/or Torres Strait Islander and Māori leadership

Description: Beyond medical schools, the AMC accredits a wide range of other programs and providers. Assessing cultural safety through strong standards and considered processes across the continuum of education and training is key to ensuring consistent expectations and continual practitioner learning.

#### **Discussion**

What does cultural safety look like in health policymaking?

What should organisations keep in mind when they commit to being led by Aboriginal and/or Torres Strait Islander and Māori people on issues that relate to their health and wellbeing?



## Developing a collaborative practitioner through strengthened accreditation processes

**Ms Glenys Wilkinson**<sup>1</sup>, Dr Sarah Meiklejohn<sup>2</sup>, Dr Lynda Cardiff<sup>1</sup>, Dr Julie Gustavs<sup>3</sup>, Ms Josephine Maundu<sup>1</sup>, Ms Bronwyn Clark<sup>1</sup>, Mr David Copley<sup>4</sup>, Professor Brian Jolly<sup>5</sup>, Associate Professor Sue Kirsas<sup>1</sup>, Ms Theanne Walters AM<sup>3</sup>, Associate Professor Fiona Kent<sup>2</sup>

<sup>1</sup>Australian Pharmacy Council, Canberra, Australia, <sup>2</sup>Monash University, Melbourne, Australia, <sup>3</sup>Australian Medical Council, Canberra, Australia, <sup>4</sup>Aboriginal and Torres Strait Islander Health Practice Accreditation Committee, Australian Health Practitioner Regulation Agency, Melbourne, Australia, <sup>5</sup>Chinese Medicine Accreditation Committee, Australian Health Practitioner Regulation Agency, Melbourne, Australia

### Introduction

The Health Professions Accreditation Collaborative Forum (the Forum), a coalition of the 15 accreditation authorities for the regulated health professions, is working to enhance the provision of interprofessional education (IPE) to Australian healthcare students.<sup>1</sup> We are conducting research to facilitate enhanced collaboration between accreditation authorities and education providers in the delivery of IPE. Our objective is to explore collaborative practice from the perspective of consumers, education providers, and health services. We seek to clarify what is understood by the term 'collaborative practitioner' and to provide practical guidance and support to education providers and accreditation authorities to achieve the goal of developing collaborative health professional graduates.

### Methods

A series of focus groups were undertaken to explore the views of consumers, health practitioners and educators regarding collaborative practice, IPE, and the vision for the future. Participants were recruited through consumer groups, health service providers and accreditation authorities. Focus groups were recorded and transcribed verbatim. Multiple transcripts were read and inductively coded by the research team, before establishing a coding framework for thematic analysis by one researcher. Ethical approval was provided by the Monash University Human Research Ethics Committee (Project ID 34594).

### Results

A total of 19 focus groups were conducted between October and November 2022 via videoconferencing. Eighty-four participants contributed. This presentation will summarise the main themes regarding the attributes of a collaborative practitioner, and how IPE and accreditation bodies may work toward facilitating these attributes.

### Discussion

The Forum seeks to generate practical support for IPE based on a clear understanding of health consumer experiences, profession-specific perspectives, health service provider practice context and future health system needs. We seek conference participant input to continue to develop a shared understanding of this important domain of clinical practice.

### References

1. Health Professions Accreditation Collaborative Forum. Strategic Plan 2023-25. At [www.hpacf.org.au/](http://www.hpacf.org.au/)

## Interprofessional education in rural clinical learning environments: a fertile landscape for harvest

**Ms Lorraine Walker<sup>1</sup>**

<sup>1</sup>*Monash University, Clayton, Moorooduc Road*

### **Introduction**

Interprofessional education legitimises a person-centred approach in which health care professionals recognise one another's contributions to patient care and promote collaborative practice. There is mounting support for interprofessional education to be embedded in undergraduate learning to ensure students are equipped with the requisite knowledge, skills and attitudes. This study explored rural clinical learning environments to identify the conditions under which a program of interprofessional education could be successfully implemented.

### **Methods**

A mixed methods case study approach was utilised to collect data from six rural organisations. Quantitative data were collected utilising existing validated tools to explore professional interactions and perspectives, and conditions under which interprofessional education was practiced. An established 13-item scale evaluated the organisation's readiness for interprofessional education. Qualitative data were collected via interviews and focus discussion groups.

### **Results**

This multi-layered investigation provided a 'whole of system' approach from a participant total of 287 managers, educators, clinicians and students. Most organisations (five) demonstrated readiness for interprofessional education. There was a clear relationship between leadership and organisational culture and their influence on personnel engagement and collaboration. Students identified that learning with other professions would help them become more effective team members and to think positively about other professionals.

### **Discussion**

Rural clinical learning environments can provide significant opportunities to promote and deliver interprofessional education for healthcare students. The clinician preceptor plays a central role in student learning for facilitating or impeding interprofessional education opportunities. This study adds to the evolving body of knowledge surrounding interprofessional education and provides important data regarding the potential for rural clinical learning environments to contribute to interprofessional learning.

## Promoting interprofessional domestic family violence education to develop collaborative practice ready midwives and social workers

**Dr Janice Bass<sup>1</sup>, Dr Katherine Reid<sup>1</sup>**

<sup>1</sup>Griffith University, Australia

The ability to work inter-professionally is a core competency for health and social care practitioners (ANMAC, 2017; AASW, 2013). Effective collaborative practice improves health outcomes for consumers and strengthens health care systems (Power, 2018). Interprofessional Learning was embedded within Bachelor of Midwifery and Bachelor of Social Work programs underpinned by a value driven social emancipatory and transformative curriculum philosophy. A shared component is preparation of future practitioners using a Trauma Informed framework to work with women who experience domestic and family violence (DFV). Women are particularly vulnerable to violence beginning or escalating in pregnancy and is associated with significant mental health problems impacting women, children, and families (Campo, 2015). Interventions for preventing and reducing DFV involve interprofessional collaboration between midwives and social workers. Students feel unprepared to deal with DFV and the vicarious trauma that may arise. A novel, innovative blended learning approach was adopted to facilitate interprofessional collaborative learning including immersive experiences, women's stories of DFV, online guided learning resource, critical reflection, and reflexive conversations.

### **Aims**

1. Evaluate the impact of a Domestic Family Violence workshop and online education resource on students' inter-professional learning
2. Describe the learning, teaching and assessment methodologies used to promote collaborative practice ready midwives and social work practitioners.

### **Methods**

A pre-post mixed-methods intervention design using Lime survey. Data analysis of survey results with thematic analysis of open-ended questions.

### **Findings**

Data analyses of 24 student participants revealed improvement in understanding the scope of collaborative practice, respective roles and responsibilities, and appreciation of different perspectives regarding DFV. Findings revealed the barriers and enablers to interprofessional learning used to inform the design of a workshop and education resource to promote collaborative practice.

### **Discussion**

Embedding interprofessional learning within programs develops collaborative practice ready midwives and social workers. Immersive learning facilitates deep exploration of DFV from diverse perspectives which informs a deeper understanding of the woman's needs.

### **References**

- Campo, M. (2015). Domestic and family violence in early pregnancy and early parenthood: Overview and emerging interventions. Melbourne: Australian Institute of Family Studies.
- Power, A. (2018). Shared learning for collaborative, high-quality care. *BJM Interprofessional Education*, 27 (2): 127-129.

## Utilising interprofessional education programs to foster learning communities

**Dr Sathana Dushyanthen<sup>1</sup>**, Meg Perrier<sup>1</sup>, Professor Kathleen Gray<sup>1</sup>, Professor Wendy Chapman<sup>1</sup>, Dr Kayley Lyons<sup>1</sup>

<sup>1</sup>University Of Melbourne, Australia

The concept of the Learning Health Systems (LHS) demonstrates the potential for the utilisation of health data in real time, through rapid and continuous cycles of data interrogation, implementation of insights into practice, and eventually practice change [1]. Yet, the lack of appropriately skilled workforce results in an inability to leverage existing data to design innovative solutions. We identified a need to develop tailored professional development programs to foster skilled interdisciplinary learning communities in the healthcare workforce, as well as digital health champions that understand each other's roles and capabilities, to collaboratively solve these complex problems.

The short course is wholly online, open to interdisciplinary professionals working in the digital health arena. To foster interprofessional learning, we assigned participants into working groups of five interprofessional members, who worked together and shared knowledge, perspectives and experiences in workshop activities throughout the 13-week course.

We undertook a mixed methods evaluation, to determine the utility and success of our programming. Participants were also invited to participate in a semi-structured interview post course. This allowed a deeper dive into themes relating to utility, barriers, recommendations for future applicability, and evolving digital health identity.

### Results

From interviews and analysis of free text responses, we discovered that the program gave participants a shared language and common understanding to converse with other interprofessional peers; transformed their perceptions of their role and the potential of data and technologies; provided a framework to organise their transformation plans; and finally provided a toolkit to refer to and operate from.

### Discussion

It is clear that in order to transform healthcare systems to their full potential, it requires a workforce with an understanding of LHS and the potential of data driven approaches, as well as an appreciation for the need for diversely skilled learning communities to tackle these problems together.

### References

1. Friedman, C. P., & Flynn, A. J. (2019). Computable knowledge: An imperative for Learning Health Systems. *Learning health systems*, 3(4), e10203-e10203. <https://doi.org/10.1002/lrh2.10203>

## Co-Teaching: Reviewing the delivery of co-taught prescribing workshops

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### **Introduction/Background**

Co-teaching utilises presenters from two or more professional areas to engage learners through demonstration of complimentary expertise .Co-teaching has been demonstrated to be a valid and potentially valuable pedagogy for content integration into undergraduate medical education<sup>1</sup> but there is a paucity of literature exploring the use of this in postgraduate medical education. Our aim was to explore postgraduate year 1 doctors' (PGY1) perceptions on co-teaching through a series of prescribing workshops run at our institution. Our workshops are co-taught by a doctor and a pharmacist or nurse specialist

### **Methods**

All attendees at prescribing workshops were invited to participate in an anonymous survey regarding their views on co-teaching. Feedback was obtained and collated via an online survey tool from three workshops held in 2021

### **Results**

81/ 82 (98.8%) felt co-teaching was useful and 79/81 (97.5%) would like to see increased use in medical education. PGY1s perceived overall enhanced learning experiences through four domains: clinical application, knowledge retention, engagement and understanding. The majority agreed presenters explored subjects from different perspectives and contributed areas of knowledge from their respective fields. They felt the workshops showcased interactive, case-based and interprofessional learning.

### **Discussion**

We found that co-teaching was well received by PGY1 doctors who attended prescribing workshops and added value to their learning. Beyond these workshops, co-teaching has the potential to be a valid and valuable pedagogy to enhance the learning experiences amongst junior doctors, rather than being limited to undergraduate students as previously described. Smooth delivery relies on meticulous planning and preparation between two or more educators. We reflect on drivers for success<sup>2</sup> and barriers to implementation of a co-taught model of education

<sup>1</sup>Willey, J. M., Lim, Y. S., & Kwiatkowski, T. (2018). Modeling integration: co-teaching basic and clinical sciences medicine in the classroom. *Advances in Medical Education and Practice*, 9, 739–751.

<sup>2</sup>Said, M., Jochemsen-van der Leeuw, R.H.G.A., Spek, B., Brand, P.L., Van Dijk. N. (2019) Role-Modelling in the training of hospital based medical specialists: a validation study of the Role Model Apperception Tool ( RoMAT). *Perspectives on Medical Education* 8, 237 -245

## At the frontline of aged care resident transfers to hospital: The paramedic experience

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### **Introduction**

Paramedics working in jurisdictional ambulance services are often the preferred transport for residents living in aged care facilities (ACF) to the hospital emergency department (ED). But as health care professionals capable of providing clinical assessment, treatment and referral, this role often reduces paramedics to simply a means of transport. This research addresses the gap in understanding how paramedic experiences with aged care staff impact outcomes for aged care residents. It further creates a rich description of this interprofessional interaction from an underrepresented perspective.

### **Methods**

Paramedics employed by jurisdictional ambulance services in Australia were interviewed individually online and asked to share their experiences interacting with aged care staff. Verbatim transcripts were analysed within NVivo™ using the descriptive phenomenological method described by Giorgi & Giorgi (2003) (1).

### **Results**

The paramedic experience is influenced by an expectation of an imagined ideal encounter. This ideal presupposes that particular criteria are met by ACF staff and sets the expectation for the interaction. If any experience does not meet these expectations, it results in feelings of apathy, mistrust, and a loss of confidence in ACF staff. The decision to transport a resident to hospital is influenced by the interaction and a negative feedback loop of unmet expectations is experienced by paramedics when responding to ACF.

### **Discussion**

The interprofessional relationship between paramedics and ACF staff impact paramedic decision-making, job satisfaction, and outcomes for aged care residents. This new understanding can inform further work into processes to improve interactions with ACF staff and underpin the delivery of focused interprofessional education. Improved staff interactions could lead to a decrease in avoidable transfers of ACF residents to overcrowded EDs. This study demonstrates a need to improve the interprofessional relationship between paramedics and ACF staff to progress the delivery of care to the ACF population.

1. Giorgi AP, Giorgi BM. The descriptive phenomenological psychological method. 2003.

## 2C – Curriculum

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### Partnership Pedagogy Approach to Gender and Sexuality Diversity Curriculum in Medical Education

**Dr Sowbhagya Micheal<sup>1</sup>**, Dr Thomas Nguyen<sup>1</sup>, Anna Gupta<sup>1</sup>, Dr Jane Graves<sup>1</sup>, Associate Professor Brahmaputra Marjadi<sup>1,2</sup>

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#### Introduction

The health of people with diverse genders, sexualities and/or innate variations of sex characteristics (LGBTQIA) warrants substantial discussion in medical education to improve the quality of services to this group who already face significant health disparities. Gaps exist in teaching LGBTQIA topics in medical schools including Western Sydney University School of Medicine (WSUSoM). Keeping with WSUSoM's commitment to social accountability, especially to under-served communities, the authors are currently reviewing the LGBTQIA contents and delivery at WSUSoM MD curriculum.

#### Aims

To review the current LGBTQIA curriculum using a Partnership Pedagogy approach to co-design, co-develop, co-assess and co-evaluate improvements with students, community partners, academics and professional staff.

#### Discussion

This project started in 2021 when queer and ally students raised concerns about LGBTQIA curriculum content and delivery, including the facilitation of safe and effective discussions on LGBTQIA topics. A Curriculum Committee working group consisting of queer and ally students and academics identified the need for (a) LGBTQIA curriculum mapping and revision; (b) ensuring safe, inclusive academic environments; and (c) raising awareness for academics and professional staff on LGBTQIA matters. Mapping of LGBTQIA-related learning objectives across the 5-year curriculum using Bloom's Revised Taxonomy<sup>1</sup> revealed areas for improvement in vertical and horizontal integration of content delivery and creating a stronger spiral approach to LGBTQIA teaching. The curriculum revision plan includes partnering internally with non-medical WSU groups and externally with community partners and professional organisations. Social accountability and authenticity will be obtained by capturing community voices through WSU-funded research which explores experiences of LGBTQIA people in Western Sydney health services. Safe learning environments and staff awareness are addressed through existing Professionalism Reporting Portal and communication channels of the working group. Interim results of these endeavours will be reported in the presentation.

#### Questions for exploration

What strategies do other institutions use to create inclusive LGBTQIA curricula?

Reference:

Krathwohl, D (2002) A Revision of Bloom's Taxonomy: An Overview, Theory into Practice, 41:4, 212-218, DOI:

## Learning about 'perspective': Evaluation of a first year medicine Health Humanities seminar series

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### Introduction

Health Humanities in the context of educating health professionals is increasingly seen as a vehicle to provide a balance between the dichotomous teaching of the sciences, with the compassion, critical and reflexive skills health professionals also need. However, few studies report on exactly what and how students are learning. Since 2021, all first year medical students at the University of Western Australia have engaged with a series of 6 integrated health humanities workshops

### Methods

This study describes first year MD students (from 2021 and 2022) reflections on what they have learned from engaging in health humanities. All 400 first year students were asked to complete a 14 item, 4 point Likert scale survey rating agreement on the learning experience and learning outcomes achieved followed by three open ended questions asking about the 'things they learned', "the most valuable aspects of the seminars" and "suggestions for improvement". Descriptive statistics and thematic analysis was undertaken.

### Results:

Of the 330 (83%) responses there was a high level of agreement (>80%) that the workshops had allowed them time to reflect, explore the experiences of other people, understand more about compassion and empathy and encouraged them to think outside of the biomedical model. A dominant theme identified around learning achievement was 'perspective'. Perspective of aging, of death and of disability along with perspective of self and perspective of others. Many also identified they had reconsidered their own perspective or their own understanding of a topic covered in the seminars and this reconsideration had come about from 'thinking' and 'reflecting'.

### Discussion

These findings offer insights for curriculum developers into the value of the health humanities series and learning outcomes achieved.

### Conclusions:

This study offers further support for the potential learning outcomes health humanities programs can achieve in undergraduate health professions education.



## Medical Student Knowledge, understanding & self-perceived readiness to address intimate partner violence

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### Introduction

Intimate Partner Violence (IPV) is a significant health issue, including being the single greatest risk factor for morbidity and mortality in women aged 24-44<sup>1</sup>. However, IPV is underrepresented in medical school curricula<sup>2</sup>. Hence, this project aimed to investigate medical student knowledge, understanding and self-perceived readiness to manage IPV disclosures at our institution.

### Methods

First, fourth and sixth (final) year medical students were invited to complete an anonymous online survey. Questions were based on the Physician Readiness to Manage Intimate Partner Violence (PREMIS) tool. After descriptive analysis, groups (year, gender, entry pathway, clinical school location, IPV lived experience) were compared using t-test/ANOVA.

### Results

206 students (111 first/30 fourth/65 sixth year) responded, with 68% female, 30% male, and 2% non-binary or prefer not to say. Thirty percent were international students, and 13% reported IPV lived experience. Most students reported no prior IPV training (63%). Of final-year respondents, 63% reported no previous training and 21% only 1-3 hours. Regarding 'knowledge' scales, there was a statistically significant increase from year 1 to year 6 (mean score increase 6.1). Similar trends were found for 'felt knowledge' and 'preparedness', and overall results indicated that students feel 'minimally' to 'slightly' prepared. Gender, clinical school location and age were not statistically significant predictors for any of these 3 domains. International students had slightly lower 'knowledge' scales than domestic students ( $p \leq 0.001$ ), and those with lived experience had higher 'felt knowledge' scores ( $p=0.005$ ). Free-text responses indicated that students felt more teaching with numerous teaching modalities such as clinical workshopping was needed.

### Discussion

Although IPV knowledge increases over the course of a medical degree, felt knowledge and preparedness for practice increases throughout medical school remain low. This demonstrates the need for more dedicated IPV teaching, utilising a variety of teaching modalities as suggested by students.

### References

1. Australian Institute of Health and Welfare. Family, domestic and sexual violence in Australia: continuing the national story 2019, Summary - Australian Institute of Health and Welfare.
2. Valpied, J., Aprico, K., Clewett, J. & Hegarty, K. Are Future Doctors Taught to Respond to Intimate Partner Violence? A Study of Australian Medical Schools. *J. Interpers. Violence* 32, 2419–2432 (2017).

## A bridge over the river inquiry: Scaffolding research from classroom to practice.

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<sup>3</sup>Pharmacy Department, Monash Health, Melbourne, Australia

### Introduction

In 2017, Monash University launched a pharmacy Vertically Integrated Masters (VIM) program. Scaffolded training supporting graduate research competency development progressing students from knowledge development to application of knowledge at increasing degrees of independence was a central component of the VIM. The capstone element of the VIM is a work-integrated learning program during the intern year where interns lead an individual research project relevant to their workplace.

Aim. To evaluate the perceived impact of a pharmacy student scaffolded research training program.

### Methods

Pharmacy interns in 2021 were asked to complete a voluntary anonymous survey to evaluate their experience completing the research training program, the impact on their research skills, and any perceived barriers to research.

### Results

Of the 183 interns that completed the program, 55% (101/183) completed research in a hospital and 45% (82/183) in a community setting. 96 responses were received (52% response rate). Of the respondents, 93% (89/96) agreed or strongly agreed the program helped develop their research skills, 78% (75/96) felt confident to undertake further research, and 99% (95/96) concluded conducting research was important to pharmacy practice. At least one barrier to research was experienced by 83% (80/96) of respondents, the most common were lack of time to complete project (51/80, 64%) and lack of workplace support or direction (33/80, 41%).

### Discussion

The scaffolded program had a perceived positive impact on intern research skill development. Variation in the degree of research mentorship received at the workplace may account for why some interns reported a lack of confidence undertaking further research, as "lack of workplace support" was a commonly perceived barrier. Training in research mentorship for workplaces is a potential area of growth for the program. This program may serve as a model for other institutions seeking to support graduate research competency development.

## Muddling down a well trodden path: exploring new physicians' preparedness and transition to unsupervised professional practice

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<sup>1</sup>Royal Australasian College of Physicians, Sydney, Australia

### Introduction

Graduating from trainee registrar to physician is a common yet significant career transition. The Royal Australasian College of Physicians' (RACP) training programs seek to equip trainees to become highly competent physicians but how well do new physicians feel their training has prepared them? And what is their experience of this transition?

### Methods

We implemented a routine survey to explore new physicians' perceptions of how well their training prepared them for unsupervised practice across ten professional domains: medical expertise; communication; quality and safety; teaching and learning; research; cultural safety; ethics and professional behaviour; judgement and decision making; leadership management and teamwork; and health policy, systems and advocacy.

Online surveys were administered to 936 new physicians one-to-two years after completing their training. Routinised administration of the surveys is providing data for longitudinal comparison.

### Results

Thirteen per cent (n=117) of new physicians responded to the survey in 2021. In line with existing literature (e.g. Dijkstra et al. 2015), a high proportion felt prepared in more clinical domains such as medical expertise; communication; and judgement and decision making. However, respondents felt less prepared in non-clinical domains such as research; health policy, systems and advocacy; and cultural safety.

Qualitative analysis revealed opportunities for improving the constructive alignment of curricula, work-based training and practice, and enhancing work-based teaching and educational supervision.

Findings emphasised that the transition from trainee to consultant is a defined and significant career stage. Targeted interventions to support this liminal stage should span the final year of training and continue through the early years of practice as a new physician.

### Discussion

Findings from this study indicate the utility of routinised monitoring of new practitioners' perceptions regarding their preparedness. Findings can inform and evaluate curricula quality improvements over time. Additionally, findings can identify navigation supports for those undertaking the significant transition to unsupervised professional practice.

### References

Dijkstra, I.S., Pols, J., Rimmelts, P. & Brand, P.L.P. (2015). Preparedness for practice: A systematic cross-specialty evaluation of the alignment between postgraduate medical education and independent practice. *Medical Teacher*, 37:2, 153–161. <https://doi.org/10.3109/0142159X.2014.929646>

## **Cross-cultural medical education: Applying contemplative pedagogy and in-depth simulated learning in improving human capabilities (empathy, communication skills and professional identity) of medical students**

**Professor Peih-ying Lu**<sup>1,2,3</sup>, Dr. Kwong D. Chan<sup>3,4</sup>, **Dr. Po-Chih Chang**<sup>1,3,5</sup>, Mrs Linda Humphreys<sup>4</sup>

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### **Introduction/Background**

Health professionals' empathy, communication, and reflective skills are essential components of medical professionalism and provision of high-quality, holistic care. In response, curricula have been specifically designed to facilitate the development of these skills. Globally, medical programs have implemented a range of simulated learning methods to provide a safe and authentic learning space for students to experience working with interprofessional teams to provide holistic care. The presenting team have experienced the challenges of applying in-depth, effective, immersive, interprofessional simulated learning curriculum in both Australian and Taiwanese contexts. These challenges are not only due to different or limited resources such as time and constituents involved, but also the fact that cultural differences may pose barriers to the successful application and translation of these curriculum design in and to other cultures.

### **Purpose and outcomes**

The purpose of this workshop is to give an example of how a framework for patient-centred clinical learning through extended immersion in medical simulated learning, first developed in a medical program in Australia as a five-day learning and teaching activity, can be adapted cross-culturally and conducted in a two-day extended, immersive simulation that involve scenarios designed to integrate local, sociocultural issues and contexts in a Taiwanese medical university. Differences/commonalities and strengths/weaknesses of these programs will be discussed. The workshop will provide participants with opportunities to identify barriers to designing high-quality, context appropriate, interprofessional, and immersive simulated learning curriculum and teaching program that facilitate students' development of empathy, communication, and reflective skills.

### **Issues for exploration OR Questions for discussion**

Through interactive brainstorming sessions, participants will identify barriers they might have encountered in their own programs, consider elements they might be able to adopt from the generic structure presented by the facilitators, and think about how to design and apply a student-centred immersive simulated learning curriculum based on their program's objectives.

### **Outline of workshop activities**

This interactive workshop will be divided into two parts. First, facilitators will present an example of how an established, immersive simulated learning approach from an Australian medical school was transplanted, localized, adapted, and applied in clinical education in a Taiwanese medical school. Facilitators will discuss what was done and present approaches to the successful implementation and adaption of the program cross-culturally. Second, participants will identify the generic structure that is applicable to most other medical education contexts as presented in the first part, consider how these might apply to their own curriculum, and brainstorm how they can design simulated learning curriculum that fit their program's needs.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

### Turning the Tide: Can we stop supervisors from “eating their young”?

**Miss Melissa Ridd<sup>1</sup>**, Mrs Leigh Moore<sup>1</sup>, Associate Professor Narelle Campbell<sup>1</sup>

<sup>1</sup>*Flinders University Rural and Remote Health NT, Darwin, Australia*

#### **Introduction/background:**

Qualified health professionals in the NT contribute considerable amounts of professional skills and time to supervising and teaching learners in the workplace. The quality of this supervision impacts on the education and preparedness of learners for their future roles as clinicians. Often, the supervising doctors, nurses and allied health professionals have little or no training in how to effectively teach others and there have been calls for culture change in education, especially in the medical field (Watling, Ajjawi & Bearman, 2019). To address these issues, Flinders University Rural and Remote Health NT academics have offered subsidised, evidence-based, interprofessional training to clinical supervisors since 2012. Training modules are aligned with Levett-Jones and Lathlean’s (2009) Ascent to Competence Framework, emphasising safety, security and belonging i.e., culture, as foundational to the development of competent practitioners. Nursing and allied health professionals form the majority of the participants at this training, with doctors rarely attending. Courses are popular and evaluations are positive, but are we “preaching to the choir”?

#### **Purpose/objectives:**

To share our experiences thus far, outline our concerns about whether we are making a difference in achieving a positive change in supervision culture, and gather ideas about attracting the supervisors in most need of attending supervision training.

#### **Issues/questions for exploration or ideas for discussion:**

Reflections on experiences as a supervisor and as a learner: what are your perspectives on culture, safety, security, and belongingness?

What characteristics are typical of a “bad” supervisor?

What prevents “bad” supervisors from attending supervision training?

Who do you think most needs supervision training?

How do we encourage those most in need to attend training?

How do we encourage more medical professionals to attend?

How do we change the culture of “eating our young”?

How do we measure the turning of the tide?

#### **References:**

Levett-Jones, T., & Lathlean, J. (2009). The ascent to competence conceptual framework: an outcome of a study of belongingness. *Journal of Clinical Nursing*, 18(20), 2870-2879.

Watling, C. J., Ajjawi, R., & Bearman, M. (2020). Approaching culture in medical education: three perspectives. *Medical education*, 54(4), 289-295.

## A diverse student body: matching reality to aspiration

**Prof Phillippa Poole<sup>1</sup>**, Prof Warwick Bagg<sup>1</sup>, Dr Briar Peat<sup>1</sup>

<sup>1</sup>University Of Auckland, , New Zealand

### Introduction/Background

Health professional educational institutions are aiming to be more socially accountable. This includes selection of a sufficiently diverse cohort of students, both to enhance access and to produce graduates who may better meet health needs. Among under-represented groups in student cohorts are those who identify as Indigenous, rural, lower socioeconomic, refugee or with a disability (1).

Once selected, these students may require dedicated academic, cultural or pastoral support to maximise their chances of completing their program successfully. In the case of rural students, specific curricular experiences may be important to consolidate a rural career choice. Moreover, many Indigenous students are on a journey to (re-)establish or deepen connection with Indigenous communities and language.

This is happening within a context of increasing resource constraint, demands on staff and more distributed educational delivery. Institutions are being challenged to respond to the call to indigenise (2). The pace and extent of change required creates a considerable challenge in this context.

### Purpose/Objectives

The session will explore how institutions are meeting the challenges to select and support more diverse student cohorts.

### Issues/Questions for exploration OR Ideas for discussion

1. Entry to health professional programmes is competitive, with current selection tools poor at predicting 'good' practitioners. How do we ensure that the selection process results in a sufficiently diverse cohort of students with the potential to complete their training?
2. Given the Australasian workforce crisis in primary health care, how can we identify those with a primary care interest at the time of selection?
3. Maximising individual student success and workforce impact may require dedicated academic, cultural or pastoral support; or personalised curricula. How are institutional structures and processes changing to meet these challenges?
4. How are we as allies supporting the indigenisation of the institution?

### References

1. Medical Deans Australia and New Zealand. Inclusive Medical Education: Guidance on medical program applicants and students with a disability. 2021 Medical Deans Australia and New Zealand Inc.
2. Hoskins TK, Jones A. Indigenous inclusion and indigenising the university. NZ J Ed Stud 2022;57:305–320.

## **Building research skills and culture in general practice training: best practice and future priorities.**

**A/prof Nancy Sturman<sup>1,2</sup>**, Dr Amelia Woods<sup>3</sup>, Ms Georgia Franklin<sup>4</sup>, Dr Sophie Vasiliadis<sup>4</sup>  
*<sup>1</sup>Royal Australian College Of General Practitioners, East Melbourne, Australia, <sup>2</sup>University of Queensland, Brisbane, Australia, <sup>3</sup>University of New South Wales, Sydney, Australia, <sup>4</sup>Royal Australian College of General Practitioners, East Melbourne, Australia*

**Introduction:** Research and academic culture in General Practice (GP) is relatively weak compared to hospital-based specialties, with limited structural and financial support for clinician-researcher careers. This project aimed to understand the GP training sector's perspectives and experience of building research skills and academic trajectories during training, and identify best practice and future priorities as the sector recovers from the pandemic and transitions to a new model of Australian GP training.

**Methods:** Online semi-structured focus group discussions, and individual and paired interviews were conducted, audio-recorded and professionally transcribed in 2022, with a total of 31 participants including trainees, medical educators, Directors of Training, recent Fellows and GP academics. Interview guides were modified iteratively as the provisional analysis progressed. Data were coded and analysed inductively. Over-arching themes and sub-themes were determined by all investigators over 5 online discussions.

**Results:** Frequently nominated challenges for building research skills included competing priorities, steep learning curves for novice GP researchers, and low visibility and accessibility of GP researcher funding, supervision and career pathways. Key elements of best practice were: exposure to GP researcher role models and GP research 'success stories'; embedding research skills in clinical learning; providing opportunities for trainees to participate in journal clubs, clinical audits and online educational modules; and research champions in local and regional training communities. Best practice opportunities for research-interested trainees included part-time academic posts with Departments of General Practice, education research grants and support for PhD pathways. Participants also advocated for flexible academic pathways, equitable access to opportunities across rural and regional contexts, and active collaboration across university, vocational training and clinical practice sectors.

**Discussion:** A stronger GP research culture and skillset (including, but not limited to, evidence-based clinical practice) is important, and in the best interests of patients, trainees and the overall status, sustainability and revitalisation of the profession.

## Absorbing and being absorbed, learning to learn in the clinical environment

**Ms Vanessa Ryan<sup>1</sup>**

<sup>1</sup>*Flinders University, , Australia*

### **Introduction**

Health professions education is often referred to as a journey where students are prepared for seamless progression from one year to the next. The reality for students is they navigate complex and ambiguous contexts, particularly when transitioning into the health system.

Aimed at understanding how students optimise clinical learning in complex health environments, this PhD study examined experiences from a medical student and clinical supervisor perspective.

### **Methods**

The research was undertaken using a qualitative case study approach. The context for the study was the third year of a four year medical course, where learning involves full immersion in clinical settings in different Rural, Remote and Metropolitan contexts. Data was collected from 26 participants via in-depth interviews: 14 students (interviewed twice) and 12 supervisors (interviewed once). This resulted in a total of 40 interviews. Themes were developed by iteratively coding and thematically analysing data.

### **Results**

Optimising clinical learning involved students understanding what skills and knowledge were valued in different environments. This study identified 4 themes relating to how students optimise learning in complex health environments. Including, integrating into the team, understanding expectations, relational conditions for learning, and transitional role development.

As expectations and implicit knowledge was acquired and practiced, students reported learning gains. They continued to enact and adjust certain skills as they transitioned through different learning landscapes. Learning gains and opportunities proportionately increased as students demonstrated these abilities. Developing and applying these abilities underpinned a 'learning investment criteria' where optimal learning and teaching takes place in the clinical environment.

### **Discussion**

This study illustrates the multiple ways that students optimise clinical learning through developing relational conditions for learning, uncovering the hidden curriculum, and co-constructing knowledge with supervisors, peers, and others.

It suggests novel ways to view learning transitions, particularly in the first entire clinical year of a health professions course.



## Reflections on medical identity; the ideal doctor, the real doctor, and me

**A/Prof Conor Gilligan<sup>1</sup>**

<sup>1</sup>*University Of Newcastle, , Australia*

### **Introduction**

We have used an established medical identity 'polarity profile' for quantitative analysis of medical students' perceptions of the ideal and real doctor, and the way they perceive themselves, using a series of juxtaposed adjectives.<sup>1</sup> Our previous findings demonstrate that students' perceptions of the ideal doctor are generally more positive than those of the real doctor, and that their self-perception lies between these two constructs. In this study, we used a mixed methods approach to more deeply explore the reasons behind these differences.

### **Methods**

First and final year students of a 5-year MD program were invited to complete the medical identity polarity scale and participate in follow-up focus groups. Here, we will present the findings from thematic analysis of the focus group discussions.

### **Results**

Thirteen first year and fifteen final year students participated across six focus group discussions in 2021. Emerging themes were mapped against established influences upon identity formation, and elements of professionalism<sup>2</sup>. Key themes included (1) the gap between ideal and real as driven by compromises and the realities of 'life' (first year students clearly articulated the ideal doctor as an unattainable standard due to the need for balance and self-care), (2) the importance of positive and negative role-models, (3) socio-cultural and family influences on individual's desire to enter the profession, and their perceptions of medical identity. Final year students also discussed the importance of practical experiences in influencing their sense of identity as a medical professional.

### **Discussion**

Even before students are exposed to role-models in clinical practice they recognise the importance of role-models, and articulate a gap between the ideal and the real doctor. We will discuss the findings in the context of how medical education could nurture the development of positive medical identity and close the gap between perceptions of the ideal and real medical professional.

### **References**

Gilligan C Loda T, Junne F, Zipfel S, Kelly B, Horton G, et al. Medical identity; perspectives of students from two countries. *BMC Medical Education*, 2020 Vol. 20 Issue 1 Pages 420.  
Helmich E, Yeh HM, Kalet A, and Al-Eraky M. Becoming a Doctor in Different Cultures: Toward a Cross-Cultural Approach to Supporting Professional Identity Formation in Medicine. *Academic Medicine*, 2017 Vol. 92 Issue 1 Pages 58-62.

## “I had a patient recently ...”: Experiences of learning genomics in the workplace

**Miss Alice Kim**<sup>1,2</sup>, Prof Jennifer Weller-Newton<sup>1,3</sup>, Dr Amy Nisselle<sup>1,2</sup>, Prof Louise Keogh<sup>1</sup>  
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<sup>3</sup>University of Canberra, Canberra, Australia

### Introduction

Workplace learning is fundamental in developing preparedness among health professionals. Large-scale efforts to mainstream genomic medicine into healthcare systems are gradually creating more genomics workplace learning opportunities, which may help address the issue of a lack of a genomic-competent health workforce [1]. Informed by prior research [2], this doctoral study explored the genomics workplace learning experiences of doctors, providing the first empirical evidence of workplace learning of genomics.

### Methods

Guided by phenomenology, a longitudinal qualitative approach was used to capture participants' experiences and perceptions of their genomics practice, workplace learning and preparedness. Doctors were eligible to participate if they worked in hospitals in Victoria, Australia, with access to clinical genetics services. Participants completed semi-structured interviews before and after submitting six reflective narratives on their workplace learning experiences over a minimum of six months. We used reflexive thematic analysis to deductively and inductively identify codes and generate themes.

### Results

Ten doctors were recruited from a range of specialties, career-stages, and genomics experience. All reported learning genomics 'day-to-day', identifying providing patient care within a complex healthcare system as affording rich learning experiences. Participants' genomics workplace learning were influenced by varied factors, including interactions with genetics specialists and services, prior experiences, specialty and patient base, their workplace, and access to funded genomic tests. Participants reflected that as they accumulated clinical experience, their workplace learning became more refined and deliberate to address knowledge and skill gaps.

### Discussion

Relevant and impactful experiences when learning about emerging technologies, such as genomics, are present in everyday practice. Currently, workplace learning is under-recognised in developing preparedness to practice genomics. These findings provide a basis to consider workplace learning to help prepare the health workforce for genomics as complementing structured education and professional development initiatives.

[1] White, S., Jacobs, C., & Phillips, J. (2020). Mainstreaming genetics and genomics: a systematic review of the barriers and facilitators for nurses and physicians in secondary and tertiary care. *Genetics in Medicine*, 22(7), 1149-1155. <https://doi.org/10.1038/s41436-020-0785-6>

## Who's Culture Contributes to Health Disparities? Interrogating Western norms in health professional education.

**Alison Francis-cracknell<sup>1</sup>**

<sup>1</sup>*Monash University, Frankston, Australia*

### **Introduction**

Health professional education is a critical mechanism for addressing persistent health disparities between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians. Despite this recognition in professional standards, health professions education remains fundamentally underpinned by western-centric perspectives, knowledge and teaching practices which perpetuate disparities. Furthermore, non-Indigenous educators involved in learning and teaching of Aboriginal and Torres Strait Islander health generally feel unprepared and lack recommended skills. Therefore, this study aimed to understand non-Aboriginal and Torres Strait Islander educators' perspectives and experiences of teaching Aboriginal health and cultural safety to health professional students in a settler colonial context. In doing so, we identify how this understanding can inform the focus of professional development of health professions educators, for healthcare equity.

### **Methods**

A qualitative study was conducted, underpinned by social constructivism. Twenty non-Indigenous nursing, physiotherapy and occupational therapy educators in a university located in South Eastern Australia were interviewed about their experiences and perspectives of teaching. Inductive thematic analysis was used to generate themes and findings.

### **Results**

The study identified themes mapped into two main groupings: 1) educator perspectives regarding learning and teaching and 2) educator perspectives regarding their own learning and professional development. Overall, educators grappled with layers of tension and uncertainty and were commonly ill-prepared to teach recommended curriculum topics such as racism, privilege and settler colonisation.

### **Discussion**

Reinforcing cycles in education continue to privilege western-centric worldviews. In order to break this cycle, non-Indigenous educators involved in delivering Aboriginal and Torres Strait Islander health curriculum need to: identify, interrogate and contextualise sources of discomfort in teaching and critically reflect on how this understanding can improve their teaching. Educators require institutional support to access evidence-based, theory informed professional development that enables them to become practitioners of cultural humility and be facilitators and co-learners (rather than experts) of Aboriginal-led curriculum.

## Unexplored environments: online social networks and their influence on medical students

**Dr Eleonora Leopardi<sup>1</sup>**, Dr Daniel Wong<sup>1,2</sup>, Dr Richard McGee<sup>1,2</sup>

<sup>1</sup>University of Newcastle, Newcastle, Australia, <sup>2</sup>Central Coast Local Health District, New South Wales

### Introduction/Background

The internet is a stable presence in our lives and has become increasingly pervasive thanks to smart devices and social media use. Tools such as Facebook, Twitter, Reddit, Instagram, and TikTok have provided new avenues for people to connect with peers worldwide. Medical students are no exception: in-person interactions related to education within medical schools are now complemented by online interactions through social networks. These Medical Students Online Networks (MSONs) may be much larger than any medical school. MSONs are both an avenue to explore students' perspectives and attitudes, and a source of culture and norms that students are exposed to, learn from, and participate in.

### Aim/Objectives

We believe it is important to explore students' use of large online networks of medical students, as content shared within MSONs contributes to their training. We aim to understand the influence of interactions happening in these groups on the students' learning, using the hidden curriculum theory as conceptual framework. After exploring the online content related to medical education, we identified the MSONs on the publicly accessible platform Reddit. We identified r/medicalschooll as the largest MSON to date, extracted all content from it, and analysed it descriptively. Further thematic and discourse analysis are ongoing.

### Discussion

As of February 6<sup>th</sup> 2023, r/medicalschooll has 632,181 members, publishing approximately 63 posts and 561 comments each day. Over the past three years, r/medicalschooll members have tripled, and number of comments has doubled. Content is primarily related to learning resources, postgraduate training, career opportunities, professionalism and students' wellbeing. Posts are categorised by "flair", which include "News", "Serious", "Preclinical", "Clinical", "Residency", "Shitpost", and "Meme".

### Issues/Questions for exploration OR Ideas for further discussion

MSONs represent a component of the medical school's learning environment, contributing to informal and hidden curricula that students experience. What does this mean for health professions educators?

### Evaluating the validity evidence for a Situational Judgement Test as a measure of professionalism for selecting physician trainees

**Dr Imogene Rothnie<sup>1</sup>**, Dr Kelly Dore<sup>2</sup>, Ms Jill Derby<sup>2</sup>, Dr Gill Starenios<sup>2</sup>, Ms Krysia Kostrz<sup>2</sup>, Ms Libby Newton<sup>1</sup>

<sup>1</sup>Royal Australasian College of Physicians, , Australia, <sup>2</sup>Acuity Insights, Toronto, Canada

#### Introduction

Entry criteria for health professional programs ought to include the core attributes of professional practice. The Royal Australasian College of Physicians (RACP) identifies communication and teamwork as such attributes, however, assessing these during selection remains challenging. In 2022, the RACP piloted a Situational Judgement Test (SJT), based on the theory of planned behaviour, to measure targeted attributes during selection. Given the high stakes of selection and the value such measures could yield, this study evaluated the evidence for interpreting the SJT scores as accurate and fair measures of important attributes of professional practice.

#### Methods

Kane's validity framework was used to develop an 'interpretation use argument' (IUA) [1] for the SJT scores as measures of professionalism, including stakeholders' descriptions of ideal and concerning behavioural representations of the targeted attributes by physicians in practice. Criteria from a measurement framework, the Rasch model (modern test theory) [2] were used to evaluate whether scores on the SJT could be explained by applicant's proficiency level on a construct that represents a measure of professionalism, and the precision of such measures.

#### Results

189 stakeholders participated in a combination of survey and workshops to align behavioural representations of key competencies in professional practice to situational depictions in the SJT. 278 applicants completed the SJT over three test forms. Rasch analysis showed that scores on the assessment showed good fit to a hierarchical unidimensional construct that could be explained as a measure of professional and social reasoning. Applicant measures could be reliably separated (person separation index of 0.83) into three statistically significant bands of performance.

#### Discussion

These results provide important validity evidence for the interpretation and use of SJT scores for assessing targeted constructs of professionalism. The results also highlight the value of engaging stakeholders to identify representative behaviours of key attributes and incorporate these in situation-based assessments.

#### References

1. Kane, M. T. 2013. "Validating the Interpretations and Uses of Test Scores." *Journal of Educational Measurement* 50 (1): 1-73.
2. Rasch G. (1960/980) *Probabilistic Models for Some Intelligence and Attainment Tests*. Chicago: University of Chicago Press.

## Comparing pharmacy student performance in simulated Objective Structured Clinical Exam (OSCE) with work-integrated learning contexts

**Dr Angelina Lim<sup>1</sup>**

<sup>1</sup>Monash University, Australia, <sup>2</sup>Murdoch Children's Research Institute, Australia

### **Introduction**

Although a thoughtfully designed Objective Structured Clinical Examination (OSCE) is a robust and valid assessment tool, debate exists about the effectiveness of OSCEs to authentically mirror real-life scenarios. Limited studies have explored the extrapolation inference in Kane Validity's Framework and explored how assessment relates to real life practice. This study aims to compare the performance of students in an OSCE to their performance in real-life, and explore factors affecting performance.

### **Methods**

A sequential mixed methods approach was used. Mystery shoppers visited pharmacy students on their community pharmacy placement and simulated the same case scenario students were given a recent infectious diseases OSCE. Students were marked with the same rubrics and these marks were compared with their OSCE score. The mystery shopping visit was then revealed to all the students and all students were asked to participate in a semi-structured interview.

### **Results**

115 visits were conducted across Monash Australia and Malaysia campuses, and 36 follow-up interviews were completed. The mean mystery shopping score was 36.2% compared to the actual OSCE score of 81.1%. About 93% of students scored lower in the mystery shopping encounters compared to their OSCE ( $p < 0.001$ ). Only 3.5% did better, while 3.5% scored the same. In the interviews, students reflected that a real-life patient is easier to manage than in an OSCE; stating in real-life they could speak more freely, real life patients were more open to different treatment options, and the presence of work colleagues eased their nervousness.

### **Discussion**

Students scored lower on placement than in OSCEs even though they reflected that it is easier to manage a patient in real-life; outlining challenges to replicate a real-life pharmacy situation in an OSCE. Whilst OSCEs are useful for testing process type skills, clinical problem solving may be best assessed in a workplace environment.

## Students as simulated patients for OSCEs: Evidence for its feasibility and efficacy

**Dr Venkat Reddy<sup>1</sup>, Dr Sharee Stedman<sup>1</sup>**

<sup>1</sup>Medical School - The University Of Queensland, Australia

### Introduction

The Objective Structured Clinical Examination (OSCE) is ubiquitous in medical education and can be daunting for students. It has been suggested that medical students in the years not being assessed by the OSCE could act as simulated patients (SPs) to increase their OSCE literacy while engaging them as partners to co-create a learning culture<sup>1</sup>.

This paper shares the lessons learned over 2 years of recruiting, training and supporting student-SPs at a large Medical School, and reports the educational benefits accrued by the students.

### Methods

Students from Year 1, 3 and 4 were recruited via a phased, multifaceted strategy to be SPs in the Year 2 formative OSCE in 2021 and 2022. A training package was designed<sup>2</sup> de novo and delivered online. Following their service as SPs, students were surveyed to assess the training package and their experience on the day. Furthermore, the educational benefits to their knowledge base, clinical skills, and confidence in preparing for future clinical examinations were assessed.

### Results

Approximately 70% of the places for SPs were filled by Year 1 students in 2021 and 2022. Places were over subscribed by 17% in 2022.

Almost 70% of SPs responded to the survey. Almost all respondents (97.5%) felt that being a SP helped built on their prior knowledge and clinical skills, and that the experience would help them prepare for future clinical examinations. One student-SP observed that it was *“A fantastic experience that I cannot recommend enough to every other medical student. Absolutely eye opening and reassuring. I am certain this will make me a stronger test taker and better doctor overall.”*

### Discussion

The growing popularity of the programme, survey responses, and qualitative feedback received underscores the educational benefits to students of being SPs. Future studies will aim to examine the performance in future OSCEs of these cohorts of student-SPs to evaluate the longitudinal benefits of the programme.

### References

<sup>1</sup> Annette Burgess, Tyler Clark, Renata Chapman & Craig Mellis (2013), “Medical student experience as simulated patients in the OSCE”, *The Clinical Teacher*, 10: 246–250

<sup>2</sup> Kamran Z. Khan, Kathryn Gaunt, Sankaranarayanan Ramachandran & Piyush Pushkar (2013), “The Objective Structured Clinical Examination (OSCE): AMEE Guide No. 81. Part II: Organisation & Administration”, *Medical Teacher*, 35:9, e1447-e1463

## **We're moving on from the OSCE – here's why: Evaluation of a new competency-based assessment of medical students' physical examination skills**

**Associate Professor Julia Harrison**<sup>1</sup>, Associate Prof Julia Harrison<sup>1</sup>, Dr Vikram Amara<sup>1</sup>, Prof Michelle Leech<sup>1</sup>  
<sup>1</sup>*Monash University, Clayton, Australia*

The Assessment of Physical Examination skills (APEX) assessment tool was developed for final year medical students to ensure medical graduates were safe to practice in relation to their physical examination (PE) skills. It involved student summative assessment of physical examination of a Simulated Patient (SP), in presence of an assessor (senior doctor), immediate verbal feedback, and repeat attempts if required; [unlike a summative Observed Structured Clinical Exam (OSCE) with no detailed feedback/ opportunity to improve]. The goals were: identification and remediation for students who are below standard; assessment for learning; motivation for students; and reassurance for staff and students for safety in professional practice.

Applying a pragmatic approach, anonymous, optional online evaluation surveys (multiple-choice questions and free text responses) were offered to all assessors and students after APEXs were completed over one year duration, addressing applicability, confidence levels of PE, value of APEX assessment, feedback provided, impact on PE skills. Simulated patients were interviewed for patient perspective of care and impact of APEX on graduate readiness. Descriptive statistics were used to report Likert's scale like responses, and thematic analysis used for free-text and interview transcripts.

A total of 124 (95%) students reported confidence in physical examination skills, 111 (85%) students appreciated the opportunity for the assessment, and 102(78%) students appreciated feedback from SPs and examiners. Themes from the content analysis of student transcripts suggested increased motivation to practice PE skills (41), increased confidence (21), opportunity for feedback (15) and positive learning environment (9). SP transcripts highlighted SP contribution to student assessment/ learning, opportunity to give feedback and mimicking real-doctor patient interaction. 108 (83%) students and 23 (69%) assessors thought APEX was effective for assessing PE. Students, assessors, and SPs reported favourably about its design, particularly in relation to opportunities for feedback, motivation for learning and similarity to real-life clinical discourse.



## The shifting tide of medical education: Training senior medical students as OSCE assessors for their juniors

**Mr Tyler Kelly<sup>1</sup>, Dr Venkat Reddy<sup>1</sup>**

<sup>1</sup>*The University of Queensland, Brisbane, Australia*

### **Introduction/Background**

From 2023, over 1700 UQ MD students will be assessed across approximately 12 Objective Structured Clinical Examinations (OSCEs). To examine these students, we will rely heavily on a finite pool of volunteer clinicians (faculty assessors) who juggle education commitments and clinical responsibilities exacerbated by the ongoing COVID pandemic. We propose to train senior medical students as OSCE assessors (peer assessors) thereby providing the co-benefits of lessening the education burden on our examiner pool and accruing educational benefits to peer assessors.

Peer OSCE assessors have been trialled by medical schools for low-stakes assessments for learning with resultant benefits for examinees, peer assessors, faculty and volunteer clinicians (1). However, evidence is scarce on the efficacy of peer assessors in higher stakes assessments of learning, with the little evidence available suggesting that inter-rater reliability between peer and faculty assessors may be a limiting factor. The role of assessor training in improving rater reliability has been identified (1) but evidence on the composition of an effective training package remain elusive. This paper aims to address this gap.

### **Objectives**

To discuss:

1. The elements and design of a training package eg. temporal features (duration, interval, timing), mode of delivery to maximise inter-rater reliability between peer and faculty assessors across sites and institutions.
2. Strategies to quantify and evaluate:
  - a. The efficacy and reliability of the training package
  - b. The range of benefits to assessors and faculty

### **Discussion**

We will present findings of a narrative literature review and qualitative data from expert input aimed at addressing the above objectives.

### **Ideas for further discussion**

We aim to add to the pool of qualitative data by tapping into collective experiences and insights of peers during the Q&A time.

### **References**

1. Khan R, Payne MWC, Chahine S. Peer assessment in the objective structured clinical examination: A scoping review. *Medical Teacher*. 2017;39(7):745-56.

## Correlation of Script Concordance Test (SCT) with Objective Structured Clinical Examination (OSCE)– a review of 10 years' data

**A/Prof Michael Siu Hong Wan**<sup>1</sup>, Dr Francis Geronimo<sup>1</sup>

<sup>1</sup>*School of Medicine. The University Of Notre Dame, Australia, Sydney, Australia*

### **Introduction**

Script concordance test (SCT) is a valid and reliable tool to assess clinical reasoning. A clinical scenario is presented in the context of uncertainty, additional information is given, and students are asked to decide whether this information increases or decreases the likelihood or appropriateness of the proposed diagnosis or management on a 5-point Likert scale. The answers are then compared with a panel of expert clinicians and scored using a weighted scoring system according to the concordance with the panel. However, its correlation with OSCE is not well studied. The aim of this study is to determine the correlation of SCT scores with OSCE in fourth year medical students.

### **Methods**

Marks for SCT and OSCE completed by fourth year medical students from 2011-2022 were retrospectively collected. Final score for SCT was out of 40 marks. Correlation between the SCT and OSCE scores were analysed using Pearson correlation coefficient.

### **Results**

The Pearson correlation coefficient between SCT and OSCE scores was 0.23-0.43 ( $p < 0.05$ ).

### **Discussion**

There is a significant and moderately strong correlation between SCT and OSCE scores. As OSCE assesses many clinical competencies including history taking, physical examination, procedural skills, communication and clinical reasoning, SCT alone could not replace OSCEs. Limitations of the study include the relatively small number of SCT items and data collected from a single medical school.

In conclusion, SCT could be used as an additional modality to assess clinical reasoning of medical students. It is relatively easy to develop, administer and mark electronically. Clinical reasoning questions in OSCE could potentially be moved to SCT written exams freeing up more time to assess communication skills and professionalism.

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### **Failing professional practice: through the students' eyes. What are we missing?**

**Miss Wendy Milgate**<sup>1</sup>, Associate Professor Jodie Copley<sup>1</sup>, Dr Jessica Hill<sup>1</sup>

<sup>1</sup>*University of Queensland, Brisbane, Australia*

#### **Introduction/Background**

Professional practice experiences are essential components for allied health and nursing students to complete during their tertiary studies. Whilst the failure rate of professional practice for occupational therapy in Australia is low, it can have a considerable emotional, psychological and financial impact on students who undergo a fail experience. Furthermore, supporting an underperforming or failing student has also been identified to be a time consuming and difficult experience for university staff and/or their clinical educators. Whilst a range of factors contributing to students failing a professional practice experience have been explored, limited research is available representing the student's perspective.

#### **Aim/Objectives**

This qualitative study seeks to understand the students' experience of failing or near failing a professional practice experience, how students are currently supported through this experience and identify areas for improvement.

Qualitative data was collected through individual semi-structured interviews with students or occupational therapists who had a fail experience in the past 5 years. University practice education staff also participated in individual semi-structured interviews with some maintaining audio diary entries during their work with students who were experiencing failure. Reflexive thematic analysis was used to identify key themes.

#### **Discussion**

Preliminary findings will be presented identifying key topics including, factors relating to the student-educator relationship, being terminated from placement, coping strategies and resources, and how the university engaged with them during this time.

#### **Issues/Questions for exploration**

These insights will create the opportunity for the university sector to reflect upon their own practices on how they can better support students who are undergoing a fail experience in professional practice. By enhancing current policies, services and resources the university sector can strive to work more effectively so that students can have a better chance of a successful progression towards become quality practitioners into the future.

## Theory into Practice: Scholarship and the Clinician-Educator

**Dr Mark Lavercombe**<sup>1,2</sup>

<sup>1</sup>Department of Medical Education, The University Of Melbourne, Melbourne, Australia, <sup>2</sup>Department of Respiratory & Sleep Disorders Medicine, Western Health, Footscray, Australia

### Introduction/Background

Thirty-three years have passed since the publication of Boyer's seminal work *Scholarship Reconsidered: Priorities of the Professoriate*. Cleland et al. reconsidered Boyer for modern health professions education (HPE) in their 2021 AMEE Guide *Redefining scholarship for health professions education*.<sup>1</sup> They offered a revised definition of scholarship for HPE while considering the relationships between scholarship, scholarly teaching and the scholarship of teaching and learning.

Although we understand the need to consider scholarship and contribution more broadly within HPE, the clinician-educator literature describes how difficult it can be for clinician-educators to contribute scholarship in their practice. Clinician-educators form a significant component of our health education workforce, and they report specific challenges that can lead to uncertainty in their professional development.<sup>2</sup>

### Purpose/Objectives

This Personally Arranged Learning Session aims to discuss the specific challenges that clinician-educators face in developing their scholarship and demonstrating their contribution. It is hoped that both clinician-educators and senior academics will attend.

Clinician-educators will be encouraged to share challenges they have met and how they have overcome them. Academic leaders will be invited to share strategies they have employed to inspire, engage and support clinician-educators to develop scholarly contribution that benefits the HPE community.

The learning objectives are to examine challenges in achieving scholarship specific to clinician-educators' work and to formulate strategies for supporting clinician-educators to overcome those challenges and contribute to the HPE community of practice.

### Questions for exploration

What barriers to achieving scholarship exist for clinician-educators? Which elements of the roles of clinician-educators can make it difficult?

How can we best support clinician-educators to participate in and contribute to the HPE community of practice?

Are there ways in which academic leaders can help develop, support and mentor clinician-educators as they grow in their dual roles?

### References

1. Cleland JA, Jamieson S, Kusurkar RA, Ramani S, Wilkinson TJ, van Schalkwyk S. Redefining scholarship for health professions education: AMEE Guide No. 142. *Medical Teacher*. 2021;43(7):824–38.
1. Chang A, Schwartz BS, Harleman E, Johnson M, Walter LC, Fernandez A. Guiding Academic Clinician Educators at Research-Intensive Institutions: a Framework for Chairs, Chiefs, and Mentors. *J Gen Intern Med*. 2021;36(10):3113–21.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## **A practice guideline to support experts by experience and health educators to co-design and co-deliver health professional university education**

**Mrs Melanie Roberts**<sup>1</sup>, Associate Professor Michelle Bissett<sup>2</sup>, Ms Hannah Gawne<sup>1</sup>, Dr Maddy Slattery<sup>1</sup>, Ms Victoria Stewart<sup>1</sup>, Ms Kim Walder<sup>1</sup>

<sup>1</sup>Griffith University, Southport, Australia, <sup>2</sup>Southern Cross University, Bilinga, Australia

### **Introduction/Background**

Health profession education programs are required to broaden the involvement of experts by experience to a partnership that spans curriculum design, implementation, and evaluation. This can be a challenging addition to an educator's skill set for those new to curriculum partnership, and an opportunity for experts by experience to contribute to the curriculum in new ways. There are guidelines to support this type of partnership in health service and research contexts, but not in higher education. Therefore, experts by experience and educators have had to muddle through without practical or theoretical guidance.

### **Aim/Objectives**

This presentation will showcase key aspects of an evidence-informed practice guideline that has been developed. The presentation content will: (i) enhance conference delegates knowledge about partnership from educator and expert by experience perspectives; and (ii) explore key elements of partnership including advocacy and logistics. The presentation will be of value to health professional educators who may be new to working in partnership models in curriculum design and delivery.

### **Discussion**

The authors have developed a practice guideline using a co-designed research process that incorporated experiences from health educators and experts by experience, and the findings of a scoping literature review. Therefore, it is a user-friendly guide, with practical recommendations that are supported by literature, that address considerations for the partnership across three time points: 1. Getting Ready: Before the designing and teaching begins, 2. Teaching time: Working together to co-design and co-teach and 3. Finishing up: Final thoughts and reflections.

### **Issues/Questions for exploration OR Ideas for further discussion**

Participants will be presented with information that will support them to reflect on their own and their university's readiness for partnership. The recommendations for practice that will be provided will allow educators to consider what action they can take to progress their own practice. Conference delegates can request a copy of the guideline to support their future partnership practice.

## A qualitative study of the experiences of early career Occupational Therapy Clinical Educators within an Australian tertiary health service

**Mrs Vicky Stirling**<sup>1</sup>, Dr Rachel Wenke<sup>1</sup>, Mrs Debborah Fitzgerald<sup>1</sup>, Mrs Alis Moores<sup>2</sup>  
<sup>1</sup>Gold Coast Hospital and Health Service, Gold Coast, Australia, <sup>2</sup>Townsville Hospital and Health Service, Townsville, Australia

### Introduction

Increased demand for clinical placements often necessitates the adoption of the clinical educator (CE) role by early career professionals. Preparation and support needs of early career CEs has received limited attention in the literature.

The aims of this research were to explore the experiences of early career occupational therapy (OT) CEs in varying practice settings within a tertiary health service, identifying their preparation and support needs.

### Methods

A qualitative descriptive approach (Bradshaw, Atkinson, & Doody, 2017) was used with semi-structured interviews with early career OT CEs. Participants were in their first four years of practice, educating a student for the first or second time on a placement of five or more weeks duration.

Inductive thematic analysis (Braun & Clarke, 2006) with integrated team discussion and consensus led to the development of key themes. Interview transcripts were coded using Nvivo software.

### Results

Ten occupational therapists consented to participate. Preliminary findings identified a range of factors which support early career OT CEs in their role, including having time to undertake activities which prepared them for their CE role. Support and guidance from staff with more clinical education experience assisted CEs to communicate and provide feedback on the expected skills to be demonstrated over the course of the placement. CEs also shared the multiple ways that they facilitated the students' and their own learning and skill development. A common support need identified by CEs was having timely awareness of appropriate clinical education resources to utilise prior to and during the placement. Additionally, the challenge of balancing student education with work demands was frequently reported.

### Discussion

The challenges and supports identified indicate that early OT CEs need time, resources and support to perform the CE role. A better understanding of the unique early career CE experience allows placement providers to reflect on their approach to supporting these staff.

## Attention hook! How to create a visual abstract for your publication

**Dr Amanda Charlton<sup>1,2</sup>, Dr Tanisha Jowsey<sup>3</sup>, Dr Rachelle Singleton<sup>1</sup>**

<sup>1</sup>University of Auckland, Auckland, NZ, <sup>2</sup>Auckland City Hospital, Auckland, NZ, <sup>3</sup>Bond University, Gold Coast, Australia

### **Introduction/Background**

A visual abstract is an infographic of a journal article's written abstract. Developed in 2016, it is a picture summary understood in a 30-second glance. Visual abstracts hook a viewer's attention, resulting in two to three times more article reads. You can browse examples of published visual abstracts on Twitter #VisualAbstract, in a medical education journal [Journal of Graduate Medical Education](#), or a [newsletter](#). Good news! Visual abstracts are designed on templates, using icons and keywords. When your manuscript is accepted, publishers are asking authors to submit a visual abstract for the journal's social media. However, if you are an author in the health professions unaware of the format and efficacy of the visual abstract, you risk missing out on communicating your research with impact.

### **Aim/Objectives**

We introduce visual abstracts, provide interaction with many examples, and demonstrate evidence of efficacy.

### **Discussion**

In addition to journal publications, we have successfully created and used visual abstracts for teaching and learning, grant proposals, clinical guidelines, article summaries, professional society newsletters, press releases and conference presentations. To help you create your first visual abstract, we have designed a [multimedia handout](#).

### **Ideas for further discussion**

Let us explore together the underpinning educational theories, creative commons icon sources, and quality evaluation tools for content and design.

## Reduce the forgetting in health professionals

### **Emma Trumble**<sup>1</sup>

<sup>1</sup>*University of Queensland, , Australia, <sup>2</sup>Australian Catholic University, Australia*

**Introduction:** Knowledge, if not revisited, deteriorates over time, from basic science content in first year students to surgical and radiography skills in health professionals. Two learning strategies, retrieval practice and distributed practice, have demonstrated improvements in long term memory in many studies. These strategies have numerous methods in which they can be applied practically by a student and educator, which may also alter their effectiveness.

**Methods:** A systematic review of these two strategies in health professions education. A critical appraisal of the research quality and summary of the application variables and statistical significance of the studies.

**Results:** Many studies showed that retrieval practice and/or distributed practice benefitted students' knowledge retention. The quality to studies was good and was often limited by the nature of a classroom-based study. The practical application of these methods in the classroom varied widely. Short answer questions often improve long term memory compared to multiple-choice questions and gradually increasing the time between restudying session, could also benefit retention.

**Discussion:** Educators could modify these strategies and trial them in their own classroom to see if their improve student learning. Options include demonstrating the benefits of these strategies and educating students about how to improve their learning. The use of formative or summative assessments will increase the amount students use retrieval practice, and spacing these assessments throughout the unit will aid in their use of distributed practice.



## 3A – Symposium

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### **From burden to benefit: Shifting the narrative around allied health clinical placements**

**Associate Professor Gillian Nisbet<sup>1</sup>, Associate Professor Merrolee Penman<sup>1,2</sup>, Dr Amabile Dario<sup>1</sup>**

<sup>1</sup>The University of Sydney, Sydney, Australia, <sup>2</sup>Curtin School of Allied Health, Curtin University, Perth, Australia

#### **Introduction/Background**

In an increasingly complex healthcare environment where allied health resources may be limited, allied health clinical placements are often perceived as an additional burden to an already overwhelmed workforce. Placements, however, are central to preparing future health professionals for practice and an important pipeline for the health workforce.

In this multi-faceted and complex context, we ask the question: 'Is it possible to re-frame the narrative around placements through demonstrating mutual benefit'?

#### **Purpose/Objectives**

This symposium will showcase research demonstrating how partnership approaches between health service providers, education providers and researchers can successfully deliver innovative placement models for *mutual benefit* - of patients, service providers, education providers, students and researchers. We aim to generate a discussion on re-imagining the purposes and practices of allied health clinical placements to assist in developing a national network of healthcare professionals and academics ready to influence practice, policy and industry engagement.

#### **List of presentations**

We present three placement models across various contexts, each evidencing positive benefit for key stakeholders, shifting the narrative from burden to benefit.

Merrolee Penman: Partnering for mutual benefit within a hospital setting.

Outcomes and lessons learned from a feasibility study of designing placement models that achieve two mutual aims: (i) effective preparation of the future workforce and (ii) delivering high quality and innovative allied health services will be presented<sup>1</sup>. Underpinned by Cultural Historical Activity Theory, we propose a model whereby students are purposefully integrated into service delivery for mutual benefit.

Amabile Dario: Clinical research placement models.

Clinical placements delivered in the context of research, whereby students are integrated and contribute to clinical research projects that involve the delivery of evidence-based care will be presented. This is a novel approach to developing future clinician-researcher and assists research development<sup>2</sup>.

Gillian Nisbet: Students improving communication access within health care settings.

Outcomes of a novel placement design whereby allied health students are deliberately integrated into the *Communication for Safe Care* project design to increase reach and impact will be presented.

#### **Discussion:**

Discussion will focus on (i) potential to apply learnings from the above projects to other contexts; (ii) how best to foster engagement with service users and students in co-design of placements and services; (iii) next steps in establishing a network of interested industry, professional and academic partners to generate a

national program of research; (iv) how best to influence national policy for stronger education–service partnerships.

### **References**

1. Nisbet, G., Thompson, T., McAllister, S., Brady, B., Christie, L., Jennings, M., ... & Penman, M. From burden to benefit: a multi-site study of the impact of allied health work-based learning placements on patient care quality. *Advances in Health Sciences Educ.* 2022:1-33.
2. Dario A, Simic M. Innovative physiotherapy clinical education in response to the COVID-19 pandemic with a clinical research placement model. *J Physiother.* 2021;67(4):235-237.

### **“Requesting vectors to final approach”: partnering with Air New Zealand to optimise fidelity of an interprofessional simulation**

**Dr Guy Melrose<sup>1</sup>, Dr Vicki Jones<sup>1</sup>, DJ Olivier<sup>2</sup>, Jonathon Webber<sup>1</sup>**

<sup>1</sup>University of Auckland, New Zealand, <sup>2</sup>Air New Zealand, New Zealand

#### **Introduction/Background**

The Urgent and Immediate Patient Care (UIPC) week is an undergraduate, inter-institutional simulation course at the University of Auckland designed to meet specific interprofessional learning outcomes. In 2022, an opportunity arose for a new scenario on day one of the course. The scenario needed to occur in a community setting and hold relevance for the three professions in attendance: final year nursing, pharmacy and medical students.

#### **Aim/Objectives**

Working with an Air New Zealand advisor, an in-flight emergency simulation was developed that models both realistic clinical and aviation practice. A pre-simulation student activity was formulated around ethico-legal issues of emergency care together with faculty materials about airline processes. The scenario was piloted successfully with interprofessional faculty participants and run for 30 groups of 8-10 students in 2022. The industry expert observed and provided feedback to the UIPC faculty and leads. Student and faculty feedback are positive and indicate that the materials facilitate interprofessional learning objectives.

#### **Discussion**

A co-design process with an industry expert supported simulation fidelity through the choice of equipment as well as the development of the simulation setting and the scenario itself.<sup>1</sup> Navigating this new partnership was made easier because of the shared use of simulation as a tool for development of teamwork skills in both aviation and healthcare. Potential airline process improvement and evaluation of changes are unexpected but promising outcomes of this partnership which is ongoing with bidirectional sharing of ideas, experiences and skills.

#### **Ideas for further discussion**

Do non-healthcare settings encourage flattening of hierarchy and support sociological fidelity<sup>2</sup>

Further opportunities to partner with non-healthcare industries to further health professional education

Expanding the interprofessional team beyond healthcare professionals in pre-hospital care

1) Carey, J.M., Rossler, K. (2022). The how when why of high fidelity simulation. *StatPearls*. StatPearls Publishing. <https://europepmc.org/article/nbk/nbk559313>

2) Boet, S., Bould, M.D., Burn, C.L., Reeves, S. (2014). Twelve tips for a successful interprofessional team-based high-fidelity simulation education session. *Medical Teacher*, 36, 853-857. <https://doi.org/10.3109/0142159X.2014.923558>

## Healthcare Simulation Escape Rooms for Interprofessional Education – the puzzles are just one facet.

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Affiliations:

<sup>1</sup>Bond University, Gold Coast, Australia, <sup>2</sup>University of Otago, Otago, New Zealand

### Background

Healthcare simulation escape rooms (HSERs) provide an immersive, real-life, puzzle-solving and storytelling experience. As with traditional escape rooms, they are typically developed for small groups of participants (players) whose goal is to solve puzzles to complete a challenge, which often requires exiting a locked room and/or completion within a given timeframe<sup>1,2</sup>. Simulation escape rooms have become increasingly popular over the past five years in health professions education<sup>1</sup>.

### Aim

In this presentation we will share lessons we have learned while designing and delivering interprofessional HSER.

### Findings

We have found that HSERs work well in simulated environments and with simulation equipment and resources. Best practices and core healthcare principles can be utilised with the overall goal of safe patient care<sup>1</sup>. However, developing and delivering authentic and engaging HSERs can be challenging – since it is not just about designing the puzzles!

### Discussion

Aspects of HSERs that we will discuss include:

1. Optimising buy-in for IPE HSERs across health professions education.
2. Design and development of authentic and engaging puzzles for healthcare education – narrative, flow, puzzles, equipment, and technology.
3. Logistics of implementation and delivery.
4. Essentials for effective interprofessional debrief.
5. Optimising feedback and evaluation.
6. Growing a community of HSER designers and facilitators.

### Issues/Questions for exploration OR Ideas for further discussion

*Comments, questions, comparative experiences and discussions on any of the aspects listed under Discussion are welcomed.*

### References

1. Anderson, M., Lioce, L., M. Robertson, J., O. Lopreiato, J., & A. Díaz, D. (2021). Toward Defining Healthcare Simulation Escape Rooms. *Simulation & Gaming*, 52(1), 7–17. <https://doi.org/10.1177/1046878120958745>
2. Botturi, L., & Babazadeh, M. (2020). Designing educational escape rooms: validating the Star Model. *International Journal of Serious Games*. 7(3), 41-57. <https://doi.org/10.17083/ijsg.v7i3.367>

**Keywords:** Escape rooms, simulation, collaboration, community of practice.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Utilising existing Interprofessional collaborative opportunities for undergraduate health students in work integrated learning experience placements

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<sup>1</sup>*School of Nursing & Midwifery University Of Newcastle; RhD candidate School of Medicine & Public Health University of Newcastle , Newcastle , Australia,* <sup>2</sup>*School of Biomedical Sciences & Pharmacy University of Newcastle , Newcastle , Australia,* <sup>3</sup>*Nursing, Paramedicine & Healthcare Sciences: Charles Sturt University, Port Macquarie Campus, Australia ,* <sup>4</sup>*School of Medicine & Public Health University of Newcastle , Newcastle, Australia*

### Introduction

This is a summary of ongoing work on a project that is exploring how Undergraduate Health Students (UHS) identify interprofessional collaborative practice (IPC) opportunities and engage in these opportunities whilst they are undertaking work integrated learning (WIL) activities. Understanding how existing opportunities can be utilised to enhance the development of an IPC practice ready workforce will support sustainability and could promote successful IPC outcomes for all involved.

### Aims:

The primary aim is to examine how UHS who are in the beginning stages of their programs are able to identify and engage in interprofessional collaborative practice and learning opportunities whilst undertaking course required clinical placements / WIL experiences.

### Methods

Implementing the conceptual framework of social-ecological theory and the methodology of focused ethnography, self-reported surveys, semi structured interviews and collection of artefacts will be cyclically gathered to explore and understand the experiences of the undergraduate health student as they begin their educational journey within the acute care clinical environment.

### Discussion

This project upholds the belief that interprofessional learning is a process occurring over time that subsequently requires several learning opportunities to establish the skills required to work together interprofessionally in practice. IPC skills should be learned from the interaction students have with others within their clinical placement / WIL environments. Utilising existing opportunities will support the sustainability of advancements in this IPC.

## Escaping the Briefcase: the key to unlocking interprofessional learning and teaming for health students

**Ms Kathryn Beyer<sup>1</sup>**, Ms Chrissie O'Connell<sup>1</sup>, Mrs Lucy Parker<sup>1</sup>, Dr Tony Fallon<sup>1</sup>, Miss Kirsten Middleton<sup>1</sup>

<sup>1</sup>*Southern Queensland Rural Health, Toowoomba, Australia*

### Introduction

Interprofessional education (IPE) ensures health students are prepared to work collaboratively in an interprofessional team. Due to health workforce shortages, the concept of teaming (Edmonson 2012) is representative of unstable team structures students must quickly adapt to. The study uses a portable escape room activity in interprofessional education workshops for health students on a rural clinical placement. The Escape Room in a Briefcase (ERiB) contains puzzles, solved sequentially by a team of students, to 'escape'. A clinical scenario scaffolds the activity, though there is no requirement of clinical knowledge or competency.

### Aim

The aim of the study is to investigate the use of ERiB as an innovative, fun way to consolidate a health student's interprofessional learning and teaming skills within the context of an interprofessional education session.

### Discussion

This study uses a mixed-method design, utilising a quantitative survey to measure changes in interprofessional behaviours, and qualitative focus groups, that are used to gain an understanding of whether ERiB is an effective activity to consolidate IPE learning and teaming, and a fun and positive learning experience.

Early indications are that ERiB enhances the development of interprofessional practice and teaming skills. It has been a popular addition to our IPE activities and regularly described as a fun, interactive and novel way to learn with high intellectual and social engagement from students.

### Ideas for further discussion

ERiB is highly portable, making it a more effective and less resource-intensive means of delivering escape-room-based IPE activities in rural settings. It encourages students to break down barriers of stereotypes and perceived hierarchies whilst providing an interactive platform for rural networking, minimising feelings of isolation whilst on a rural placement. A question that emerged from this study is whether the ERiB could be used with experienced healthcare staff as part of upskilling initiatives in established interprofessional settings.

Edmonson, A. (2012). *Teaming: How Organizations Learn, Innovate, and Compete in the Economy*, Jossey-Bass

Knowledge

## Using lived experience to facilitate IPE in the classroom

Ms Kahlia Nissen<sup>1</sup>, Professor Lucy Chipchase<sup>1</sup>, Professor Tiffany Conroy<sup>1</sup>, **Dr Olivia Farrer<sup>1</sup>**

<sup>1</sup>Flinders University, Adelaide, Australia

### Introduction

Authentic patient learning activities in an interprofessional education (IPE) setting can contribute to the development of health professional students' skills to work within and across teams. In tertiary education, challenges have been identified in effectively incorporating a patient experience or voice in the classroom, prior to placement activities. This project sought to explore student experiences of a lived experience patient video, in conjunction with a written case study of the same patient in an interprofessional group setting.

### Methods

This abstract describes the qualitative findings from what was a pre-post, mixed methods research study. Allied health students were invited to attend an interprofessional, one-off, focus group where they were presented with a written case study and asked to discuss their initial impressions and assessment. Students then viewed a 5-minute video of the patient lived experience and were asked to discuss again – using a similar sequence of questions. Transcripts were analysed using Braun and Clarke's reflexive thematic analysis<sup>1</sup>.

### Results

The qualitative findings highlighted three key themes; reflection on language, interprofessional practice and value of lived experience. The themes highlighted that the lived experience video created a shift in student assumptions and language, towards a more strengths-based discourse about the patient. After viewing the video, students had a greater appreciation for the role of the interdisciplinary team and were able to discuss holistic care plans more clearly with understanding of the patient's journey and priorities. A surprising finding was the students' reflection on their change in perception, and judgement pre and post the video.

### Discussion

Using patient teachers in tertiary curriculum creates significant burden to patients, and issues with lived experience becoming standardised over time. This simple methodology could offer a solution to creating more authentic patient simulation in the classroom as part of an IPE curriculum and teaching activity.

### Reference

1. Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597.

## Including the Patient Perspective in Interprofessional Practice

**Mrs Rebekah Couper<sup>1</sup>, Dr Kris Tulloch<sup>1</sup>**, Dr Stevie-Jae Hepburn<sup>1</sup>, Dr Rebekah Shakhovskoy<sup>2</sup>, Professor Fiona Bogossian<sup>1</sup>

<sup>1</sup>University Of The Sunshine Coast, Sunshine Coast, Australia, <sup>2</sup>Sunshine Coast University Hospital, Birtinya, Australia

### Introduction

Interprofessional Collaborative Practice (IPCP) is distinctly patient-centred but theoretical models are remiss for patient-related outcomes. In addition, patient perspective research is scant from which a foundational understanding of outcomes of IPCP is developed. As we educate future interprofessional team members, a foundational and central view of the patient and their inclusion is required.

### Methods

A qualitative patient perspective study was conducted with seven patients with chronic and complex health needs from Queensland, Australia, to uncover the patient-related and patient meaningful outcomes of IPCP. This study went beyond the immediate healthcare-related outcomes and extended our understanding of the realised benefits of IPCP, experienced within the patients' lives and less often seen by healthcare professionals.

### Results

Findings are visually represented and described showing connection of outcomes and realised benefits participants experienced.

Patient-related outcomes of unique treatment plans, adaptable plans, health competency, increase information sharing, and improved functioning were identified through Interpretive Phenomenological Analysis.

Domains of the IPCP frameworks that were especially meaningful to the patient and connected to outcomes included communication, collaboration, team functioning and patient-centred care.

Patients identified realised benefits that included feeling safe and secure, vulnerability, financial costs, life-confidence and self-efficacy, independence, and life goal achievement.

### Discussion

Participant-generated outcomes demonstrate priorities that may be missing from interprofessional education. Many of these outcomes indicated deeper, longer-term and more holistic benefits than are often considered during professional healthcare education. Including these outcomes in health professional education may allow students to improve the holistic care of their patients. Conclusions relating to theoretical model improvement, patient-centred care improvements are possible and will be discussed. Implications for the training and skills development of students and the professional development of current healthcare professionals will benefit from a keener and more accurate understanding of the outcomes and benefits of IPCP as experienced by the patient.



## Development of Women and Children Protection Advocates During the COVID-19 Pandemic

Professor Doctor Eryln Sana<sup>1</sup>, **Professor Doctor Melflor Atienza<sup>1</sup>**, Dr. Bernadette Madrid<sup>2</sup>, Attorney Katrina Legarda<sup>2</sup>, Dr. Melissa Joyce Ramboanga<sup>2</sup>, Dr. Riza Lorenzana<sup>2</sup>, Mrs. Claire Pastor<sup>1</sup>, Ms. Annaliza Macabbabad<sup>2</sup>, Ms. Anna Teresa Clemente<sup>2</sup>

<sup>1</sup>National Teacher Training Center for the Health Professions, University of the Philippines Manila, Manila, Philippines, <sup>2</sup>Child Protection Network Foundation, Inc., Manila, Philippines

The Child Protection Network (CPN) Foundation, Inc. is committed to build a critical mass of child and women advocates. It offers both formal and informal programs together with the Department of Pediatrics, Philippine General Hospital and the College of Medicine, University of the Philippines Manila. When the COVID-19 pandemic hit the Philippines, the CPN laddertype program was transferred to online platform. This study aimed to describe the experiences of the first batch of trainees with online learning.

The Recognizing, Reporting, Recording, and Referral (4Rs) of Women and Children Abuse, Multidisciplinary Team Training (MDT), and the Women and Children Protection Specialty Training (WCPST) were developed at the UP Manila Learning Management System at <https://wcpol.upm.edu.ph>. Participants came from Women and Children Protection Units of the country and served as key informants. Their performance and feedback were derived from the course site. Data were analyzed using frequency counts, descriptive statistics, and recurring themes. There were 68 who finished the 4Rs from 19 July to 10 September 2021, 63 finished MDT on 15 December and 55 finished WCPST on 7 March 2022. Graduates included physicians, social workers, and police officers. Trainees consistently logged in and completed at least one learning task at a time. Analytics revealed that activities peaked from 11:30 am to 1:00 pm, 6:00 pm to midnight, and almost the whole day on weekends. Participants appreciated their learning experience and thanked CPN for sustaining the program even during the pandemic. The site now has 2,650 enrollees in the 4Rs and have produced 1,067 graduates. The online programs reflect the continuous commitment of CPN to protect women and children from abuse. It is an effective learning platform for continuing professional development of physicians, social workers, and police officers.

### **Physiotherapy Clinical Placements In Private Practice: A Mixed Methods Feasibility Study Of A Structured Educational Model**

**Dr Shane Pritchard**<sup>1,2</sup>, Jon Ford<sup>2,3</sup>, Marlina Calo<sup>3</sup>, Andrew Hahne<sup>3</sup>, Janet McConville<sup>3</sup>, Casey Peiris<sup>3</sup>

<sup>1</sup>Monash University, Australia, <sup>2</sup>Advance Healthcare, Melbourne, Australia, <sup>3</sup>La Trobe University, Australia

#### **Introduction**

Many physiotherapy graduates commence working in private practices. However, the private sector appears to be underutilised in clinical placement allocations, and new graduate physiotherapists are perceived as underprepared for private practice. Unique barriers to high quality placements in private practices include risks to efficient service provision and client safety, resource limitations, perceived lost income, and a dearth of evidence-based guidelines for educational practice. The aim of this study was to investigate the feasibility of a structured learning and teaching model for physiotherapy core musculoskeletal placements within private practices.

#### **Methods**

Bowen's feasibility framework was adopted in this mixed methods study investigating acceptability, implementation, and practicality of the clinical placement educational model. The model was developed based on peer-assisted, active, reflective practice, and experiential learning theories. Thirty-four (n=34) 5-week "core" placements were conducted between September 2020 and December 2022 across five linked physiotherapy practices. Students (n=34) and supervisors (n=8) completed online surveys post-placement. Focus groups were conducted with supervisors (n=8) and practice owners (n=4). Descriptive statistics and interpretive description were used to synthesise quantitative and qualitative data.

#### **Results**

Students rated the placement model experience positively overall (mean 8.6/10), with the most valuable tasks being peer-assisted assessment practice (9.5/10, and seeing patients independently with detailed written feedback on their clinical reasoning from peers and supervisors (9.6/10). Supervisors and business owners felt the model was generally effective at enabling student learning opportunities without compromising income, patient care, or operations. Additional time was required by supervisors to implement the model, which was supported by protected time and additional remuneration. The structured approach involving graded complexity of clinical tasks and reasoning activities was perceived as highly valuable by all stakeholders.

#### **Discussion**

The structured model for physiotherapy private practice core musculoskeletal placements appears to be feasible for students, supervisors and business owners.

## Physiotherapy Clinical Placements In Private Practice: A Mixed Methods Feasibility Study Of A Structured Educational Model

**Dr Shane Pritchard**<sup>1,2</sup>, Jon Ford<sup>2,3</sup>, Marlina Calo<sup>3</sup>, Andrew Hahne<sup>3</sup>, Janet McConville<sup>3</sup>, Casey Peiris<sup>3</sup>

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### Discussion

The structured model for physiotherapy private practice core musculoskeletal placements appears to be feasible for students, supervisors and business owners.

## Allied Health collaborative practice: knowing what it is in order to get there

**Dr Isabel Paton<sup>1</sup>**, Assoc. Prof. Narelle Patton<sup>2</sup>, Dr Anne Croker<sup>3</sup>

<sup>1</sup>Gateway Health/Charles Sturt University, Albury Wodonga, Australia, <sup>2</sup>Charles Sturt University, Albury, Australia, <sup>3</sup>University of Newcastle, Newcastle, Australia

### Introduction

Allied health professionals have a fundamental role in collaborative practice in healthcare settings. This combined with the diverse range of Allied Health professionals, highlights an inherent complexity of collaborative practice in relation to this group. This research aims to unbundle this complexity to inform pre-registration student education and preparation for collaborative practice.

### Methods

This research was situated in a qualitative paradigm and used a Gadamerian philosophical hermeneutic approach to open-up possibilities of new knowledge development. Two studies approached the topic through different but inter-related angles. The first study accessed established and accepted concepts as published in literature. The second explored allied health students' and academics' perspectives and experiences.

### Results

This research highlighted some of the nuances of allied health collaborative practice, in particular contextual, relational and individual shapers of allied health collaborative practice. This research illuminated **in-situ standards** and **physical environments** as contextual shapers of allied health collaborative practice. Social shapers are **interpersonal transactions** and **reciprocal exchanges**. **Individual contributions** and **deliberate engagements** comprise individual shapers of allied health collaborative practice. These six shapers of allied health collaborative practice were found to act in a dynamic and unequal way, exerting more or less influence at different times and places. This interplay was in response to the various requirements and opportunities that arose across diverse healthcare settings, healthcare personnel, and patient/client situations. This response underpinned the fluidity of allied health collaborative practice and the many and varied ways it can be enacted.

### Discussion

Understanding the key shapers of allied health collaborative practice provides allied health educators with the opportunity to develop educational frameworks and subsequent opportunities for learning that integrate these shapers and demand students to respond to these shapers. This research illuminated how utilising the shapers of allied health collaborative practice may be a way to prepare students for practice settings. This oral presentation also explores how collaborative practice resonates with key concepts described by practice theorists.

## **Creating opportunities for medical students and primary healthcare providers to improve quality of RACF care in Tasmania: a mixed methods study of stakeholder engagement**

**A/Prof Anthea Dallas**<sup>1</sup>, Dr Emily Mackrill<sup>1</sup>, Dominic van Winden<sup>1</sup>, Mikah Olive Walker<sup>1</sup>, Damaris Green<sup>1</sup>, Jake Shen Loong Ong<sup>1</sup>, Tung Yu Lau<sup>1</sup>

<sup>1</sup>*University of Tasmania, Hobart, Australia*

### **Introduction**

Enabling medical student contribution during primary care clinical placements can enhance student learning and quality of care for elderly patients in residential aged care facilities (RACF). Our RACF placement includes a learning task where students recommend improvements to resident care. The study aimed to identify these recommendations, measure their adoption and explore stakeholders' perspectives on the program.

### **Methods**

A mixed methods approach was adopted to audit student recommendations and their adoption into resident care, followed by semi-structured interviews with stakeholders in the educational program to determine attitudes, barriers and enablers to use of student recommendations.

Students completed a medical assessment of a resident during their RACF placement, summarising their recommendations in a letter to the resident's general practitioner (GP). Three months after the time of recommendation, residents' files were audited.

Semi-structured interviews with RACF staff and GPs were transcribed, coded using an inductive and iterative process of constant comparison, and thematically analysed to identify stakeholder perspectives.

### **Results**

Forty residents and 43 students had recommendations audited. In total, 391 recommendations were made, and 77 recommendations were adopted. Medication recommendations were most common (47%), followed by allied health referrals (12%), lifestyle changes (10%) and GP review (10%).

Themes from the interview data included: benefits for residents and facility life; quality improvement from student involvement; barriers to stakeholder engagement, and identified opportunities for improvement to the program.

### **Discussion**

Primary care placements in RACFs provide a unique opportunity to use an existing student learning task to feed into genuine quality improvements for care, and connecting the students with primary healthcare partners in a meaningful way enhances learning. This study gives insight into types of recommendations students make, and suggests strategies to maximise the benefits of student contributions.

## From professional competencies to learning outcomes

**Dr Samantha Byrne<sup>1</sup>**, Dr Clare McNally<sup>1</sup>, Ms Claire Mustchin<sup>1</sup>, Ms Narelle English<sup>2</sup>, Dr Pam Robertson<sup>2</sup>

<sup>1</sup>Melbourne Dental School, The University Of Melbourne, Melbourne, Australia, <sup>2</sup>Assessment and Evaluation Research Centre, the University of Melbourne, Melbourne, Australia

### **Introduction/Background**

Health professions educators need to design curricula that meet the competency or graduate outcome expectations set by accrediting bodies. For accreditation, curriculum learning outcomes and assessments must be clearly mapped to the accrediting body expectations.

### **Aim/Objectives**

The aim of this project was to use the Australian Dental Council (ADC) professional competencies of the newly qualified dental practitioner as a framework to develop construct maps. The construct mapping approach addresses how to describe a lower extension of the professional competencies as students go from emerging to meeting the standards set out by the ADC professional competencies. The descriptions of increasing competence support the design of curriculum and assessment for students. They support educators to develop curricula that assist students to progress through the described levels. In assessment design, they assist educators to structure assessments in ways that collect the evidence needed across a range of student abilities so that feedback can be provided to support learning. Additionally, the explicit descriptions of competencies from novice to attainment of the ADC professional competencies supports both students and educators to understand expectations.

### **Discussion**

This presentation will describe the development of construct maps for a Doctor of Dental Surgery and a Bachelor of Oral Health program. It will then describe how these maps were used to create learning outcomes and inform curriculum design decisions during a curriculum redesign at an Australian dental school. Challenges encountered during this process will be discussed and recommendations for those embarking on a similar process will be proposed.

### **Issues/Questions for exploration OR Ideas for further discussion**

Developing construct maps is a valuable but time-intensive process. How could collaboration across institutions support the development of shared construct maps? What is the scope for shared resources in domains such as professionalism and communication in health professions education?

## Expert by experience and health educator perspectives of partnering to design and deliver health professional education

**Mrs Melanie Roberts<sup>1</sup>**, Associate Professor Michelle Bissett<sup>2</sup>, Ms Hannah Gawne<sup>1</sup>, Dr Maddy Slattery<sup>1</sup>, Ms Victoria Stewart<sup>1</sup>, Ms Kim Walder<sup>1</sup>

<sup>1</sup>Griffith University, Southport, Australia, <sup>2</sup>Southern Cross University, Bilinga, Australia

### Introduction

Expert by experience involvement in health professional curriculum is now an expectation of some education programs in Australia. To achieve this, educators and experts by experience can partner to inform each other and students on the best ways to navigate service provision with people with lived experience. However, there are no guidelines to assist effective partnership within the higher education context. This study aimed to explore the perspectives of experts by experience and health educators who partner to co-design and/or co-deliver curriculum in health professional education.

### Methods

This study adopted a qualitative descriptive design. Six experts by experience and six health educators were interviewed for 50-60 minutes to share their experiences of what helped and hindered co-designing and/or co-teaching. Interviews were transcribed verbatim and analysed using reflexive thematic analysis (Braun & Clarke, 2021). The transcripts for each participant group were initially analysed separately to ensure the voices of each group were maintained.

### Findings

All participants were positive regarding the value and impact of curriculum partnership and identified that a sound understanding of co-design and investment in the working partnership were fundamental. Experts by experience valued opportunities to work and connect with their peers and benefitted from educator support to understand the expectations of their work. Health educators discussed the complexities of partnership including their need to self-learn how to partner effectively and strategies to navigate partnership within constrained university contexts.

**Discussion** Health educators and experts by experience share similar and different experiences during a co-design and/or co-teaching partnership. It is important to reflect on a university's readiness to engage in such innovative work, including available funding, an educators' knowledge and skill, and the time needed. It is also important to consider the capacity of the experts by experience in order to negotiate reasonable expectations on the work to be completed and the support required.

### References

Braun, V., & Clarke, V. (2021). *Thematic analysis: a practical guide*. Sage Publications.

## Preparing students for private practice settings

### **Dr Roma Forbes<sup>1</sup>**

<sup>1</sup>*The University Of Queensland, Brisbane, Australia*

#### **Introduction/Background**

Private practice is the largest single employer or workplace of allied health professionals in Australia. It is expected that the allied health private practice sector will continue to grow due to factors such as increased demand from the community, the implementation of new private and government healthcare funding programs, and the growing trend of privatisation in the healthcare industry. New graduate allied health professionals are expected to possess the necessary skills and knowledge to provide safe and effective care across clinical settings, including private practice, despite limited opportunity to experience this setting during their training.

#### **Aim/Objectives**

This presentation outlines the development of an industry, consumer and student partnered online training module for allied health professional students with an aim of preparing students for both placements and work in private practice settings. In doing so, this presentation will also outline the results of a mixed-methods study used to evaluate the online learning module from the perspective of allied health professional students.

#### **Discussion**

Employers, clinical educators, private practice owners, private practice consumers and students gave important insight into how allied health professionals should be prepared for engaging in private practice settings and helped shape an innovative online learning module. Results from the research attached to this project suggest students have enhanced self-efficacy for engaging in such settings and reinforce the importance of clinical experience in private practice for graduate preparedness. Future research should investigate the impact of targeted education for private practice settings on student and graduate clinical performance, as well as explore ways to implement structured graduate programs in private practice to support the development of new graduates as practitioners.



## What does leadership look like in a student-led learning environment: A Scoping Review

**Associate Professor Jodie Copley**<sup>1</sup>, Mr Dean Lising<sup>2</sup>, Associate Professor Anne Hill<sup>1</sup>, Mrs Kathryn Parker<sup>2</sup>, **Dr Freyr Patterson**<sup>1</sup>, Mrs Teresa Quinlan<sup>1</sup>

<sup>1</sup>The University of Queensland, Brisbane, Australia, <sup>2</sup>The University of Toronto, Toronto, Canada

### Introduction

Student leadership is essential to the success of both individual health professional and interprofessional education since it enhances students' willingness to collaborate and initiate service development, thereby facilitating better client outcomes. Student-led experiences (SLEs) are unique workplace-based learning opportunities where health professional learners provide leadership to an existing service and/or address a significant gap in available services. Examples include training wards, service learning and university clinics. However, it is unclear to what extent leadership models or frameworks are adopted in developing and implementing SLEs. Nor is it known whether pedagogical and student supervision models adopted within SLEs are designed to facilitate leadership skills. This scoping review is aimed to answer the question: ***How is student leadership conceptualised and developed within student-led experiences?***

### Methods

The review was conducted in accordance with best practices in scoping review methodology. The inclusion/exclusion criteria scoped the SLE literature to health professional students with student led activities in the practice curriculum. The five stages framework included: Stage 1: identifying the research question; Stage 2: identifying relevant studies; Stage 3: study selection; Stage 4: charting the data; and Stage 5: collating, summarising and reporting the results.

### Results

The research team screened 2,836 abstracts, identified 262 articles for full text review and conducted a content analysis on 67 articles.

### Discussion

A definition of student leadership within the context of an SLE is largely absent in the literature. Results show a gap in both how student leadership is defined and how it is taught and assessed within the structure of an SLE. Alignment of leadership objectives and models, supervision strategies and assessment of leadership skills is needed to optimise SLE learning outcomes for students.

## Has Covid 19 changed our conceptual understanding of Fieldwork Placement?

**Dr Merrolee Penman<sup>1,3</sup>, Dr Yvonne Thomas<sup>2</sup>**, Dr Jacqueline Raymond<sup>3</sup>, Karen Sundar<sup>1</sup>, Renae Liang<sup>4</sup>, Annora Ai-Wei Kumar<sup>5</sup>

<sup>1</sup> Curtin University, Westerns Australia, Australia, <sup>2</sup> Te Pukenga, Otago, New Zealand, <sup>3</sup> The University of Sydney, Australia, <sup>4</sup> University of Notre Dame Australia, <sup>5</sup>The University of Western Australia, Australia

### Introduction/Background

The pandemic disrupted fieldwork placements in an unprecedented way. A range of innovative and creative solutions were developed across the Allied Health Professions to ensure continuity of students' progression. Prior to COVID-19, these placement solutions may not have been acceptable or considered as suitable learning opportunities. However, emerging evidence suggests that this disruption to practice education had positive outcomes for students and service users (Clarke et al, 2022; Woollischoft et al, 2020) thus challenging our understanding of the purpose of practice education.

### Purpose/Objectives

This presentation will draw on recent literature and outline the diversity of student placements during COVID-19 and consider the models for practice education that were implemented.

### Method

This presentation will leverage the learning from the pandemic to champion different approaches to practice education brought about by disruptive innovation.

1. In what ways did disruption lead to innovation for different disciplines?
2. What new models of practice placements were implemented during the pandemic?
3. What outcomes for students/educators and/or service users were observed?
4. Will practice education naturally return to the previous 'normal' or is a new normal likely?
5. Is this experience changing our understandings of the 'purpose' of practice education?

### Results

Innovative placement during covid-19 featured changes to location, supervisory structures, assessment processes, the timing and length of placements, the accreditations requirements of some professions, including simulation, and the type of activities that student were permitted to undertake as placement. The outcomes have demonstrated the potential of innovation to broaden the range of possible placement moving forward. This presentation will question the desire to return to what we have previously known and rather ensure placements include authentic learning activities irrespective of location.

Clarke, M., Rowlands, R., Morecroft, S., Begum, S., Evans, J., Ford, A., Morgan, J., Prior I., & Slater C., (2022) Adapting student practice placements in response to COVID-19: 'Get there together' a digital stories project for people living with dementia. World Federation of Occupational Therapists Bulletin, 78:1, 21-28, DOI:10.1080/14473828.2021.1975918

Woollischoft, J. (2020) Innovation in Response to the COVID-19 Pandemic Crisis. Academic Medicine, 95(8):1140-1142. doi: 10.1097/ACM.0000000000003402

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

### **Fairness, diversity, and rigour: promoting inclusivity and equity in medical education**

**Associate Professor Lisa Cheshire<sup>1</sup>, Mr Carey Wilson<sup>1</sup>, Professor Anna Ryan<sup>1</sup>**

*<sup>1</sup>Department of Medical Education, Melbourne Medical School, University of Melbourne, Parkville, Australia*

#### **Introduction/Background**

Recent policy reforms have seen a welcomed increase in the number of students enrolled in medical school who live with a disability. Their inclusion in our medical programs benefits not only their own lives, but also improves the diversity of medical professionals practicing in Australia and better reflects the breadth of human experience seen in the wider community. However, current discourse suggests that a tension exists between the prioritisation of personal justice and equity of those living with a disability, reasonable course adjustments, and the maintenance of certain clinical assessment standards—those that exist to safeguard patient safety.

#### **Purpose/Objectives**

This PeArL session will facilitate a discussion on the complexities of designing fair, equitable and reasonable disability accommodations that maintain—or perhaps even improve—standards of clinical education and assessment. Using hypothetical scenarios as stimuli, we hope to use this session to tease out the nuances involved in making ‘case-by-case’ decisions regarding the appropriate use of accommodations (i.e., modifications to subject and course outcomes, teaching and learning, and assessment procedures). The overarching goal of such accommodations being to create inclusive learning environments for all medical students, increasing the diversity in the medical professions and maintaining high standards.

#### **Issues/Questions for exploration OR Ideas for discussion**

We’ll ask participants to work finding the balance between promoting equity and inclusivity for all students, and maintaining standards of clinical education and assessment to ensure patient safety.

Hypothetical scenarios will be provided to stimulate group discussion. Participants will be encouraged to consider the appropriateness, fairness, and feasibility of accommodations, and whether or not they would feel comfortable implementing this in their own educational setting. If not, we ask participants to consider whether there would be a suitable alternative accommodation that could be offered to the student instead.

## Making Good Teaching Visible

**Dr Tehmina Gladman**<sup>1</sup>, Associate Professor Elizabeth Thyer<sup>2</sup>, Professor Weny Hu<sup>2</sup>, Professor Tim Wilkinson<sup>1</sup>, Associate Professor Joy Rudland<sup>1</sup>

<sup>1</sup>University of Otago, , New Zealand, <sup>2</sup>Western Sydney University, , Australia

### Introduction/Background

Scholarly teaching practice improves the quality of learning and teaching in health professions education and, as a consequence, improves clinical practice. The criteria for scholarship are consistent across many different contexts, professions and institutions (e.g. TEQSA Guidance, Kern's quadrant, AAMC criteria, AMEE guide) But good educators may still struggle to show how they meet these criteria to stakeholders in their teaching practice, including learners, peers in their discipline, to their institutions and to the global scholarly community. As educators our primary goal is to improve the quality and educational impact of our practice, but an important secondary goal for many is to be *visible* to different audiences. That is, to be recognised by their peers, institutions and the wider community of scholars and thus build their profile and professional identity as an educator.

### Purpose/Objectives

Using Cleland et al's framework for scholarly activity we will invite participants to reflect on their educational practice, and the ways in which it may be expanded and made visible as scholarship.

### Issues/Questions for exploration OR Ideas for discussion

Using a scholarship framework participants will be asked to:

1. Individually consider what scholarly activities they currently practice (a template to be provided) and the visibility of the activity to their key stakeholders.
2. In small groups – probably 5 people per group - to discuss their profile, what would encourage them to explore other scholarly activities and how they could make their activity more visible.
3. In the whole group, and informed by feedback from the smaller groups, consider strategies, including those that could be facilitated by ANZAHPE, that may be useful in enhancing scholarly activity and its visibility.

### References

- 1 Jennifer A. Cleland, Susan Jamieson, Rashmi A. Kusurkar, Subha Ramani, Tim J. Wilkinson & Susan van Schalkwyk (2021) Redefining scholarship for health professions education: AMEE Guide No. 142, *Medical Teacher*, 43:7, 824-838, DOI: [10.1080/0142159X.2021.1900555](https://doi.org/10.1080/0142159X.2021.1900555)

### “I think it’s the emotional PPE”: Implementing Schwartz Rounds to improve staff wellbeing in a hospital setting

**Professor Andrew Teodorczuk<sup>1,2,3</sup>, Dr Christine Hogan<sup>3</sup>, Dr Jonathan Munro<sup>3</sup>, Dr Georgia Hunt<sup>3,4</sup>, Dr Tatjana Ewais<sup>3,4</sup>**

<sup>1</sup>Metro North, Brisbane, Australia, <sup>2</sup>Faculty of Medicine, Brisbane, Australia, <sup>3</sup>Griffith University, Southport, Australia, <sup>4</sup>Mater Misericordiae Ltd, Brisbane, Australia

#### Introduction

Staff working in healthcare environments increasingly have to adapt to evolving work-related stresses. Consequently, rates of depression, burnout and suicidal ideation are higher in comparison to the general public. Unfortunately, attempts at building resilience often fail as there is a perception that individuals are being blamed for well-being difficulties when the difficulties in fact run deeper at systemic levels.

There are relatively few organisational well-being approaches that have proven efficacy, however one such approach is Schwartz Rounds<sup>1,2</sup>. As a multiprofessional research team we have studied the impact of the implementation of Schwartz Rounds in an Australian setting at the Mater Hospital<sup>3</sup>.

#### Methods

Over a 12-month period we introduced regular Schwartz Rounds into a busy tertiary hospital in Brisbane. We undertook a mixed methods study that looked at both qualitative and quantitative outcomes and changes following the intervention of Schwartz Rounds. These rounds were delivered in ICU and gastroenterology settings. Outcome measures included the Maslach Burnout Inventory, Culture of Care Barometer as well as the Schwartz Centre Compassionate Care Scale at three time-points, including pre-round, post-round and three-month follow-up. Two focus-groups were held approximately two months after the Rounds completion.

#### Results

Quantitative findings revealed no statistically significant differences between time points despite improvements in total and subscales for each measure. Three main themes from the qualitative findings were that Schwartz Rounds knit the team together through a focus on being rather than fixing; Schwartz Rounds allow a pause in care to help develop a feeling of compassion for the patient; and a recognition of the cathartic value and need for staff and the organisations.

#### Discussion

These findings are encouraging and align with previous findings that Schwartz Rounds can lead to a greater appreciation of the contributions of colleagues and provide a safe reflective confidential space for staff to talk. This represents an exciting area to research further to improve the resilience and well-being for staff post pandemic.

#### References

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  - 1) Lown, BA Manning C. *Academic Medicine*, 2010 Jun;85(6):1073-81.
  - 2) Ewais T, Hunt G, Munro J, Pun P, Hogan C, William L, Teodorczuk A. Schwartz Rounds for Staff in an Australian Tertiary Hospital: Protocol for a Pilot Uncontrolled Trial. *JMIR Res Protoc*. 2022 Apr 27;11(4):e35083

## Advancing assessment of professionalism: findings from a large Australasian qualitative study

**Dr Janeane Dart**<sup>1</sup>, Professor Claire Palermo<sup>1</sup>, Professor Susan Ash<sup>1</sup>, Associate Professor Louise McCall<sup>1</sup>, Professor Charlotte Rees<sup>2</sup>

<sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>University of Newcastle, Newcastle, Australia

**Aim:** Professionalism is a key competency area in health professions education; yet is recognised and described in the literature as one of the most difficult competencies to assess.<sup>1</sup> We aimed to explore current approaches to assessing professionalism in dietetic education across Australia and New Zealand, including strengths of current approaches and areas for improvement.

**Methods:** Underpinned by social constructionism and interpretivism, we conducted qualitative interviews with 78 academic and practitioner (workplace-based) educators across 17 Australian and New Zealand universities and dietetic programs. Data were analysed using team-based, framework analysis.<sup>2</sup>

**Results:** Our findings indicate considerable advances and a modified narrative in assessing professionalism in dietetic education over recent years. This was most pronounced in programs where assessing professionalism was situated as part of programmatic assessment. Themes developed from our framework analysis identified that progress has been enabled by philosophical and curricula shifts; clearer articulation and shared understandings of professionalism standards; enhanced learner agency and reduced power distance; early identification and intervention of professionalism lapses; and increased confidence and capabilities of educators. Professionalism assessment is embedded in the formal curricula of numerous programs and is occurring in both university (prior to placement) and workplace-based settings.

**Conclusions:** Developing shared understandings of professionalism and approaching professionalism assessment from a more holistic, student-centred, and interpretivist lens, has supported considerable advances and practice shifts in contemporary professionalism assessment; included reduced emotional burden. Ongoing transformation of assessment approaches are required to more fully embed and strengthen professionalism curricula approaches across all programs. Strategies for building safer learning cultures, strengthening approaches to remediation and enhancing educator capabilities for professionalism conversations are areas for future strengthening and research.

### References:

1. Hodges BD, Ginsburg S, Cruess R, Cruess S, Delpont R, Hafferty F et al. Assessment of professionalism: recommendations from the Ottawa 2010 Conference. *Med Teach* 2011;33(5):354-63.
2. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In *Analyzing qualitative data*. Routledge; 2002: 187-208.
3. Dart J, Rees C, Ash S, McCall L, Palermo C. Shifting the narrative and practice of assessing professionalism in dietetic education: An Australasian qualitative study. *Nutr & Diet* 2023. Accepted for publication.

## Coping Self-Efficacy, Social Support, and Self-Stigma of Help Seeking Inhibition Among Male and Female Medical Students

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<sup>1</sup>University of Queensland-Ochsner Clinical School, Brisbane, Australia, <sup>2</sup>University of Queensland Faculty of Medicine, Brisbane, Australia

### Introduction

Undergraduate medical education requires the ability to adapt to high workloads with little time for leisure activities. This has led to high rates of depression, burnout, and suicidal ideation among medical students. (1) Factors influencing well-being and help seeking behaviors are shown to differ significantly between men and women. (2) Based on this understanding and the idea that early intervention can have lasting impacts on well-being, we looked at a medical student population to better understand the differences that exist between men and women regarding levels of coping self-efficacy (CSE), perception of social support (PSS), and self-stigma and help-seeking inhibition (SHSI).

### Methods

A quantitative cross-sectional study used a self-report questionnaire administered to University of Queensland medical students. Variables measured CSE, PSS, SHSI. T-tests compared values and statistical significance was set at  $p < 0.05$ .

### Results

410 students completed the survey (246 males, 164 females). No significant difference was found for CSE between males and females ( $p = 0.186$ ). Females reported significantly higher levels of PSS ( $p = 0.008$ ) and significantly lower levels of SHSI ( $p = 0.005$ ) compared to males.

### Discussion

The findings of our study indicate important differences among male and female medical students in regard to their potential for well-being. Female medical students portray a stronger ability to deal with distress because they report stronger support structures and are less likely to feel stigmatized against seeking help for a problem. This suggests that males could be at greater risk of psychological distress such as anxiety, depression, and even burnout. Encouraging male medical students to foster social support networks may be a primary intervention for this group. Based on these results, important considerations should be made by medical educators and administrators to develop programs centered around the de-stigmatization of seeking professional help for anxiety, depression, and poor mental health across the continuum of medical training.

### References

1. Dyrbye LN, Thomas MR, Shanafelt TD. Medical Student Distress: Causes, Consequences, and Proposed Solutions. *Mayo Clinic Proceedings*. 2005;80(12):1613-22.
2. Tedstone Doherty D, Kartalova-O'Doherty Y. Gender and self-reported mental health problems: predictors of help seeking from a general practitioner. *Br J Health Psychol*. 2010;15(Pt 1):213-28.

## Exploring the transfer of the 'Hotspots' system to tackle bullying, harassment and discrimination

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### Background

Bullying, discrimination and harassment (BDH) at work is a significant global issue with health, economic and social consequences. Health trainees on placements are known to experience BDH, but few solutions exist. We developed an innovative, award-winning\* integrated system ('HOTSPOTS') which successfully tackles workplace BDH experienced or witnessed by medical students. It uses a survey and associated processes to provide 'safety in numbers' for students and confidential, benchmarked reporting for clinical leaders (Chief Medical Officers and Department Heads), motivating action. A progress summary is reported back to students. HOTSPOTS is in place in half of New Zealand's hospitals.

\*Safeguard New Zealand Workplace Health and Safety Awards

<https://www.auckland.ac.nz/en/news/2022/06/28/team-tackling-bullying-wins-national-award.html>).

With parts of our sector moving toward requiring BDH metrics as part of programme accreditation in Canada and Australasia, now is the time to identify how to transfer HOTSPOTS. We are evaluating its implementation in New Zealand in order to understanding transfer challenges. We will present initial findings of an ongoing implementation fidelity study (funded by an Ember Wellbeing Trust Grant). This will include views from stakeholders (students, chief medical officers, and university staff) and measures of system performance (response rates, number of actions taken etc.)

### Objectives

To outline and share lessons from an award-winning BDH reporting/action system for medical students on clinical placements

To explore whether this system could be useful elsewhere, and barriers or enablers in transferring it to other programmes, institutions, countries or sectors.

### Discussion

Alongside preliminary implementation fidelity findings, practicalities of running HOTSPOTS over the last 3.5 years will be discussed. This includes examples of issues identified by students, consequent actions taken, strengths and weaknesses of the HOTSPOTS system, and future plans.

### Exploration

Would a system like HOTSPOTS transfer to your workplace? If not, why not?

What (if any) alternative are others using to measure and act on BDH?



## **‘We want to lessen the gap by walking over the bridge together’: Pacific perspectives on health professions education leadership; an interpretivist case study**

**Dr Sinead Kado<sup>1</sup>**, Professor Simon Clarke<sup>1</sup>, Professor Sandra Carr<sup>1</sup>

<sup>1</sup>*University Of Western Australia, CRAWLEY, Australia*

### **Introduction**

Health Professions Education (HPE) leadership is a complex social phenomenon that requires relevant faculty development, however, current faculty development initiatives are often founded in western theoretical frameworks. This research aimed to understand Pacific HPE leadership to inform the design of relevant future faculty development in this setting and offer a different perspective to the international literature.

### **Methods**

This interpretivist case study followed seven HPE leaders from one Pacific University over twelve months. Data were collected using Rich Pictures, reflective journals and semi-structured in-depth interviews. Data analysis followed Miles and Huberman’s approach and trustworthiness was enhanced through member checking, triangulation of results and researcher reflexivity.

### **Results**

Common themes identified revealed Pacific HPE leaders viewed leadership as ‘Riding a Rollercoaster’, describing leadership as overwhelming, stressful and challenging. Despite this they aimed to ‘Lesson the Gap’ by developing others to improve patient and community health. Their applied strategies encompassed ‘Walking over the Bridge Together’ through collaboration, care, commitment and communication. The values that underpinned their leadership, were influenced by their culture and context, and encompassed ‘Being a Coconut Tree’. This included being humble, empathetic, adaptable, valuing others and striving for excellence in their many leadership roles of educator, clinician, and researcher.

### **Discussion**

The findings of ‘Lessening the Gap’; ‘Walking over the Bridge Together’ and ‘Being a Coconut tree’ encompass Bush and Glover’s(1) concept of leadership as a triad of vision, influence and values. However, it does not address the challenge of ‘Riding a Rollercoaster’. To lessen the stress of HPE leadership in this context, realistic visions, sustainable partnerships and values of determination and hope are required, as advocated in the recent AMEE guide on adaptive leadership.(2) Moving forward, this research provides empirical evidence for many of the leadership qualities advocated in HPE leadership and offers guidance as we move towards designing contextually relevant HPE leadership development.

### **References**

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2. McKimm J, Ramani S, Forrest K, Bishop J, Findyartini A, Mills C, et al. Adaptive leadership during challenging times: Effective strategies for health professions educators: AMEE Guide No. 148. *Medical Teacher*. 2022:1-11.

## The personal, behavioural and organisational factors that affect access and effectiveness of clinical supervision in allied health

**Associate Professor Fiona Kent<sup>1</sup>**, Mr Marcus Gardner<sup>2</sup>, Ms Sharon Downie<sup>3</sup>, Dr Melanie Farlie<sup>1</sup>, Dr Owen Howlett<sup>2</sup>, Professor Nicholas Taylor<sup>4,5</sup>, Dr David Snowdon<sup>1</sup>

<sup>1</sup>Monash University, Clayton, Australia, <sup>2</sup>Bendigo Health, Bendigo, Australia, <sup>3</sup>Royal Children's Hospital, Parkville, Australia, <sup>4</sup>LaTrobe University, Bundoora, Australia, <sup>5</sup>Eastern Health, Box Hill, Australia

### Introduction

Clinical supervision of allied health workers is needed to attain its proposed benefits of both safe patient care and clinical, practical and emotional staff support. However, access to effective clinical supervision is not equitable across all health settings or all health professions. The aim of this study was to establish the determinants of access and effectiveness of clinical supervision in allied health workers.

### Methods

A cross-sectional survey was conducted across Victoria in 2021. Data were collected on clinical supervision effectiveness with the Manchester Clinical Supervision Scale (MCSS-26), based on Proctor's supervision model; and with open-ended survey responses. Multivariable linear regression analysis was conducted to determine how MCSS-26 scores differed across health profession, work location, and work setting. Qualitative data were analysed using content analysis, interpreted through Bandura's social cognitive theory.

### Results

From the 1113 allied health workers, 319 (28%) reported they did not receive any clinical supervision; this group had a higher proportion of males, held management positions, worked in a regional or rural location, had been in their position for >5 years or were supervisors themselves. For those who did receive clinical supervision, MCSS-26 scores significantly differed between some professions and work settings; psychologists and allied health workers practising in private practice settings reported the highest levels of effectiveness. Effective clinical supervision was influenced by personal determinants such as attitudes, perceptions and values; behavioural determinants such as autonomy, engagement and self-efficacy; and environmental determinants such as access, resourcing and culture.

### Discussion

Overall, clinical supervision is effective for allied health workers but about 1 in 4 do not access supervision. Where supervision was least effective, additional clinical supervision training may be required, however when considered within the context of Bandura's theoretical framework, it is likely that the environment also plays a significant role so organisational support may also be beneficial.

## Designing a coaching program: Insights from an international educational collaboration

**Dr Svetlana King<sup>1</sup>**, Shafeena Anas<sup>2</sup>, Professor Naomi Low-Beer<sup>2</sup>

<sup>1</sup>Flinders University, Adelaide, Australia, <sup>2</sup>Brunel University London, London, United Kingdom

### **Introduction/Background**

Coaching as a mechanism to foster self-regulated learning and reflective practice is gaining momentum in health professions education (HPE). While the burgeoning literature offers general guidance about the aims, scope, and approaches to coaching, little is known about the process of designing and implementing a coaching program in HPE.

### **Aim/Objectives**

In this presentation, we draw on our experiences of working together to design and implement an academic coaching program for Brunel Medical School, a new medical school in the UK. This ongoing collaboration involves academic staff from Brunel and Flinders University (Adelaide), where there is an existing coaching program. Both medical schools have adopted a programmatic assessment philosophy.

### **Discussion**

Through the collaboration, we have identified several principles that have guided our approach to the design and implementation of the academic coaching program. These principles highlight the importance of: clarifying the scope of the role of coaching in supporting learning and wellbeing; clearly communicating expectations; scaffolding support for learners; establishing and maintaining a coaching community of practice to facilitate ongoing professional development; adopting an adaptable, flexible and responsive approach to implementation; and collaborating with coaching colleagues.

### **Issues/Questions for exploration OR Ideas for further discussion**

In this presentation, we explore these principles with a view to supporting others who are interested in designing and implementing a program-wide coaching program in their own contexts. We also seek feedback from those who are already engaging in this process regarding the relevance and significance of these principles in practice.

### Comparing face-to-face and online peer simulation: a preliminary study of students' perspectives and experiences

**Dr Kristie Matthews<sup>1</sup>**, Dr Shane Pritchard<sup>1</sup>, Ms Narelle Dalwood<sup>1</sup>, Professor Stephen Maloney<sup>1</sup>, Professor Prue Morgan<sup>1</sup>

<sup>1</sup>Monash University, Australia

#### Introduction

Peer simulation involves health professional students portraying patients' roles in simulated clinical interactions with their peers. However, the optimal design for peer simulation to best enable effective learning is not well described. During 2020, physiotherapy students experienced peer simulation using both face to face (F2F) and online methods of delivery. This study explored students' perceptions and experiences of F2F and online peer simulation, to identify the ideal features of each approach.

#### Methods

138 third year physiotherapy students completed three F2F and six online peer simulation activities over 10 weeks during Semester 1, 2020. Students were invited to complete an anonymous online survey at the end of semester. Survey design was based on a published tool(1), and included Likert ranking statements and free text response options. Thirty-five (25.3%) valid responses to the survey were received. Quantitative data were analysed using descriptive statistics, and qualitative data were analysed using inductive thematic analysis.

#### Results

Students felt more confident completing patient assessment and delivering interventions during F2F peer simulation when compared to online, however the online debrief was more highly valued because it was 'easier to get questions addressed compared to face to face'. Online was equivalent to F2F for developing clinical reasoning skills, however F2F was reportedly more helpful for identifying practical skill deficits. Students proposed that a third of peer simulation activities should remain online in future, to replicate telehealth skill development and promote a safe space for learning.

#### Discussion

Simulation-based education for physiotherapy students has typically reverted to predominantly F2F approaches in the post-COVID restriction era. This study suggests there may be benefits to incorporating a hybrid model of F2F and online peer simulation, in contrast to F2F only. Potential benefits of a hybrid model relating to equity of access, clinical reasoning, and reflection skills should be considered in future curricula design.

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## Acceptance and adoption of mobile learning technology in Australian undergraduate nurses' work-integrated learning

**Mrs Donna Wilson**<sup>1</sup>, Dr Golam Sorwar<sup>1</sup>, Professor Jennene Greenhill<sup>1</sup>, Dr Felicity Walker<sup>1</sup>, Associate Professor Christina Aggar<sup>1</sup>  
<sup>1</sup>*Southern Cross University, Gold Coast, Australia*

### Introduction

A capstone of nursing education occurs in the Work-integrated Learning (WIL) setting, where nursing students consolidate theoretical constructs learnt on campus with real-world skill development in clinical environments. The body of research exploring the use of mobile technology in education is increasing; however, there is little evidence indicating how this mobile technology is received by undergraduate student nurses to support their learning in the WIL setting. Therefore, this research was undertaken to evaluate the key predictors for acceptance and adoption of a mobile technology-based learning program specifically designed to support WIL.

### Methods

First-year nursing students enrolled in a Bachelor of Nursing degree at a regional Australian University were invited to participate in pre and post-WIL online surveys. Data was collected using a modified version of the extended DeLone and McLean information system success model. The data were analysed using the Partial Least Squares method, a statistical analysis technique based upon Structural Equation Modelling.

### Results

Student nurses had good acceptance and adoption of mobile technology as a support for WIL, albeit COVID was a confounding variable. Perceived Usefulness ( $p < 0.05$ ) was found to positively affect User Satisfaction, and User Satisfaction ( $p < 0.05$ ) positively affected Perceived Net Benefits in both pre and post-WIL stages. Self-Efficacy was not found to be a key factor for User Satisfaction in the pre or post results.

### Discussion

This research adds knowledge regarding acceptance and adoption of mobile technology to support undergraduate nursing student programs in the Work Integrated Learning setting. Understanding acceptance and adoption of mobile technology in education is essential to understanding value, efficacy and future investment decisions in nursing education.

## Making gynaecology operations faster and safer - Introduction of a virtual reality laparoscopic simulation program

**Dr Belinda Lowe<sup>1,2</sup>**, Dr Anne Woolfield<sup>1</sup>, Mr Jack Matulich<sup>1</sup>, Dr Victoria Brazil<sup>1,2</sup>

<sup>1</sup>Bond University, Gold Coast, Australia, <sup>2</sup>Gold Coast University Hospital, Queensland Health, Australia

### Introduction

Operating theatre time is a precious resource that comes at a significant healthcare cost.<sup>1</sup> Educational strategies to improve trainee surgeon performance have the potential to improve operating theatre efficiency and procedural safety.<sup>2</sup> Despite many research studies confirming that laparoscopic simulation increases surgical skill acquisition, translation of results from educational programs to real life operating theatre outcomes is not well documented.

### Background

In 2020 Gold Coast Hospital Health Service (GCHHS) purchased a Lap SIM virtual reality laparoscopic simulator (LapSIM VR). In 2021 a pilot surgical laparoscopic credentialing simulation program began in obstetrics and gynaecology at GCUH. Trainees were required to perform a safe laparoscopic salpingectomy on the VR simulator, and achieving a 'pass' prior to primary operating on patients.

### Aims/Objectives

The aim of this pilot study was to investigate the impact of a LapSIM VR training program on operative time of laparoscopic salpingectomies for ectopic pregnancies. We aimed to study the translation of an educational program to operative room efficiency and safety.

### Findings

Lap SIM VR credentialing was performed by 81% of the GCHHS gynaecology registrar cohort following introduction in 2021. Trainees completed 234 virtual reality salpingectomies – three times the number of actual laparoscopic salpingectomies performed at GCHHS for ectopic pregnancy in 2021. Introduction of the LapSIM VR program was associated with a significant reduction in mean operative time for all ectopic pregnancies in all primary surgeon groups. This was most marked in the uncomplicated ectopic pregnancy cases. For uncomplicated procedures, after adjusting for primary surgeon training level and surgical technique, there was strong evidence of reduction in operative time of 13 minutes per case ( $p < 0.001$ , 95% CI 8-19 minutes). The Lap SIM VR credentialing program was not associated with any increase in primary surgeon opportunities for the registrar cohort.

### Discussion

Introduction of a laparoscopic simulation VR credentialing program resulted in a significant reduction in operative time for laparoscopic salpingectomies in our institution. Educational programs should aspire to translational, patient focused, outcomes in their design and delivery.

QLD Health Guideline – Operating Theatre Efficiency -

[https://www.health.qld.gov.au/\\_data/assets/pdf\\_file/0022/640138/qh-gdl-443.pdf](https://www.health.qld.gov.au/_data/assets/pdf_file/0022/640138/qh-gdl-443.pdf) [accessed on 25.01.23]

Larsen C et al. Effect of virtual reality training on laparoscopic surgery: randomised controlled trial. BMJ 2009; 338: b1802

## Developing a custom-built medical learning management system for medical students and educators

**Dr Bradley Williams<sup>1</sup>, Ms Renee Harvey<sup>1</sup>, Professor Lizzi Shires<sup>1</sup>, Dr Samuel Brandsema<sup>1</sup>**

<sup>1</sup>*University of Tasmania, Burnie, Australia*

### **Introduction/Background**

The University of Tasmania's School of Medicine (TSOM) has clinical schools in Hobart, Launceston, and the Rural Clinical School (RCS) in the North-West. Learning and teaching in the Undergraduate medical degree is assessed through a portfolio of niche assessment tasks. The degree is transitioning to a Doctor of Medicine (MD) in 2023 with embedded research. This transition presents an opportunity to develop a system that unifies all core course components.

### **Aim/Objectives**

A custom-built single-source medical platform that is accessible to staff, students and external clinical supervisors, with an underlying philosophy to provide a standardised vertically integrated learning resource to support case-based learning, clinical placement and research, with complete transparency of program assessment.

### **Discussion**

The Learning Management System (LMS) was designed to be a living resource in the ever-changing field of medicine. Content is accessible to staff, students and external stakeholders as a single source for current medical teaching and assessment practices, ensuring consistency in the medical curriculum.

Clinical rotations are asynchronously delivered with all students required to meet the same learning outcomes regardless of regional differences in clinical exposure. In keeping with FAIR principles the LMS provides content in a variety of formats and is not restricted by year level, giving clear guidance for students on completing assessment tasks, outlining how tutors are to assess items including giving effective feedback.

Functionality for curriculum mapping has also been developed to report against a spiral curriculum using multiple frameworks (e.g. the University's ILOs and professional accreditation standards).

## How do virtual simulated international placements develop cognitive and affective skills

**Dr Amanda K Edgar**<sup>1</sup>, Prof James A Armitage<sup>1</sup>

<sup>1</sup>*Deakin University, 76 Pigdons Road, Australia*

### **Introduction**

Cognitive and affective skills such as clinical reasoning require health professionals to perform a series of active metacognitive processes. Whilst experienced clinicians run through these metacognitive steps with unconscious competency, trainees often struggle to integrate recently acquired knowledge or clinical skills into a metacognitive routine. We developed a simulated clinical environment and deliberately constructed cases dealing with unfamiliar presentations to prompt optometry students to engage in deliberate reflective practice and refine their own metacognitive processes. The aim of this study was to evaluate the benefits of a virtual simulated international placements in optometric education.

### **Methods**

This virtual simulator replicated the Sankara Nethralaya Eye Hospital and hosted asynchronous branching clinical scenarios coupled with synchronous style videoconferences for 167 students from Deakin University in Australia and Elite School of Optometry in India. A mixed methods study evaluated student perception of the simulation. De-identified data collected from teaching and learning activities within the optometry course curriculum were used in combination with students' and facilitators' perceptions derived from focus group discussions. Descriptive statistics and thematic qualitative analysis were used.

### **Results**

Survey responses (64) and self-reflective inventories (46) were collected and focus groups were performed with 6 student participants and 6 facilitator participants in separate sessions. Students perceived that the virtual simulation experience was relevant and motivated them to apply theoretical knowledge to clinical contexts. The thematic analysis uncovered factors from the teaching activity underpinning this learning highlighting novel ways for students to develop clinical reasoning.

### **Discussion**

Whilst the virtual placements were developed in response to COVID-19, this presentation will discuss the affordances of the pedagogical approach and expansion of the intervention into curriculum.



## Mental models for portfolio, feedback and assessment system design

**Professor Stephen Tobin<sup>1</sup>**, Doctor Jenny McDonald<sup>1</sup>

<sup>1</sup>Western Sydney University, Campbelltown Campus, Australia

### Introduction/Background

WSU decided on a university portfolio system, now in its 5<sup>th</sup> year at our MD program. We have developed a showcase approach with regular mentor-interviewers. The system also extends to formative workplace-based assessments. These have been refined over 3 years, the workflow allowing frequent points-of-assessment across the 5 years.

### Aim/Objectives

- 1 Contemporary #med.ed approaches can utilise IT system capabilities;
- 2 Sharing documents, diagrams, whiteboards and remote & F2F meetings enables mental models;
- 3 Iterative change as well as substantial system upgrades are manageable;
- 4 Shared mental models drives collaboration.

### Discussion

As a client, it is tempting to say to an IT system vendor, that "...we want this..." The trick is collaboration meaning direct academic input, time and effort. Language is important when medical education people dialogue with IT systems experts, some being vendors and some being at IT central in the university. Shared mental models help.

Developing this system has meant meetings across timezones with diagrams, screenshots and freehand drawing. This has been an intellectual process requiring shared mental models. The complicated medical program across urban and rural sites, with the addition of partner medical school, has added significantly to the work.

The system works: our medical students and faculty "get it". The system is so widely employed as to be the norm. One of us had the pleasure of seeing three cohorts all get their smartphones out to download the new app, during academic year commencement days.

### Issues/Questions for exploration OR Ideas for further discussion

How would you go about this? Have you done something similar?

Do you believe in portfolios and workplace-based assessments?

(The system used is discussed elsewhere @ANZAHPE)

## Hepatitiscape™: A 3D Virtual Escape Room to Teach Hepatitis

**Dr Angelina Lim**<sup>1</sup>

<sup>1</sup>Monash University, , Australia, <sup>2</sup>Murdoch Children's Research Institute, , Australia

### **Introduction**

Escape room games have been shown to be successful in improving teamwork and promoting critical thinking. The aim of this project was to develop a 3D interactive virtual escape room (Hepatitiscape™) to complement teaching hepatitis concepts and to assess its effectiveness in two cohorts of students (Monash Australia and Malaysia campuses).

### **Methods**

A sequential mixed methods approach was used. To assess the effectiveness of the virtual game-based learning, a pre- and post- knowledge test was administered to measure students' immediate knowledge gain and the final assessment grades were used to measure knowledge retention of the topic. Students' perception of Hepatitiscape™ was gathered using an online questionnaire.

### **Results**

A total of 418 students participated and a statistically significant improvement was seen in the knowledge test scores (58.66% pre-intervention vs 72.05% post-intervention,  $p < 0.05$ ). Final assessment scores for hepatitis-related exam question improved by 2.3% (Malaysia) and 8.8% (Australia) compared to previous year. From the 105 students who participated in the perception survey, 97% strongly agreed/agreed that they had a better understanding of hepatitis after completing Hepatitiscape™. The majority of students also perceived the activity improved their teamwork (99.1%), critical thinking skills (95.2%) and problem-solving skills (94.3%).

### **Discussion**

Hepatitiscape™ was an effective pedagogical approach to teach and reinforce clinical concepts of hepatitis among pharmacy students. Hepatitis is a specialised area and it can be difficult to find facilitators to run workshops. Hepatitiscape™ can be run with minimal facilitation and off campus. Game-based learning has been known to positively stimulate students' engagement and persistence on tasks, which in turn enhance deep learning. (Cain et al, 2015) With the evolving landscape of education and learner demographics, investment in technology- enhanced game-based learning can help support academics engage students online.

### **Reference:**

Cain, J., & Piascik, P. (2015). Are Serious Games a Good Strategy for Pharmacy Education?. American journal of pharmaceutical education, 79(4), 47. <https://doi.org/10.5688/ajpe79447>

## How does video of clinical practice influence learning conversations in postgraduate medical education?

**Dr Andrew Huang**<sup>1,2</sup>, Professor Elizabeth Molloy, Professor Anna Ryan, Professor Margaret Bearman

<sup>1</sup>University Of Melbourne, Parkville, Australia, <sup>2</sup>Austin Health, Heidelberg, Australia

### Introduction

Studies of learning conversations in medical education suggest these conversations can be supervisor-driven, monologic, and may rely on poor recall of events. Sometimes educators provide vague comments to avoid upsetting learners. Some educators have begun to use video of clinical practice for educational purposes, which may help address these potential limitations. Collating and synthesising studies of videos might provide empirical insight into the value of video in learning conversations. Therefore, we aimed to answer the question “How does video of clinical practice influence learning conversations in post-graduate medical education?”

### Methods

MEDLINE, Embase, PsycINFO and ERIC databases were searched for articles from 1 Jan 2010 to 1 Jan 2022. Major inclusion criteria were: postgraduate medical learners and video of actual clinical practice that was used in a learning conversation. Qualitative data was then analysed using Braun and Clarke’s thematic analysis.

### Results

Nineteen articles were included in the study. Self-report data (mainly survey-based) revealed that learners can view video-assisted coaching both positively and negatively. The educational design of the video-based encounter was often poorly described. Our thematic analysis of the qualitative data resulted in four themes. Video was seen to influence learning conversations in the following ways: video captures performance data that can be co-analysed; enables the learning conversation to take place in a different environment; changes the teaching approaches of educators; and may promote learner agency and voice.

### Discussion

This review suggests that video has the potential to influence learning conversations but more studies are needed. Additionally, the educational design associated with video-assisted coaching, particularly relating to how the footage is used before and during the conversation may be a key to how it impacts the tenor of the learning conversation. This link between design and effects, along with how video influences learning conversations requires further investigation.

## **Experiences of female academic leaders in health professions: Opportunities, Barriers and Strategies**

**Dr Rashmi Watson<sup>1</sup>, Professor Angela Carbone<sup>2</sup>**, Professor Kerryyn Butler-Henderson<sup>3</sup>

<sup>1</sup>*The University of Western Australia, Perth, Australia*, <sup>2</sup>*RMIT, Melbourne, Australia*, <sup>3</sup>*RMIT, Melbourne, Australia*

### **Introduction**

Females face reduced recognition for their skills contribution as academic teachers and published researchers as well as under representation in academia and leadership roles. The current status of female leaders across Australia is low where the top leaders as Vice Chancellors is currently 28 per cent (Butler-Henderson et al., 2021) and only one third as Professors (Rea, 2018). Even in female dominated fields, such as Nursing, leadership positions are dominated by male academics (Livesay et al, 2021). Overall, women deliver global health, yet men lead it highlighting the global disparity of female leadership.

### **Methods**

A mixed-method research was conducted in 2021 utilising an online survey.

### **Results**

If based on research/evaluation please insert your abstract results here.

### **Discussion**

Increasing challenges are faced by female academics since COVID-19 increasing the gender inequalities. In the study completed by Watson et al. (2022), factors contributing to more or less motivation for career progression were highlighted, perceptions on academic status of female leaders and academic progression perceptions were discussed. Since the beginning of the pandemic, new ways of working have been realised globally alongside re-evaluation of priorities and work. Systematic changes are required to address barriers and ways to support female leaders in the health professions.

## A Framework for Embedded Faculty Development in Health Professions Education

**Associate Professor Koshila Kumar**<sup>1</sup>, Dr Svetlana King, Dr Gillian Kette

<sup>1</sup>*Flinders University, , Australia*

### **Introduction/Background**

Faculty development (FD) refers to any professionally oriented learning undertaken by health professionals, educators, and researchers to build their educational expertise<sup>1</sup>. Informal FD refers to specifically to learning which occurs outside of formal structured activities and includes learning through everyday work.

### **Aim/Objectives**

We present a framework for informal FD informed by situativity theory. In doing so, we reposition informal FD as embedded FD, to emphasise that it is situated within, and integrated into, the everyday work practices and professional contexts of health professionals, educators, and researchers.

### **Discussion**

Based on our previous empirical work, our framework for embedded FD is underpinned by its three signature features (affordances, constraints, and effectivities)<sup>2</sup>. This framework also incorporates three principles to optimise learning through everyday work: (1) cultivating a mindset for professional learning through everyday practices; (2) leveraging the social dimensions of learning; and (3) strengthening the social contract between individuals and organisations for learning. This reframing helps to shift the focus onto how embedded FD arises in the interactions between individuals and their social and physical environments, and emphasises the need to support individuals, groups, and organisations to develop their effectivities to navigate and negotiate the affordance and constraints for learning in complex and changing environments.

### **Issues/Questions for exploration/ further discussion**

What are the implications of framing faculty development using a situativity lens? What might we do differently as individuals, groups, or organisations?

### **References**

1. Steinert, Y. (2014). Faculty Development in the Health Professions: A Focus on Research and Practice (Vol. 11). Springer.
2. King, S. M., Richards, J., Murray, A.-M., Ryan, V. J., Seymour-Walsh, A., Campbell, N., & Kumar, K. (2021). Informal faculty development in health professions education: Identifying opportunities in everyday practice. *Medical Teacher*, 43(8), 874-878.

## Professional practice in the modern world: riding the waves to success

**Jacqueline Broadbridge<sup>1</sup>, Wendy Milgate<sup>2</sup>, Maggie Scorey<sup>3</sup>**, Claudia Bielengberg<sup>4</sup>, Jodie Booth<sup>5</sup>, Wendy Hood<sup>5</sup>, Michelle Nash<sup>6</sup>, Robyn Reddiex<sup>4</sup>, Karen Salata<sup>7</sup>, Kellie Tune<sup>8</sup>  
*<sup>1</sup>Griffith University, Gold Coast, Australia, <sup>2</sup>OT Futures, Brisbane, Australia, <sup>3</sup>Southern Cross University, Gold Coast, Australia, <sup>4</sup>Central Queensland University, Bundaberg, Australia, <sup>5</sup>University of Queensland, Brisbane, Australia, <sup>6</sup>University of the Sunshine Coast, Sunshine Coast, Australia, <sup>7</sup>James Cook University, Townsville, Australia, <sup>8</sup>Bond University, Gold Coast, Australia*

### Introduction/Background

Professional practice experiences are essential for allied health students during their tertiary studies to develop the relevant professional competencies for graduation. As demand for allied health professionals, including occupational therapists, grows, so too has the number of occupational therapy programs and student enrolments.

The modern workplace has also evolved, with many embracing more dynamic and flexible working arrangements. Opportunities to work from home allows greater autonomy and variation in service delivery for allied health professionals, such as mobile services and flexible working hours. Service continuity is also being impacted by higher rates of workforce mobility, high staff turnover and ongoing staff shortages. Furthermore, COVID-19 has demanded the reimagining of the nature and context of how allied health services are delivered. Significant funding reforms in the aged care and disability sectors (e.g. NDIS) have also created a workplace that is now more agile and responsive.

Consequently, the contemporary landscape of professional practice has changed with the percentage of placement opportunities for students in the private practice sector growing significantly in recent years.

### Aim/Objectives

These changes have impacted on the student professional practice experience, as traditional placement models and structures no longer align to industry expectations or needs. University programs need to undergo their own transformation to support a sustainable practice education environment to meet these current and future demands.

### Discussion

This presentation will provide an overview of the Queensland occupational therapy professional practice context and how professional practice teams from university members of OT Futures (Queensland) have responded to these changes.

### Issues/Questions for exploration OR Ideas for further discussion

Strategies on how to increase capacity within the private practice sector to provide sustainable and quality professional practice experiences will be discussed along with what we see as the emerging challenges and ideas for future development.

## Collaborating with older adult simulated patients (SPs) to deliver effective geriatric simulations. What? why? and how?

**Dr Nemat Alsaba<sup>1,2</sup>, Mrs. Helen Houghton<sup>1</sup>, Mrs. Patricia Green<sup>1</sup>, Mrs. Leonie Tuite<sup>1</sup>**

*<sup>1</sup>Bond University, Gold Coast, Australia, <sup>2</sup>Gold Coast University Hospital, Gold Coast, Australia*

### **Introduction/Background**

Globally our population is aging. Healthcare providers must prepare for the challenges associated with caring for older adults due to the complex medical, psychosocial, and physiological age-related changes (Braude et al. 2015) Simulation-based education in healthcare allows healthcare professionals to practice and master skills and competencies associated with the care of older adults. Designing and delivering geriatric simulation encompasses specific considerations, including selecting an appropriate simulation modality, such as working with older simulated participants (SP). Hence it is vital to collaborate with older SPs to design and deliver an authentic simulation-based education. As simulation educators, we must ensure that our simulation faculty and older SPs have the right tools and support to provide effective geriatric-focused simulation activities (Smith et al. 2020)

### **Objectives**

The aim is to understand the importance of engaging older adults as SPs in geriatric-focused simulation and recognize the unique considerations when working with older SPs.

### **Discussion:**

Simulation educators may not understand the rationale for working with an age-appropriate simulated patient. Choosing a younger SP to portray an older person may compromise simulation authenticity and carries the risk of stereotyping, bias, and promoting ageism.

Effective collaboration with older SPs in simulations is achievable through investing resources in preparing, training, and ensuring their well-being via translating knowledge of physiological aging into a successful approach when working with and supporting older SPs. We offer a three-phase framework that provides healthcare simulation educators with knowledge, tools, and strategies to ensure that older SPs and simulation communities have the proper support to contribute to simulation-based education safely and effectively. This presentation describes the key components of the three-phase collaborative framework and how simulation educators can use and apply them in their practice.

### **Issues/Questions for exploration:**

Identify strategies for dealing with these considerations and apply them to the simulation program using a three-phase pre, during, and post-simulation framework.

### **References**

Braude, P., Reedy, G., Dasgupta, D., Dimmock, V., Jaye, P., & Birns, J. (2015). Evaluation of a simulation training programme for geriatric medicine. *Age and Ageing*, 44(4), 677-682.  
<https://doi.org/10.1093/ageing/afv049>

Smith, C. M., Sokoloff, L. G., & Alsaba, N. (2020). Collaborative framework for working with older simulated participants (SP). *BMJ Simulation and Technology Enhanced Learning*, 7(2), 112-115.  
<https://doi.org/10.1136/bmjstel-2020-000613>

## **‘Online only’ Clinical Teacher Training: participant perception and assessment outcomes**

**Professor Annette Burgess**<sup>1</sup>, Mr Tyler Clark<sup>1</sup>, Dr Akhil Bansal

<sup>1</sup>*The University Of Sydney, Faculty of Medicine and Health, Sydney Medical School, Sydney, Australia*

### **Introduction**

The Clinical Teacher Training (CTT) program was moved to ‘online-only’ delivery in response to the disruption of COVID-19. Delivered via synchronous and asynchronous sessions, the 10 modules included: 1) Feedback, 2) Planning and delivering teaching sessions, 3) Facilitating small group teaching, 4) Key tips for teaching in the clinical setting, 5) Teaching a skill, 6) Teaching clinical handover, 7) Team-based learning, 8) Case-based learning, 9) Journal club and 10) Mentorship. We sought to investigate the efficacy of the new online program based on participation, participant perception and knowledge acquisition.

### **Methods**

In 2022 the ‘online-only’ CTT program was delivered across 4-weeks, with provision of succinct literature, frameworks, videos, discussion boards and peer feedback. Synchronous activities were adapted to an online format, providing opportunities for active participation in small interprofessional groups. Knowledge and skills acquisition were assessed using Multiple Choice Questions (MCQs), and scores provided by facilitators on participants’ ability to teach and provide feedback. Quantitative and qualitative data were collected via questionnaire, and analysed using descriptive statistics.

### **Results**

122 clinicians completed the CTT program, from 13 Local Health Districts (LHDs) and Institutions, plus various pharmacies. Disciplines included: Medicine (55%); Pharmacy (23%); Dentistry and Oral health (8%); Nursing (11%); Speech pathology (2%). Thirty percent of participants responded to the survey. Participants found the program well-structured and interactive, with a variety of topics, delivered within appropriate timeframes. They appreciated the succinct literature with frameworks, and multiple opportunities to practice and receive feedback. The majority of respondents commented on the flexibility and accessibility of ‘online only’ delivery, with 97% satisfied to complete the program completely online. Assessment results (MCQs and practical teaching sessions) demonstrated acquisition of a good level of knowledge and skills.

### **Discussion**

The ‘online only’ CTT program provided an excellent framework to ensure an up-to-date, relevant, and accessible training resource for clinicians working in metropolitan and regional/rural settings.



## Using turning tides to your advantage: developing an interprofessional work integrated learning community of practice

**Dr Robyn Johnson**<sup>1</sup>, **Dr Julia Blackford**<sup>1</sup>, Dr Shane Ball<sup>1</sup>, Dr Yobelli Jimenez<sup>1</sup>, Jo Lewis<sup>1</sup>

<sup>1</sup>*The University of Sydney, Sydney, Australia*

### Background

In our faculty, there is an established group focussed on research in practice education. However, not all academics involved in planning and coordinating practice education are active researchers in this area. Despite this, they wish to ensure their students on placement are learning effectively and informed by current evidence. The characteristics of communities of practice informed our decision to develop such a community for work integrated learning (WIL) in allied health (Wenger, 2011): the *domain* of practice education, the *community* of academics working and/or interested in this area, and the *practice*, a safe, collegial and supportive environment, in which to mutually learn and collaborate with each other by sharing and developing ideas, best practice and expertise.

### Objectives

This presentation will discuss the development, implementation and evaluation of the WIL community of practice (CoP).

### Discussion

Prior to a recent restructure, almost all placement education was overseen by one specialised team. The current community of practice is open to any academic in our school with an interest in supporting best practice in WIL. All stages of the development of the CoP involved consultation with potential CoP members. This consultation aimed to determine the purpose, membership, operating model, key topics and possible methods of evaluating the CoP's effectiveness. The CoP is open to all academics in our school, who are interested in supporting best practice in WIL. Key regular CoP discussion topics include 'an intractable problem', 'ideas worth spreading' and 'creative corner'. Effectiveness and evaluation will be discussed.

### Questions for exploration

The opportunities to connect academic and clinical staff with shared interests in WIL contributed to the CoP. In the future, it will be important to explore challenges to CoP participation, and long-term sustainability of the current model.

### Reference

Wenger, E. (2011, 20 October 2011). Communities of practice: A brief introduction. STEP Leadership Workshop, University of Oregon.

## Teaching nursing and midwifery academics and research students to write for publication through a series of semi-structured writing retreats

**Mr James Bonnamy**<sup>1</sup>, Associate Professor Lyndal Bugeja<sup>2</sup>, Professor Julia Morphet<sup>1</sup>, Associate Professor Philip Russo<sup>1,3</sup>, Associate Professor Gabrielle Brand<sup>1</sup>  
<sup>1</sup>*Nursing and Midwifery, Monash University, , Australia*, <sup>2</sup>*Department of Forensic Medicine, Monash University, , Australia*, <sup>3</sup>*Cabrini Research, Cabrini Health, , Australia*

### Introduction

Writing for publication can be intimidating and frustrating, especially for nurses and midwives transitioning to academia from clinical practice. The elements for successful research environments have been previously identified as investment in researcher socialisation and development (Ajjawi et al., 2018). This research aimed to evaluate the effectiveness of a series of semi-structured writing retreats on researcher development and outputs, specifically: 1) What was the experience of nursing and midwifery academics and research students attending the writing retreats, 2) What impact did a series of retreats have on research outputs, and 3) How did semi-structured writing retreats enable and develop academics and research students writing for publication?

### Methods

Utilising a mixed-methods exploratory sequential design: Phase one – A qualitative survey collected participant experiences which informed phase two, where quantitative data were collected on the number and quality of research outputs. Qualitative themes were derived from content analysis, and descriptive statistics were undertaken for the quantitative data.

### Results

Phase one: A total of 103 staff and students attended six writing retreats over four years. Findings demonstrate that semi-structured writing retreats provide a 'sacred' space for a shared writing experience where immediate expert peer review, opt-in tailored research training and mentored writing enable and develop academic and research students writing for publication. Phase two: Eighty-three publications were planned. Of these, 50 have been published, 11 have been submitted, 14 are in draft and eight were abandoned.

### Discussion

Drawing on concepts of communities of practice, and enculturating the elements needed for successful research environments, our semi-structured writing retreats enabled and developed nursing and midwifery academics and research students writing for publication. Semi-structured writing retreats are a valuable research investment that enables preparation of high-quality research outputs by offering protected time to write, peer and expert review and opportunities for collaboration between participants.

### References

Ajjawi, R., Crampton, P. E. S., & Rees, C. E. (2018). What really matters for successful research environments? A realist synthesis. *Medical Education*. <https://doi.org/10.1111/medu.13643>



# **ANZAHPE 2023**

**TURNING TIDES**  
Navigating the Opportunities

## **PROGRAM**

**DAY TWO**

**Wednesday 28 June 2023**



## Plenary 2

Dr Mike Todorovic, Griffith University

### **Power of the post: Using social media to promote inclusivity in medical education.**

Michael Todorovic<sup>1,2</sup>

<sup>1</sup> School of Nursing and Midwifery, Griffith University, Queensland, Australia

<sup>2</sup> Menzies Health Institute Queensland, Griffith University, Queensland, Australia

The COVID-19 pandemic necessitated a rapid shift to online teaching and learning. While this presented significant challenges for educators and learners, it also illustrated the potential of online platforms, such as social media, to provide inclusive and flexible learning opportunities. Today, social media platforms are increasingly being used by medical educators as a tool to create innovative and engaging educational content that promotes discussion and fosters a community of learners. Platforms such as Twitter, TikTok, Instagram, Podcasts, and YouTube offer educators an opportunity to connect with learners beyond the classroom, and facilitate interactive and engaging learning experiences across geographic and socioeconomic boundaries. By leveraging social media, medical educators can democratise access to evidence-based information and shape the learning landscape, ultimately contributing to a more equitable education system. In addition, academics can leverage these platforms to advance their careers through digital scholarship, showcase their research, build a professional network, and establish a reputation as an expert in their field.

This presentation, through a variety of case studies, experiences, and literature, will provide insights and strategies for educators to leverage social media as an innovative tool to connect with a diverse audience, build their professional profile, and expand their reach.

#### **Issues/Questions for exploration OR Ideas for discussion**

*What are the current issues with educators using social media?*

*Will AI and chat programs play a role in this space?*

## 4A – Symposium

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### Who are you? Defining and redefining your identity as a health professions educator

**Professor Cathleen Pettepher<sup>1</sup>, Associate Professor Kimberly Dahlman<sup>2</sup>, Associate Professor Zhi Xiong Chen<sup>3</sup>**

*<sup>1</sup>Vanderbilt University School Of Medicine, Nashville, United States, <sup>2</sup>Vanderbilt University Medical Center, Nashville, USA, <sup>3</sup>National University of Singapore Yong Loo Lin School of Medicine, Singapore, Singapore*

#### **Introduction/Background**

The development of professional school curricula that include highly integrated courses and active learning methods has significantly impacted the career paths and professional identities of many medical science educators. Over the past decade, there has been a shift from the traditional health professions teacher, whose duties were often limited to lecturing or course coordination, to a professional educator with a multidimensional skill set. As a result, it is important for educators to assess their current skills and develop competencies and qualities to be successful in modern curricula. These skills include educational leadership, curriculum design/implementation, mentorship and coaching, competency-based assessment, evidence-based teaching/facilitation, and educational scholarship. This symposium will discuss the evolution of faculty from teachers to educators, the roles of the modern health professions educator, professional identity formation, and the future roles of health professions educators.

#### **Purpose/Objectives**

This interactive symposium is appropriate for educators at all career levels and will provide practical information and a framework that participants can use to assess their roles and identity as educators, now and in the future. After attending this symposium, participants will be able to:

1. Define the different roles of the modern health professions educator.
2. Describe how the professional identity of health professions educators has changed as a result of the development of integrated health professional curricula.
3. Self-identify their educator strengths and weaknesses and determine potential roles for the future.

#### **List of presentations**

Neil Osheroff, PhD

“Who Are You? The Roles of the Modern Health Professions Educator”

Dr. Osheroff will describe how the advent of curricular integration and modern teaching methodologies have affected the roles of health professions educators.

Kimberly B. Dahlman, Ph.D.

“Professional Identity Formation of Biomedical Scientists and their Pathways into Health Science Education”

Dr. Dahlman will discuss the results of a multi-institution qualitative study that examines professional identity formation in biomedical health science educators and compares it to studies of clinical educators.

Zhi Xiong Chen, Ph.D.

“Redefining Your Roles as a Health Professions Educator – Looking into the Future”

Dr. Chen will discuss potential new roles that will help future-proof faculty members’ careers as health professions educators

#### **Discussion: Issues/questions for exploration OR Ideas for discussion**

Issues for exploration include how faculty roles in health professions education have changed and will continue to change in the future and how these roles will continue to affect professional identity formation.

## Navigating opportunities to embed interprofessional knowledge in health professions education

**Professor Eleanor Beck<sup>1,2</sup>, Dr Breanna Lepre<sup>2,3,4</sup>, Professor Lauren Ball<sup>2,4</sup>**, Dr Helen McCarthy<sup>5</sup>

<sup>1</sup>*School of Health Sciences, University Of New South Wales, , Australia*, <sup>2</sup>*NNEdPro Global Institute for Food, Nutrition and Health , Cambridge, United Kingdom*, <sup>3</sup>*Centre for Health System Reform and Integration, Mater Research Institute-University of Queensland, , Australia*, <sup>4</sup>*Centre for Community Health and Wellbeing, University of Queensland, , Australia*, <sup>5</sup>*Institute of Health and Sport, Victoria University, , Australia*

### Introduction/Background

A key element of the health workforce is the education system that enables their competency development. Incorporating public health competencies is challenging in already crowded medical, nursing and allied health curricula. For example, poor diet is a key public health concern and is a leading cause of death worldwide. Yet, nutrition knowledge and skills are often not included in meaningful quantities within health professional education programs. The Australian National Preventive Health Strategy<sup>1</sup> highlights that understanding prevention will be critical in improving longer term health outcomes of Australians. An interprofessional approach, in both health professional training and ongoing practice, is required to optimise both preventative and chronic care and maximise subsequent outcomes for individuals, groups and populations.

This symposium describes strategies for embedding knowledge from individual health disciplines into broader health professions education, using nutrition as a case study. The NNEdPro ANZ Regional Network works collaboratively to strengthen the nutrition education and competence of healthcare professionals in Australia and New Zealand through innovation in research, resource development and delivery. The session will include experts in nutrition education for health professionals available for Q&A.

### Purpose/Objectives

The symposium aims to describe how to navigate opportunities for advocacy for interprofessional collaboration; to provide a case study of a framework for nutrition education in medicine as an example of scholarly practice to define curricula requirements; and to provide an example of innovation in teaching methods to maximise learning for students.

### List of presentations

1. **Professor Eleanor Beck: Opportunities for multiple disciplines embedded in health professional curriculum** – interprofessional education provides opportunities for understanding of scope of practice, teamwork and communication across a breadth of practice areas through vertical and horizontal embedding of discipline specific knowledge and skills.
2. **Dr Breanna Lepre: An Australian Framework for Nutrition Education in Medicine** –A new Framework for Nutrition Education in Medicine provides a blueprint of competencies and enabling concepts (knowledge) to guide educators and regulators of medical education.
3. **Professor Lauren Ball: Culinary Medicine opportunities** – A review of innovations in medical education to involve practical, cooking classes with students to enhance their knowledge, skills and attitudes towards nutrition.

### Discussion: Issues/questions for exploration

How can we advocate for embedding cross disciplinary knowledge and skills -both top down and bottom up – embedded in curricula of other disciplines? What are the scholarly strategies to justify that 'your' discipline knowledge is important?

<sup>1</sup>Commonwealth of Australia. National Preventative Health Strategy 2021-2030. In: Department of Health, ed. Valuing health before illness: living well for longer. Canberra, 2021

## 4B Curriculum – Learner Focus

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### What can I bring to the job?

#### **Dr Angelina Lim<sup>1</sup>**

*<sup>1</sup>Monash University, Australia, <sup>2</sup>Murdoch Children's Research Institute, Australia*

#### **Introduction**

Academics are key players in supporting graduate employability and little is known about what pre-registrant pharmacists perceive to be valued by employers. This study explores what perceived competencies and attributes highlight their employability and what evidence they drawn upon in job interviews.

#### **Methods**

As part of an assessment, pre-registrant pharmacists performed a virtual mock job interview for an entry-level pharmacy position. Participants were asked what skills they could bring to the job. Participants were asked if their responses could be used for research purposes after the assessment. Responses were transcribed and coded using team-based framework analysis using an inductive codebook mapped to competencies set out by the Australian Pharmacy National Framework, which set out desired skills for practicing pharmacists.

#### **Results**

A total of 143 interview transcripts were included in the analysis. The top employable skills mentioned were “leadership of self” (98.6%) and “communication and collaboration” (96.5%). Responses about skills were often spoken about broadly without relating to evidence/experience and were often not targeted to the job description. There was often a disconnect between the opportunities provided by the university and the pre-registrant interview responses. Examples of this included rare mention of research related competencies (31.5%) and no participant discussed experience in specific clinical services; despite having opportunities to participate in specialised areas in workplace placements and graduating from a course with an integrated research curriculum.,

#### **Discussion**

Academics can do more to support graduate employability especially as the job market becomes more saturated with health professionals. To support employability, future curriculum could provide emphasis on portfolio management from their first undergraduate year and linking learning to competencies, provide learning opportunities across all competencies and regular mentoring from practicing pharmacists.

## The time and tides of Professional Plus+: Reviewing the innovative horizontal and vertical online interprofessional curriculum for entry-to-practice health profession students

**Bronwyn Tarrant**<sup>1</sup>, Dr Nicole Hill<sup>3</sup>, Dr David Kelly<sup>2</sup>, Anthea Cochrane<sup>5</sup>, Dr Rebecca Wong<sup>6</sup>, Ms Sue Durham<sup>8</sup>, Dr Jessica Lees<sup>2</sup>, Dr Peter Carew<sup>4</sup>, Philippa Marriott<sup>1</sup>, Dr Lauren Story<sup>4</sup>, **Dr Hayley Dell'Oro**<sup>7</sup>

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### Introduction/Background

Concerns regarding students' professional behaviour on clinical placement and their subsequent chance of success and growth demonstrated many similarities across entry-to-practice students in the Faculty of Medicine, Dentistry and Health Sciences [FMDHS]. In response to these commonalities, eight of these distinct health professions joined together creating an opportunity to develop a unique, purpose-built interprofessional-curriculum equipping all health profession students with skills to successfully navigate clinical placements. *Professional Plus+* is an innovative horizontal and vertical online interprofessional curriculum explicitly teaching health professional students their requisite professional behaviours simultaneously with corresponding wellbeing strategies to sustain them in their studies and practice. A co-constructed collaboration by students and academics from the outset, *Professional Plus+* promotes interpersonal skills to communicate with one another across disciplines and pioneers the coupling of wellbeing and professionalism curriculum equipping students for the challenges of becoming a health professional.

### Aim/Objectives

This presentation highlights our learnings from reviewing over two years of *Professional Plus+* implementation involving 1,018 Doctoral and Masters' students in entry-to-practice health disciplines across the FMDHS at the University of Melbourne.

### Discussion

Key learnings from the early implementation of *Professional Plus+* include (1) the challenges of designing a single professionalism and wellbeing curriculum that resonates across disciplines, each with unique course and subject learning outcomes, accreditation requirements, and timetabling; (2) promoting engagement in interprofessional group discussions; (3) creating bespoke, high-quality and meaningful learning activities, and finally (4) what students report to us about their wellbeing. The introduction of this interprofessional curriculum has received positive feedback, whilst student learning and wellbeing outcomes continue to be evaluated.

### Issues/Questions for exploration OR Ideas for further discussion

Future directions for this project include development of advanced modules, exploring further strategies to promote interprofessional interaction in asynchronous learning activities, using technology to enhance student learning experiences, and outcome measurement.



## Exploring Game-Based Learning for clinical reasoning in an undergraduate medical program

**Dr Eleonora Leopardi<sup>1</sup>**, Abbey Isaac<sup>1</sup>, Amelia Sadler<sup>2</sup>, Brittany Inglis<sup>2</sup>, Colin House<sup>2</sup>, Jane Mak<sup>1</sup>, Dr Nara Jones<sup>1</sup>, Dr Conor Gilligan<sup>1</sup>

<sup>1</sup>*School of Medicine and Public Health, University of Newcastle, Newcastle, Australia*, <sup>2</sup>*School of Rural Medicine, University of New England,, Armidale, Australia*

### Introduction

Clinical reasoning is a critical skill for healthcare professionals, and its teaching and assessment is an active area of exploration. The literature suggests that multiple strategies should be implemented in combination for clinical reasoning teaching, such as simulation-based education, work-integrated learning, reflective learning.<sup>1</sup> Virtual clinical scenarios have been developed and implemented, however digital simulation-based education presents numerous challenges: high acquisition and maintenance costs, need for faculty training, limited flexibility of the scenarios. To overcome these, alternative teaching methods should be considered. Game-Based Learning (GBL) has recently emerged as novel educational approach, and the classic board game format has been used in health professions education.<sup>2</sup>

### Methods

We aimed to develop a serious board game aimed at fostering clinical reasoning development in an undergraduate-entry medical program in Australia. Using phenomenological and participatory research approaches, we assessed the feasibility and perceived usefulness of a GBL activity in a learning session. Data collected included reflective diaries, communications within the research team and with external content experts, observation of the GBL sessions, and focus group discussions with the learners which explored the students' engagement, learning and motivation for further learning. All data was analysed thematically through the collaborative development of a codebook.

### Results

The board game *Diagnosis* was designed and refined through multiple gameplay testing sessions. Three pilot GBL sessions and focus groups were conducted with second-year students in the Joint Medical Program. Four main themes were identified from analysis of the data: *Relevance to clinical setting; Integration with current learning; Positive learning experience; Room for improvement.*

### Discussion

GBL is a feasible and engaging educational strategy to further clinical reasoning development. Our study provides useful experience for curriculum designers, offering key considerations in the development and implementation of a GBL activity. End-user engagement throughout the process is vital to the success of the activity.

## Industry co-design in undergraduate health professions entry to practice education: a review of the evidence.

**Dr Monica Peddle**<sup>1</sup>, Ms Hosu Ryu<sup>2</sup>, Ms Cindy Hoang<sup>2</sup>, **Ms Rachael Sabrinskas**<sup>2</sup>, Ms Caroline Borzdynski<sup>2</sup>, Mr Thomas Matthew<sup>2</sup>

<sup>1</sup>Deakin University, Burwood, Australia, <sup>2</sup>La Trobe University, Bundoora, Australia

### Introduction/Background

Recently, industry co-design in development of curricula, which refers to an approach that engages health practitioners in collaboratively designing education programs to improve and optimise the learner experience and outcomes, is gaining popularity (Brand et al., 2021). The principles of the co-design approach are that it is inclusive, respectful, participative, iterative and outcomes focussed (Brand et al., 2021).

### Aim

The aim of this presentation is to outline the benefits and challenges and summarise current evidence on effective approaches and strategies that engage and support health care professional engagement in the co-design of health professions entry-to-practice education curricula.

### Discussion

Content analysis of data identified categories addressing the benefits and challenges, current strategies and key factors for success when using an industry co-design approach. Sub themes within the benefits category included superior idea generation, shared ownership strengthening learning, authenticity in education content and delivery, credibility and relevance of the course, flexibility and agility in content and improved alignment with stakeholder needs. Subthemes within the challenges category included logistics and timing, educational design expertise, working environment demands and resourcing.

Current strategies used in co-design approaches range from informal information gathering approaches to formal active techniques generating themes, either face-to-face or online. Formal active techniques include organised meetings and workshops with activities such as brainstorming, buzz groups to generate mind-maps. Other informal approaches can include narratives, focus groups and interviews, personal consultation and follow up discussions.

Key factors for success in industry co-design include timing of engaging with industry, developing a positive working culture, detailed guidelines with clear roles and responsibilities.

### Summary

There are a wide number of co-design approaches being used to promote and support stakeholder engagement to design health professions education curricula. Importantly implementing industry co-design is not a linear process but requires reflection, flexibility, and adaptation (Brand et al., 2021).

### References

Brand, G, Sheers, C, Wise, S, et al. A research approach for co-designing education with healthcare consumers. *Med Educ.* 2021; 55: 574– 581. <https://doi-org.ezproxy-f.deakin.edu.au/10.1111/medu.14411>

## Contrasting learning modalities for preparing allied health students for placements

**Dr Belinda Judd<sup>1</sup>**, Dr Jennie Brentnall<sup>1</sup>, Ms Laura Rossiter<sup>2</sup>, Dr Ruth Turk<sup>2</sup>, Dr Chloe Grimmett<sup>2</sup>, Dr Emma Cowley<sup>2</sup>, Dr Keith McCormick<sup>2</sup>, Dr Deborah Thackray<sup>2</sup>

<sup>1</sup>University Of Sydney, , Australia, <sup>2</sup>University of Southampton, , United Kingdom

### Introduction

The current healthcare climate and increasing demand for allied health placements necessitate exploring creative ways to maximise student readiness for placements, enhance clinical experiences, and limit clinical educator burden. This study aimed to explore the experiences of domestic and international allied health students completing either an in-person simulation or online pre-clinical preparation program. The findings contribute to best practice evidence to design and deliver pre-clinical preparation programs.

### Methods

First-year students from physiotherapy, podiatry and occupational therapy self-selected to complete either the in-person simulation or online program prior to their first placement. An integrative mixed-methods approach explored qualitative findings from student focus groups, complemented by quantitative pre-post questionnaires.

### Results

Overall, 53 students participated in the study (n=29 simulation; n=24 online). International students disproportionately selected the simulation program, while older students preferred the online program. Students in the simulation program started with a lower baseline confidence and perceived greater benefit as compared to the online program, with this finding corroborated by both qualitative and quantitative findings. Specifically, the in-person simulation program supported students to apply their learning and practice professional communication, thereby increasing their confidence. By contrast, the online program was most effective at developing students' clinical reasoning and proficiency with documentation. Students noted minor negatives in relation to relevance and skill development for each program.

### Discussion

Both pre-clinical preparation programs were perceived to enhance readiness and foundational skills development for self-selecting novice allied health students. The practical nature of simulation generated more advantageous findings, with particularly marked increases in confidence among international students. This study provides useful information on the benefits and challenges of both types of programs, and their complementarity for pre-clinical preparation. Educators may design for students from diverse backgrounds, who may then be appropriately informed to select programs to meet their personal needs.

## Unfurling the sails and charting their own course – MD1 learners experiences of the flexible flagship MD curriculum

**Associate Professor Lisa Cheshire<sup>1</sup>, Professor Steve Trumble<sup>1</sup>**

<sup>1</sup>*The University Of Melbourne, Australia*

### Introduction/Background

In 2022, the University of Melbourne launched our redesigned flagship Doctor of Medicine Program. Our redesign shifts to a flexible, student-centred curriculum with blended delivery and modularisation of content supported by technology enhanced learning. We launched early clinical learning journeys with hospital and GP placement days from week 5. Innovations included removal of pre-requisite subjects, programmatic assessment including ungraded subjects and allowing students flexibility on meeting course outcomes via Discovery electives supported by our Course Advice program. These innovations enable learners to unfurl their sails and chart their own course towards becoming the doctor they want to be.

### Aim/Objectives

We report the evaluation data for the flexible curriculum MD1 student experience in 2022.

### Discussion

Student representatives attended five focus groups with academic staff at the end of semester 2 2022 and offered responses to a series of question prompts for these innovation domains.

Positive feedback included;

5. Overall: Intellectually stimulating and meaningful course.
  - Assessment: Ungraded MD1 benefits collaboration, support, inclusivity; wellbeing, motivation and work/life balance improved, supporting focusing on learning for enjoyment.
  - Discovery and Course Advice: Course Advice helpful in getting a fix on their position and navigating their MD1 Discovery choice; Endorsement of the concept of Discovery and charting their own course.
  - Hospital placement: High-quality, extended hospital placement which integrated well with the curriculum; Increased confidence in the clinical environment eases the transition to MD2.

Opportunities for growth included:

- Overall: Too much content with some content considered less helpful for learning.
- Assessment: Some limited understanding of standards of performance and insufficient communication about expected standards increased worry about not meeting them.
- Discovery and Course Advice: Variable Discovery experiences and requirements (quality, workload, assessment) and timetable challenges.
- Hospital placement: minor individual placement issues only.

### Questions for exploration

Our flexible innovations were regarded as engaging, building connections and navigating their course with useful areas for improvements identified.

Creating flexibility within curriculum for students to chart their own course requires substantial change management, resourcing and cultural shift for learners, faculty and staff.

## Being the first ones: Student perceptions of a new Regional Medical Pathway.

### **Dr Candice Pullen<sup>1</sup>**

<sup>1</sup>CQUniversity, Rockhampton, Australia, <sup>2</sup>University of Queensland, Rural Clinical School, Rockhampton, Australia, <sup>3</sup>Central Queensland Health and Hospital Service, Rockhampton, Australia

#### **Introduction/Background**

Australia is currently experiencing a shortage of medical practitioners in rural and regional areas (Duckett & Breadon, 2013). The Regional Medical Pathway (RMP) was established as a partnership between CQUniversity Australia, University of Queensland, Central Queensland Health and Hospital Service and Wide Bay Hospital and Health Service, with the main aim of enabling students to complete their medical training within Wide Bay and Central Queensland, creating 'home-grown' doctors. A new medical program can be particularly exciting for stakeholders and the local community, however, there is often uncertainty and apprehension from potential applicants.

#### **Aim/Objectives**

The aim of this study is to investigate the perceptions, experiences, and expectations of the first cohort of students in the RMP, including any attractors and barriers that they experienced. Data was collected through focus groups that were held with each region's cohort of year 1 pre-medicine students.

#### **Discussion**

Thematic analysis of data collected during focus group sessions held on the Rockhampton and Bundaberg campuses suggest that although some of the participants had to relocate to undertake their studies, for some, the ability to study close to home influenced their decision to select medicine. Students reported a strong sense of community and belonging between the cohort and the local medical community. Some of the challenges experienced by participants included a lack of established student accommodation (particularly in Bundaberg) and poor public transport. Some participants also reported that they struggled with the transition from high school to university.

Smaller cohort sizes were also seen as a major attractor as participants felt that they had greater access to teaching staff. These findings have implications for universities seeking to establish new medical pathways and partnerships to fill regional medical shortages. Cohort development and support for students relocating to the regions appears important, along with leveraging on links with established programs.

#### **References:**

Duckett, Stephen and Breadon, Peter, Access All Areas: New Solutions for GP Shortages in Rural Australia (September 29, 2013). Grattan Institute Report, September 2013, Available at SSRN: <https://ssrn.com/abstract=2334025>

## The Use of an Online Nominal Group Technique to Gather Opinion and Consensus on Research Training Curriculum in a Geographically Dispersed Rural Collaboration

**Dr Anthony Fallon<sup>1,2</sup>**, Ms Christine O'Connell<sup>1</sup>

<sup>1</sup>The University Of Queensland, Southern Queensland Rural Health, Toowoomba, Australia, <sup>2</sup>Centre for Health Research, University of Southern Queensland, Toowoomba, Australia

### Introduction

The nominal group technique (NGT) is a structured focus group shown to effectively gather opinion and successfully generate consensus from small groups on topics of interest. Traditional NGTs involve private generation of ideas, "round-robin" recording and discussion of ideas, voting on ideas, and discussion of voting to reach consensus<sup>1</sup>.

A previous study examining the NGT in curriculum development used a traditional face-to-face format<sup>2</sup>. This study aimed to determine the feasibility of using NGTs, modified to be delivered online, to gather data on topics for a research training program from health professionals working across geographically dispersed locations in regional, rural and remote southern Queensland.

### Methods

Fifteen clinical educators from a University Department of Rural Health (UDRH), dispersed across two UDRH sites (Toowoomba and Charleville) or working from home offices across the region, participated in one of two one-hour online NGTs. Two free online platforms (Zoom® for videoconferencing, Wooclap for voting and response collation) were used. Documents used during NGTs were controlled centrally by workshop facilitators.

### Results

Zoom® was an effective platform for presenting an online NGT, and sufficiently flexible to allow active contributions from participants with low internet connectivity. All participants contributed topic ideas during silent generation, and there was open discussion and clarification of ideas generated. Wooclap was effective in formulating and reviewing generated responses, response voting, and providing real-time feedback on voting outcomes. Outcomes were indicative of group consensus and useful in prioritizing research training topics.

### Discussion

The modified online NGT was an effective tool for gathering opinion and gaining consensus on a research training curriculum from a geographically dispersed health education workforce with varied levels of internet connectivity and experience with online platforms. It represents a cost- and time-effective alternative to face-to-face NGTs that is resilient to workforce disruptions.

### References

1. Van de Ven AH, Delbecq AL. The nominal group as a research instrument for exploratory health studies. *American Journal of Public Health* 1972; 62: 337-342.
2. Sauers-Ford HS, Hamline MY, Tzimenatos L, et al. You Don't Know What You Don't Know: Using Nominal Group Technique to Identify and Prioritize Education Topics for Regional Hospitals. *Hospital Pediatrics*. 2019;9(4):300-304.

### **Does patient and public involvement influence the development of competency frameworks for the health professions? A systematic review.**

**Ms Nicole Murray<sup>1</sup>**, Prof Claire Palermo<sup>1</sup>, Dr Alan Batt<sup>1,2</sup>, Dr Kristie Bell<sup>3</sup>

<sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>Fanshawe College, London, Canada, <sup>3</sup>Queensland Children's Hospital, Brisbane, Australia

Competency frameworks typically describe the perceived knowledge, skills, attitudes, and other characteristics required for a health professional to practice safely and effectively. Delivery of person-centred care is a defining feature of a competent health professional. Despite this, patient and public involvement in the development of competency frameworks is uncommon [1, 2]. This systematic review aimed to determine how patients and the public are involved in the development of competency frameworks for health professions, and whether their involvement influenced the outcome.

This review aligns with the PRISMA guidelines. All peer-reviewed papers that reported a competency framework for health professionals, the methodology used and included patients, caregivers or members of the public in the development were included. The GRIPP2 was used as the data extraction and quality assessment tool.

8222 citations were identified; 43 full-text articles were selected for inclusion. Overall, there was a lack of detail reported regarding the process and outcome of patient and public involvement. The most common recruitment sources were patients with the clinical condition of interest and established consumer representative groups. Patients and the public were predominately involved in the generation of competency statements or reviewing draft competency frameworks. Most studies took a consultative (rather than collaborative) approach. Validation of health professional- derived competency statements, descriptions of desirable behaviours and attitudes and generation of additional competency statements were the most common ways in which they contributed to the frameworks.

There is an opportunity to optimise approaches to patient and public involvement in competency framework development. To navigate how they can be meaningfully engaged in the process, we require guidance about who, how, when and for what purposes they are included. Consideration should be given to requirements for reporting to ensure their input is adequately captured and evaluated.

1. Batt, A.M., W. Tavares, and B. Williams, *The development of competency frameworks in healthcare professions: a scoping review*. *Advances in Health Sciences Education*, 2020. **25**(4): p. 913-987.
2. Lepre, B., et al., *Stakeholder Engagement in Competency Framework Development in Health Professions: A Systematic Review*. *Frontiers in Medicine*, 2021. **8**: p. 759848.

## **Clinical Blindness: Co-designing interprofessional simulation-based education with consumers and staff to uncover and address cognitive bias in healthcare.**

**Dr Samantha Sevenhuysen<sup>1,2</sup>, Associate Professor Gabrielle Brand<sup>1</sup>**, Professor Julia Mophet<sup>1</sup>, Samantha Dix<sup>1</sup>, Joy Davis<sup>2</sup>, Renee Molloy<sup>1</sup>, Sue Sinni<sup>1,2</sup>, Alison Watts<sup>2</sup>, Michelle Daniel<sup>2</sup>, Holly Challis<sup>2</sup>, James Bonnamy<sup>1,2</sup>, Pauline D'Astoli<sup>3</sup>  
<sup>1</sup>Monash University, Frankston, Australia, <sup>2</sup>Peninsula Health, Frankston, Australia, <sup>3</sup>Consumer advisor, Frankston, Australia

### **Introduction**

The presence and consequences of cognitive bias in healthcare contributes to health disparities, and targeted education strategies to increase awareness of bias can mitigate its influence on clinical care<sup>1</sup>. This four-part project aims to co-design, deliver and evaluate an interprofessional simulation-based education (SBE) experience to address cognitive bias in healthcare; and establish a framework for utilising incident data, along with consumer and health professional staff experiences to co-design education interventions. This presentation will present parts one and two of the project, which aimed to 1) explore staff and consumer experiences of cognitive bias in healthcare; and 2) co-design an interprofessional SBE experience.

### **Methods**

Data were collected from a) health service serious adverse patient safety event (SAPSE) reports involving cognitive bias and b) staff and consumer experiences of cognitive bias in healthcare. Content analysis was conducted on the report data and triangulated with thematic analysis of interview transcripts. A Participatory Action Research methodology was used to co-design an interprofessional SBE experience with a team of educators, simulation experts, health service staff and consumers, which focuses on the complex interplay between physical and mental health.

### **Results**

Data from nine SAPSE reports, three consumer and five staff interviews were analysed. Themes identified were integrated into an SBE experience, including de-identified encounters to ensure authenticity. In debrief, participants will be encouraged to reflect on the impact of cognitive bias on person-centred care and create strategies to recognise and respond to cognitive bias in their clinical practice.

### **Discussion**

To our knowledge, this is the first interprofessional, co-designed SBE designed specifically to address cognitive bias. The impact of the experience will be evaluated in future phases of the project. The framework for utilising incident data and participant experience to co-design education interventions with consumers may be applicable to a range of subject areas and contemporary health professional practice contexts.

Zestcott CA, Blair IV, Stone J. Examining the presence, consequences, and reduction of implicit bias in health care: a narrative review. *Group Processes & Intergroup Relations*. 2016 Jul; 19 (4): 528-42.



## Reshaping curriculum delivery to transition to a multiple campus MBBS program

**Dr Karen Carlisle<sup>1</sup>**, Associate Professor Peter Johnson<sup>1</sup>, Associate Professor Julie Mudd<sup>2</sup>, Associate Professor Nagaraja Haleagrahara<sup>1</sup>, Dr Nishila Moodley<sup>1</sup>  
*<sup>1</sup>College of Medicine and Dentistry, James Cook University, Townsville, Australia, <sup>2</sup>College of Medicine and Dentistry, James Cook University, Cairns, Australia*

### Introduction

The COVID pandemic forced medical schools to rapidly restructure curriculum delivery. James Cook University (JCU, Townsville QLD) implemented a model comprising pre-recorded online materials, live online sessions and small group in-person workshops for the MBBS program. As JCU is commencing its inaugural MBBS cohort in Cairns from 2023, this provided a unique opportunity to explore student experiences to inform how curricula could be delivered in a future distributed model.

### Methods

The descriptive quantitative study required MBBS Y1-3 students to complete an online survey which included ranking statements and open-ended questions on mode of delivery and Likert scale questions on experiences of online learning.

### Results

The response rate was 60% (342 surveys completed). Exploratory analysis suggests students preferred lectures and workshops to be delivered live in-person. However there were significant differences between cohorts with MBBS Year 1-2 students preferring online lectures and MBBS3 preferring regular orthodox lectures ( $p < .01$ ). Qualitatively, students preferred in-person lectures and workshops citing the importance of engagement, working collaboratively, interactions with the lecturers, peers and tutors and the social aspects of attending on campus. Flexibility of learning at their own pace and managing workload were key features for those preferring online content. Students also provided responses about ease of access to online materials, the importance of appropriate home study environment, challenges associated with the ability to keep pace with content, and engagement with other students and lecturers.

### Discussion

These findings critically assessed how students interact with learning materials (online and in-person). The delivery approaches adopted will be continually assessed as we progress with multi campus MBBS teaching in 2023.

## Social histories in rural contexts: evaluation of a multimodal teaching program

**Dr Heather Russell**<sup>1</sup>, Ms Lisa Hampshire<sup>1</sup>, Dr Alice Henschke<sup>1</sup>, Dr Jayne Crew<sup>1</sup>, Professor Catherine Hawke<sup>1</sup>, Professor Annette Burgess<sup>2</sup>

<sup>1</sup>School Of Rural Health, The University of Sydney, Orange, Australia, <sup>2</sup>Sydney Medical School, The University of Sydney, Sydney, Australia

### Introduction

The social history is a fundamental yet often overlooked aspect of a patient's medical history.<sup>1</sup> The social determinants of health significantly influence the health of populations and individuals, yet health professional students have few opportunities to refine their expertise in building social histories.<sup>2</sup> A multimodal teaching program developed at the School of Rural Health, The University of Sydney, aims to improve students' competence in building social histories, particularly in rural contexts.

### Methods

Between January and May 2022, the multimodal teaching program was evaluated with Year 3 and 4 medical students and volunteer patients involved in the program's delivery. A pre- and post-module questionnaire utilising a 7-point Likert scale assessed student respondents' understanding and confidence in building social histories. Students and volunteer patients were invited to participate in focus groups following the teaching program. An inductive thematic analysis was undertaken and emergent themes identified.

### Results

Ten students responded to both the pre- and post-module questionnaire (n=10/26; 38%) and eleven students and two patients participated in focus groups. Student respondents demonstrated improvement in their understanding and confidence in building social histories. There was also improvement in opportunities to practice social histories after undertaking the teaching program. Emergent themes from student focus groups highlighted a deeper understanding of the intersectionality of disadvantage and the role of the social history in individualising patient care. Both students and volunteer patients highlighted the importance of allowing the patient narrative to develop naturally, minimising interruptions.

### Discussion

Explicit teaching in social histories improved the understanding and confidence of medical students based at a rural clinical school. A change in approach to social histories and a deeper understanding of the role of the social history was demonstrated by students participating in the program. Future iterations of the program would be enriched by learning in an interprofessional context.

### References

<sup>1</sup>Srivastava R. (2011). Complicated Lives — Taking the Social History. *NEJM*, 365(7), 587–589. doi:10.1056/NEJMp1106985

<sup>2</sup>Behforouz HL, Drain PK, Rhatigan JJ. (2014). Rethinking the social history. *NEJM*, 371(14), 1277-1279. doi:10.1056/NEJMp1404846

## **Influence of a rural immersion on medical students' rural clinical school perceptions and preferences**

**Associate Professor Sue Garner**<sup>1</sup>, Ms Jessica Beattie, Associate Professor Lara Fuller, Dr Brendan Condon

<sup>1</sup>*Deakin University, Australia*

### **Introduction**

The final 2 years of Deakin University's Doctor of Medicine program is completed at one of 5 clinical schools: 2 metropolitan and 3 rural clinical schools (RCSs). The introduction of a dedicated Rural Training Stream (RTS) in 2022 prompted the introduction of a 3-day rural immersion prior to clinical school selection. All year 1 students who had entered the course through the Rural Training Stream and interested students from the General Entry stream attended the immersion. This study's aim was to gain an understanding of how participation in the rural immersion influenced students' perceptions of RCS training and clinical school preferences.

### **Methods**

Following the immersion, students were invited to complete an online survey regarding their perceptions and clinical school preferences pre and post the immersion.

### **Results**

65 of 88 students attending the immersion completed the survey (73.8%). Pre-immersion, 55% of students agreed they felt hesitant/unsure about the RCS environment, with only 43% agreeing that the RCS would be the best environment for them. Post-immersion, 85% of students felt confident about attending a RCS, with 89% stating it allowed them to make an informed decision about their clinical school preferences. Post-immersion, fewer students indicated they were unsure about their clinical school preferences (post 45% compared to 60% pre). Notably, one third of students who indicated they were not going to preference the RCS they attended first changed their mind following the immersion, preferring this RCS first.

### **Discussion**

This study highlights the uncertainty medical students may have regarding rural clinical school training and the positive impact that a short rural immersion can have in alleviating uncertainties and allowing students to make informed decisions about their clinical school preferences. These findings support early exposure to RCS environments prior to clinical school selection, to enhance student perceptions and uptake of rural training environments prior to clinical school selection, to enhance student perceptions and uptake of rural training.

## Collaborating with consumers and the community to embed rehabilitation, ageing and independent living experiences into health professions education

**Mr James Bonnamy**<sup>1</sup>, Associate Professor Libby Callaway<sup>2,3</sup>, Dr Natasha Brusco<sup>2</sup>, Professor Keith Hill<sup>2</sup>, Associate Professor Gabrielle Brand<sup>1</sup>

<sup>1</sup>*Nursing and Midwifery, Monash University, , Australia*, <sup>2</sup>*Rehabilitation, Ageing and Independent Living Research Centre, Monash University, , Australia*, <sup>3</sup>*Occupational Therapy Department, Monash University, , Australia*

### Introduction/Background

The dominant voice in health professions education is that of the educator. Their voice is privileged as the expert, and tells the clinical story of a person's experience of health and social care systems. The lens through which they tell the story has traditionally been impairment-focused, aligning with biomedical models of teaching (Brand & Dart, 2022). With a growing focus on person-centred care, coupled with increased life expectancy, chronic disease and disability (Australian Institute of Health and Welfare, 2022), health professionals are now encouraged to work in partnership with consumers and the community. Embedding consumer and community voices across health professions education (HPE) provides rich and authentic learning experiences that aligns with the actual needs and realities of consumers and their community.

### Aim/Objectives

Through a collaborative partnership with consumer and community stakeholders, we developed an education resource to embed their voices into HPE for rehabilitation, ageing and independent living curricula. The aim of this presentation is to demonstrate the design and development of this evidence-informed resource.

### Discussion

Drawing on the principles of co-design, we developed an education resource based on interviews conducted with stakeholders across rehabilitation, ageing and independent living services, where they shared artefacts that conceptually represented their reality and human experiences. These artefacts were combined with personal narratives and then infused into narrative portraits which were used with visual thinking strategies to create ambiguity and challenge learners to focus on the person rather than their diagnosis, disease, impairments or disability. Through facilitated reflection, health professional learners are guided to adapt their lens toward more strengths-based ways of seeing from the consumer and community perspective.

### Issues/Questions for exploration OR Ideas for further discussion

1) The traditional impairment-focus of HPE, 2) The changing landscape and expectations of HPE, and 3) Innovative ways of embedding the consumer and community voice into HPE.

### References

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## **“This is about everyone and anyone who has a stake in health professions curricula”: Using design thinking to co-design planetary health curricula**

**Dr Shane Pritchard**<sup>1</sup>, Jessica Abbonizio<sup>1</sup>, Michelle Lazarus<sup>1</sup>, Gabrielle Brand<sup>1</sup>, Gitanjali Bedi<sup>1</sup>, Fiona Kent<sup>1</sup>, Julia Choate<sup>1</sup>, Claire Palermo<sup>1</sup>

<sup>1</sup>Monash University,, Australia

### **Introduction**

Health professionals play a major role in addressing planetary health, yet educational approaches to equip the future workforce are poorly described<sup>1</sup>. Research has identified the importance of prioritising end users' voices in planetary health curriculum design. This study aimed to investigate design thinking methodology to co-design high quality planetary health education with health professionals and students, and to explore the possibilities of such curricula in partnership with end users.

### **Methods**

Students (n=14) and health professionals (n=8), across six professions (medicine, nursing, psychology, biomedicine, pharmacy and nutrition and dietetics) participated in four 90-minute design thinking workshops facilitated by the authors (faculty). Qualitative content analysis was performed on audio-recorded transcripts of the design thinking workshop discussions, facilitators' reflections of the process and student participants' reflections of the planetary health learning experience.

### **Results**

Over 150 ideas were generated through the design thinking process including formal and informal educational approaches, and strategies to incentivise the uptake of planetary health curriculum. A pilot solution that incorporated Indigenous knowledges and storytelling was implemented with 90 nutrition science students in 2022. Design thinking generated ideas that may not have been considered by faculty alone. While there were mixed perspectives amongst faculty and end-users about the usefulness of the proposed solutions, the design thinking process was regarded positively. Academic facilitators (faculty) experienced uncertainty throughout the design thinking process related to the diversity of perspectives, the complexity of the problem, and navigating the design thinking process itself.

### **Discussion**

Design thinking enabled an inclusive space for multiple perspectives to be heard and uncertainties to be attended to where faculty learn “with” participants to co-design curricula. Design thinking appears to be a feasible and useful strategy to address the complex health professions curriculum challenges of planetary health, where student and industry voices are crucial to curricula relevance and effectiveness.

### **References**

1. Brand G, Collins J, Bedi G, Bonnamy J, Barbour L, Ilangakoon C, et al. 'I teach it because it is the biggest threat to health': Integrating a planetary health perspective into health professions education. *Medical Teacher* 2021; **43(3)**: 325–333.

## Equipping the future dietetic workforce to take bold, urgent action on planetary health

**Dr Julia McCartan**<sup>1</sup>, Dr Liza Barbour<sup>1</sup>

<sup>1</sup>*Monash University, Notting Hill Australia*

### **Introduction/Background**

The World Health Organisation identified climate change as the biggest threat to 21st century global health. Health professionals play a vital role in climate change mitigation and adaptation. Food systems contribute to climate change, accounting for over a third of greenhouse gas emissions. Dietitians are well-positioned to address complex food system challenges however require evidence-based curriculum in this emerging area of health professional practice. An audit conducted in 2016 revealed four out of 19 (21%) of Australian accredited dietetics degrees included curricula that addressed food systems, environmental sustainability and/or climate change.

### **Aim**

We aim to examine (i) existing curriculum opportunities for dietetics students in Australia to learn about food systems, environmental sustainability and/or climate change, (ii) approaches used to assess these learning and teaching activities, and (iii) changes to the tertiary landscape from 2016 to 2023. Our currently in-progress research includes both a content analysis of Australian accredited dietetics degree websites, and an online survey for dietetics educators to describe their programs of assessment.

### **Discussion**

Each unit offered within dietetics degrees was screened for eligibility using standardised search terms. Preliminary results, where 531 units from 19 eligible dietetic degrees were screened, identified 39 eligible units represented across all degrees (100%). Bloom's taxonomy and Miller's Pyramid educational theories will be used to analyse learning outcome and assessment task descriptions.

### **Ideas for further discussion**

Since 2016, tertiary offerings for dietetic students in Australia have evolved to consider contemporary challenges related to climate change. This coincides with an evolution in the National Competency Standards for Dietitians which now include more performance criteria regarding environmental sustainability. However, dietetic (and all health professions) educators must be supported to prioritise high quality, fit-for-purpose planetary health education to equip the future workforce to address this major threat to global health.

### Plain sailing or making waves? Charting the role and purpose of health advocacy within health curricula

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#### **Introduction/Background**

Health advocacy is considered an essential graduate outcome criterion by multiple health professional accreditation bodies, including the Australian Medical Council. However, there is evidence suggesting that Australian health professional graduates lack competency as health advocates.<sup>1</sup> Preliminary research suggests a challenge in health advocacy education includes lack of consensus on both the definition and scope of the concept itself. Leading a discussion that draws upon the experience of those who are already sailing the waters of health advocacy, along with those who want to get on board, may assist with building a discourse around this key curricular topic.

#### **Purpose/Objectives**

The objective of this PeArLS is to explore the concept of health advocacy with the group. We shall discover whether defining health advocacy is plain sailing or requires navigation of rough seas to reach a consensus in the group. We then sail on to discuss which elements of health advocacy are to be covered in health professional curricula. We shall draw upon the group expertise to help chart a course towards developing a curriculum framework for health advocacy education and facilitate group discussion about opportunities for building this capability in university graduates.

#### **Issues/Questions for exploration OR Ideas for discussion**

We shall employ the SEEN framework<sup>2</sup> to identify and develop the graduate attribute of health advocacy through small and large group discussions using the following prompts;

1. Specify - What is health advocacy – moving towards an agreed definition by consensus of attendees.
2. Explain - What are the key elements of health advocacy that need to be addressed?
4. Embed - What are the in-class opportunities for building student capability as health advocates?
3. Nudge – How might students demonstrate health advocacy behaviour beyond the classroom?

#### **References**

1. Maloney DP, Moodie R, Daube M, Wilson AN. Are Australian junior doctors failing to act as health advocates? A qualitative analysis. *Australian and New Zealand Journal of Public Health*. 2022 Aug;46(4):527-32.
2. Kensington-Miller B, Knewstubb B, Longley A, Gilbert A. From invisible to SEEN: A conceptual framework for identifying, developing and evidencing unassessed graduate attributes. *Higher Education Research & Development*. 2018 Nov 10;37(7):1439-53.

## Further questions related to accommodations for medical students' long-term conditions in assessments

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### **Introduction/Background**

Previously, in a PeArLS session, medical course staff discussed their experiences of accommodations requested and provided to support students with long term conditions undergoing academic assessment [1]. This highlighted variation and led to a proposed model to reduce such variation. The model is based on authenticity (accommodations would be acceptable to an employer within a workplace and acceptable to a regulatory body), and feasibility to education institutions [2]. This approach is part of a journey to improve policy and practice to promote equivalence across institutions, to support those in need of accommodations.

### **Purpose/Objectives**

The purpose of this session, will be to discuss participants' experience of accommodations requested and to discuss the practical implications of the proposed model.

### **Issues/Questions for exploration OR Ideas for discussion**

Could an approach primarily based on authenticity, and then feasibility be used to inform policy and practice within participants' current institutions?

The discussions can include, but not be limited to, some practical implications that need to be addressed or considered [2]:

How might any disagreement in acceptability between the regulator and employer be resolved?

How can we ensure that the decision on accommodations allowed, or not, is based on current authenticity to practice, or authenticity when the student potentially enters practice?

How might the flexibility of regulators granting practicing certificates with defined scopes be reflected with flexibility in assessment during education and training?

### **References**

1. M Tweed & T Wilkinson. Medical students requesting alternative arrangements and/or special considerations for assessments. ANZAHPE Conference; Adelaide. 2017.
1. M Tweed & T Wilkinson. Making accommodations for medical students' long-term conditions in assessments: An action research guided approach. *Medical Teacher* 2022;44(5):519-526.



# Creating psychological safety and multidisciplinary team engagement for patient safety: a leadership challenge for health professionals

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Speaking up is a necessity for patient safety but remains a dilemma for multidisciplinary healthcare teams. We continue to hear of tragic outcomes that could be avoided if only someone in the team had spoken up, or listened.

The considerable literature on speaking up favours interventions such as graded assertiveness to assist staff to raise their concerns. While these may help, assertiveness training doesn't seem to have solved the problem. We consider the responsibility lies with senior staff to create a psychologically safe environment<sup>1</sup> where team members don't hesitate to raise their concerns, knowing their contributions are valued, and vital for patient safety.

In a previous study<sup>2</sup> we explored perspectives of senior operating theatre health professionals on 'being spoken up to' i.e. their reactions when another staff member voiced concerns about their decision or actions. We identified key factors influencing this response including current emotional state, existing relationships with the speaker, culture and past experiences of fallibility. The resulting model of the 'speaking up interaction' from the senior leader's perspective, formed the basis of a reflective survey which we have pilot tested with a wider audience of health professionals.

In this presentation we will describe our story so far, and present our plan to explore potential drivers for change in the culture of healthcare. Our ultimate aim is to ensure all voices are willing and able to contribute to best outcomes for patients.

## References

<sup>1</sup>Edmondson AC, Roloff KS. Overcoming barriers to collaboration: Psychological safety and learning in diverse teams. In Team effectiveness in complex organizations 2008 Nov 20 (pp. 217-242). Routledge.

<sup>2</sup>Long J, Jowsey T, Garden A, Henderson K, Weller J. The flip side of speaking up: a new model to facilitate positive responses to speaking up in the operating theatre. British Journal of Anaesthesia. 2020 Dec 1;125(6):1099-106.

## Student perspectives on the facilitators and inhibitors of learning autonomy supportive teaching practices

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### Introduction

Academic motivation, the willingness to engage and persist with learning, is strongly related to a student's intrinsic motivation, which, according to self-determination theory, can be influenced by perceived autonomy (i.e., choices and control) during learning.<sup>1</sup> Since intrinsically motivated students tend to achieve improved learning outcomes, research needs to move beyond a focus on theoretical structures underpinning autonomy to the identification of teaching practices that support student autonomy.

Research Question: What teacher practices facilitate and inhibit students' perception of autonomy?

### Methods

To identify teaching practices that do or do not enhance student autonomy, we used a general inductive qualitative approach to analyse 16 semi-structured interviews of 4<sup>th</sup> and 5<sup>th</sup> year students taking Pathology in our MB ChB programme. Students with varying levels of perceived autonomy support were recruited using the MUSIC Inventory's Empowerment Scale.<sup>2</sup>

### Results

Initial analysis identified three major areas of teacher practices that supported student autonomy: (1) clarity of purpose, which focuses on the relationship between the goals of the autonomy supportive behaviour and learners' understanding of those goals; (2) method and motivation, which takes into account the relationship between the learner and the type and quantity of choice that is made available to support learning; and (3) structure and feedback, which considers the relationship between the type and quantity of choice available and the goals of the choices offered.

### Discussion

While students recognised that choice was useful and enabled self-directed learning, they became easily confused if there wasn't a clear sense of the structure and goals of the choices offered. Students also described the importance of teachers addressing student feedback through more clearly structuring the autonomy-supportive opportunities offered. Recommendations about how teachers can be more autonomy-supportive while ensuring students do not get lost in a sea of choice are considered.

### References

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## I'm not "fake rural": Rural student negotiation of identity and place in medical school

**Dr Nicole Shepherd<sup>1</sup>**, Ms Romy Wilson Gray<sup>1</sup>, Professor Wendy Hu<sup>2</sup>, Dr Sarah Hyde<sup>3</sup>, Associate Professor Riitta Partanen<sup>1</sup>, Associate Professor Alexia Pena Vargas<sup>4</sup>, Professor Lucie Walters<sup>4</sup>, Associate Professor Rebecca Olson<sup>1</sup>

<sup>1</sup>University of Queensland, Herston, Australia, <sup>2</sup>Western Sydney University, Penrith, Australia, <sup>3</sup>Charles Sturt University, Orange, Australia, <sup>4</sup>University of Adelaide, Adelaide, Australia

### Introduction

Medical schools aim to recruit rural students into their programs to address chronic shortages in the rural healthcare workforce. This paper reports on rural medical students negotiation of identity and place in the early years of medical training.

### Methods

We interviewed 22 students to explore their experiences of admissions processes and participating in medical programs. Students were recruited from four medical schools in Australia - University of Queensland, Western Sydney University, Charles Sturt University and University of Adelaide. The concept of intersectionality was used as a sensitising concept to analyse the transcripts.

### Results

Participants characterised admissions pathways as complex, requiring social capital to navigate. Though most participants expressed pride in their rural identity and spoke favourably of rural lifestyles, they readily shared their frustrations and sense of missing out on the opportunities available to urban students. Analysing their accounts through an intersectional lens illustrates that stigma and disadvantage of a rural geographic background are exacerbated by the overlap of socioeconomic disadvantage and rurality, but can be mitigated by material wealth. For some students, an authentic rural identity arose from intersections of social class and locality; students who were perceived to have come from a more privileged background yet used a rural entry pathway were referred to as "fake rural".

### Discussion

These findings offer valuable insights on the effectiveness of widening participation measures in student selection. Using an intersectionality lens highlighted the immense difficulty of navigating selection for students from both rural and socioeconomically disadvantaged backgrounds. To increase the participation of rural students requires the replication of the social supports enjoyed by many urban students, such as access to medical school information sessions, access to networking and mentoring from peers and near peers and tutoring to prepare for the admissions test and interviews.

## Tertiary Health Science Student Willingness or Resistance to Cultural Competency and Safety Pedagogy

**Dr Sowbhagya Micheal<sup>1,3</sup>**, Dr David Lim<sup>2,3</sup>, Miss Anita Ogbeide<sup>2</sup>, Associate Professor Amit Arora<sup>2,3</sup>, Dr Stewart Alford<sup>2</sup>, Mrs Rubab Firdaus<sup>2</sup>, Associate Professor Tinashe Dune<sup>3</sup>  
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### Introduction

Population diversity creates opportunities and challenges for health professionals to care for diverse patients. Patient outcomes can be negatively impacted if sociocultural differences between patients and health professionals are not reconciled. Acknowledging this, many universities emphasise cultural competency and safety training in health professional courses. The Culture Diversity and Health (CDH) unit encourages allied health professional students to explore issues within their own identifiable cultural contexts and promotes active citizenship amongst students. The study explored students' willingness and resistance to cultural competency training through students' feedback to teaching in the unit and tutor focus groups.

### Methods

1529 students enrolled in the course between 2013 and 2020 provided Student Feedback on the Unit. Ten tutors who taught CDH during the same period provided their Student Feedback on Teaching (containing feedback from 1342 students) for textual analysis, and eight tutors participated in focus groups.

### Results

Sub-themes for willingness included students' perceptions of tutors, applicability of course content and students' own lived experiences. Sub-themes for resistance included "attacking" dominant cultures, students feeling personally attacked and questioning the relevance of cultural competency and safety training.

### Discussion

Willingness to engage with the unit was largely dependent on students' interest in the content, a safe teaching environment and how much they value cultural competency training as relevant to their future practice. Students who felt culturally confronted illustrated the most resistance to CDH content, with tutors noting the topics around sexuality and white privilege being more resisted. Building trust between students and tutors and creating a spiral curriculum where students revisit diversity topics in later years of training are imperative. Acknowledging reasons for student resistance and developing strategies to reduce resistance, such as immersive learning experiences, can facilitate better student engagement with cultural competency, ultimately leading to the future provision of culturally competent healthcare.

## Lived experience of being interprofessional: co-creation of a framework for interprofessional identity

**Ms Angela Wood**<sup>1,2</sup>, A/Prof Jodie Copley<sup>1</sup>, A/Prof Anne Hill<sup>1</sup>, A/Prof Neil Cottrell<sup>3</sup>

<sup>1</sup>*School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Australia*, <sup>2</sup>*Metro South Hospital and Health Services, Brisbane, Australia*, <sup>3</sup>*Faculty of Health and Behavioural Sciences, The University of Queensland, Brisbane, Australia*

### Introduction

Interprofessional collaboration (IPC) has been recognised as invaluable in our complex and demanding healthcare environment. Significant and credible research has advanced interprofessional education (IPE) and interprofessional (IP) competency frameworks, and yet a shift from professional silos to a culture of collaboration can still be elusive and challenging in practice. Additional to invaluable IP skills and knowledge, understanding what it means to *be* interprofessional, including the values, attitudes and other factors that lead to IP behaviours is also key to successful IPC.

The aim of this study was to explore the lived experience of clinicians who are interprofessional, specifically the values, behaviours, experiences and other factors that contribute to IP identity. The research question was *How do clinicians experience being interprofessional?*

### Methods

The research design for this qualitative study was interpretive phenomenological analysis (IPA). Fifteen participants with lived experience of being interprofessional were recruited across seven sites via purposive sampling. The primary data collection method was semi-structured interviews, with supplementary observations and document review. Modified member checking through an interpretive lens was conducted post-analysis (Doyle, 2007).

### Results

Analysis followed the principles of IPA proposed by Smith et al., (2022). In line with the idiographic nature of IPA, individual lived experience of IP identity is presented as Personal Experiential Themes (PETs) for each clinician, followed by cross case analysis which yielded 33 Group Experiential Themes (GETs). These were grouped as (i) personal factors, (ii) relational or team factors, and (iii) extrinsic factors that contributed to interprofessional identity. The GETs will be outlined in this presentation.

### Discussion

A further study will streamline, synthesise, map and connect the GETs, to co-create a model or framework for interprofessional identity which is readily translatable into practice. The model will be trialled by clinicians, healthcare organisations and policy makers as an integral part of interprofessional education and development programs.

### References

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Smith, J.A., Flowers, P. & Larkin, M. (2022). *Interpretive Phenomenological Analysis: Theory, Method and Research*. London: Sage.

## **"You can't use an old map to explore a new world" Navigating a new bicultural and bilingual roadmap for Professionalism in health professional education**

**Vicki Jones<sup>1</sup>, Sharmyn Turner<sup>1</sup>, Te Aro Moxon<sup>1,2</sup>, Jade Tamatea<sup>1,2</sup>, Andy Wearn<sup>1</sup>**

<sup>1</sup>University of Auckland, Auckland, New Zealand, <sup>2</sup>Te Whatu Ora - Health New Zealand, , New Zealand

### **Introduction/ Background**

The Personal and Professional Skills (PPS) domain is integrated throughout the University of Auckland's Medical Programme. In 2022, an approved request for a PPS assessment to be submitted in te reo Māori highlighted the current limitations of PPS curriculum components in supporting students who are bilingual in te reo Māori and English, both official languages of Aotearoa New Zealand. This request spurred change, providing a mandate to reorganise and enhance the domain's approach to biculturality and to more fully integrate *te ao Māori* perspectives of professionalism.

Alongside the evolution of the PPS domain, new draft Australian Medical Council accreditation standards for primary medical programs in Australasia have increased focus on cultural safety and the rightful development of outcomes led by First Nation peoples. The expectation of regulators is that the principles and responsibilities of a bicultural approach to 'professionalism' are not simply 'addressed' but meaningfully woven throughout the fabric of health professional education programmes.

### **Aims/ Objectives**

Share in our journey as educators learning to navigate new challenges and opportunities in an evolving landscape of 'professionalism' in an undergraduate medical curriculum within our bicultural and bilingual context.

### **Discussion**

Contemporary definitions of 'professionalism' and accepted norms within medical education remain predominantly Western-centric and may not be applicable to a 21st century healthcare workforce. How therefore should 'professionalism' teaching and learning encompass bilingualism and biculturalism and evolve to best serve our student cohorts and changing societies?

### **Issues/Questions for exploration OR Ideas for further discussion**

How do educators honour biculturalism and incorporate bilingualism in the teaching & learning components of 'professionalism' modules/s?

How do we avoid tokenism and tailor nuances to local contexts?

## Infection prevention and control in medical imaging: what are the current knowledge sources used by staff?

**Dr Yobelli Jimenez<sup>1</sup>**, Mrs Suzanne Hill<sup>1</sup>, Dr Dania Abu Awwad<sup>1</sup>, Professor Sarah Lewis<sup>1</sup>  
<sup>1</sup>*Discipline of Medical Imaging Science, The University Of Sydney, , Australia*

### Introduction

High numbers of intravenous contrast examinations are performed in the computed tomography (CT) suite. Infection Prevention and Control (IPC) is a key component for safety and quality of intravenous contrast-enhanced CT examinations; hence, staff need to be appropriately trained in IPC practice. In Australia, national standardised IPC training does not exist for the CT environment. The aim of this study was to benchmark the current IPC knowledge sources used by CT staff.

### Methods

An online survey was distributed to radiographers and radiology nurses. Participants were asked to indicate whether their workplace had an IPC team and intravenous contrast infection control policies and guidelines ('yes', 'no', 'unsure'), and the timeframe of their last IPC training. Further, participants could choose the source of knowledge used in four specific areas of clinical practice.

### Results

Radiographers (n=138) and nurses (n= 22) were included in the study. A majority of participants agreed that they had an IPC team and intravenous contrast IPC policies and guidelines in their workplace (60% and 78% respectively), with smaller numbers indicated 'no' (31% and 10% respectively) or 'unsure' (9% and 12% respectively). Just over half of participants had undertaken IPC training within the past 12 months (52%), and 26% in the last 1-3 years. Participants selected 'policies and guidelines' as the main knowledge source relating to 'infection control resources' (90.1%) and 'CT contrast administration'(90.1%). 'Colleagues' were the main knowledge source for 'Intravenous power injector information' (87%) and 'CT contrast administration problem information' (80.1%).

### Discussion

Knowledge transfer related to IPC and contrast-enhanced CT occurs via informal and formal pathways, but overall IPC awareness is less than 80%. The absence of national standardised education regarding IPC presents opportunities for radiographers and radiology nurses to develop leadership and expertise in this area. Strengthening IPC education in universities and CT departments supports a national approach to regulation of IPC knowledge and training.

### **Interprofessional education using immersive mixed reality technology to improve the management of the deteriorating patient.**

**Deb Newman**<sup>1</sup>, Doctor Fiona Naumann<sup>2</sup>, Doctor Andrew Woods<sup>2</sup>, Doctor Christina Aggar<sup>1,2</sup>, Doctor Golam Sorwar<sup>3</sup>, Mr David Clark<sup>3</sup>, Karen Bowen<sup>1</sup>

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#### **Introduction**

Interprofessional education (IPE) underpins and facilitates interprofessional practice (IPP), an essential ingredient for the provision of safe, high-quality patient care (Reeves et al., 2013). The aim of this study was to evaluate the effectiveness of IPE using immersive mixed reality (MR) technology to improve clinicians' IPP to manage the deteriorating patient.

#### **Methods**

A pre-post and follow up test was used to evaluate the impact of a four-module IPE program using immersive MR (HoloPatient© software via Microsoft HoloLens2© devices). Health care professionals formed interprofessional ward-based groups to participate in the program. Psychometrically tested tools were used to measure health care professionals' perceptions of IPE, non-technical skills during clinical emergencies, and observations of teamwork.

#### **Results**

A total of 136 participants enrolled in the program. Participants' perceptions of IPE improved significantly at post-intervention, likewise their ability to perform non-technical skills during clinical emergencies, and their ability to work in an interprofessional team. Participants' enhanced perceptions of IPE and collaborative practice and non-technical skills during clinical emergencies were sustained at six to eight weeks post-intervention. Participants reported that IPE strengthened interprofessional relationships by improving their teamwork and communication skills. Interprofessional collaboration between team members was observed to have a positive effect on participants who work together.

#### **Discussion**

This study provided a new opportunity for healthcare professionals to learn together in a supportive safe environment. The value of IPE using MR technology was demonstrated by participant perceptions of enhanced IPP, teamwork and communication. These findings are important because the collaborative dynamics of an interprofessional team contribute to the successful management of the deteriorating patient. A longitudinal analysis of deteriorating patient outcomes whose management was provided by the interprofessional team should be explored. Further research is also required to explore methods of sustaining health care professionals' improved IPP skills within ward based teams.

#### **References**

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## Allied health student engagement in interprofessional education and collaborative practice during clinical placements

**Dr Susan Stoikov<sup>1</sup>**, Ms Cate Fitzgerald, Dr Susan Waller, Ms Kassie Shardlow

<sup>1</sup>*Metro South Health, Woolloongabba, Australia*

### Introduction

Health professional student engagement in interprofessional learning activities whilst on profession-specific clinical placements is reported to enhance the readiness of students to meet the health care needs of consumers. There is currently limited understanding of how frequently students participate in interprofessional learning within health care settings. This study aimed to explore the frequency of student participation in interprofessional collaborative practice (IPCP) and interprofessional education (IPE) during profession-specific clinical placements across metropolitan and non-metropolitan health services and clinical practice areas.

### Methods

A retrospective survey was undertaken of allied health (AH) students across two health services (metropolitan and regional/rural). Participants were asked to report participation frequency in eight common IPCP activities and five common IPE activities. Non-parametric testing was conducted to determine if participant groups differed in the frequency of IPCP and IPE activities based on geographical location and clinical practice area.

### Results

Survey responses were received from 223 participants across ten allied health disciplines. Results indicate that allied health students participated in a variety of IPCP and IPE activities during clinical placements, with binary analysis revealing the majority of students participated in IPCP (96.9%) and IPE (93.7%) activities at least once per placement. However, the frequency of their participation in IPCP and IPE activities was low and also variable across geographical locations ( $p < 0.001$ ) and clinical practice areas ( $p < 0.001$ ).

### Discussion

While allied health students participate in IPCP and IPE activities during clinical placements the frequency of participation is low and opportunities exist for change. Collaboration between universities, students, placement supervisors, and health services is necessary to support student learning from IPCP and IPE activities. This collaboration will support their transition from student to a health care professional enabled to engage more readily in IPCP.

## Is it time for an Interprofessional research methodology?

**Ms Tika Ormond<sup>1</sup>, Dr Dale Sheehan<sup>2</sup>, Maggie Meeks<sup>3</sup>, John Dean<sup>2</sup>, Dr Laura Joyce<sup>2</sup>**  
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### Introduction

This presentation will share a qualitative interprofessional research methodology that we trialled while investigating Telemedicine from an interprofessional perspective.

### Aims/Objectives

1. Review a developing qualitative interprofessional methodology as a 6th category to add to Creswell's 5 methods of qualitative research.
2. Explore the concept of interlocking as a distinctive element in interprofessional research and practice.

### Discussion

The method we developed sought to build on the foundation of qualitative research, but to focus our methods and data analysis techniques on a range of professions and contexts, and to use the power of the group's diverse professional perspectives to inform the development of both themes and research outcomes. We went beyond having a multi-professional research team, to developing a research team that continually developed their interprofessionality as practitioners and researchers.

Our protocol directed us to constantly question our understanding of the values behind each profession's approach to telemedicine and the way they work with their clients. We always recognised the need to challenge interpretations and what people saw in the data during analysis. We discovered that our divergent cognitive resources contributed by each profession needed to interlock, not just be contributed. The concept comes from the natural sciences and requires that researchers have some additional skills beyond their contributory expertise; skills that enable them to recognize enough of the key elements from another profession to participate in the interlocking process.

### Questions for exploration

1. Is Interprofessional research ontologically rich enough to justify a IP research methodology and protocol?
2. Does the concept of "interlocking" have face validity and is it likely to be a key part of any emerging protocol?

## Designing a wholly online, multidisciplinary Master of Cancer Sciences degree

Dr Julia Lai-Kwon<sup>1,2,3</sup>, Dr Sathana Dushyanthen<sup>4</sup>, **Mr David Seignior<sup>5</sup>**, Ms Michelle Barrett<sup>1</sup>, A/Prof Femke Buisman-Pijlman<sup>5</sup>, Mr Andrew Buntine<sup>5</sup>, A/Prof Robyn Woodward-Kron<sup>2</sup>, Prof Grant McArthur<sup>1,3,6</sup>, **A/Prof David Kok<sup>1,3</sup>**

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**Introduction:** Improving oncology-specific knowledge and skills of healthcare professionals is critical for improving the outcomes of people with cancer. Current postgraduate education offerings may be inaccessible to busy professionals, contain minimal consumer input or do not focus on the multidisciplinary nature of cancer care. In response to these needs, a fully online Master of Cancer Sciences degree was developed.

**Aims/ Objectives:** To describe the development and implementation of the Master of Cancer Sciences.

**Discussion:** We describe the theoretical and pedagogical underpinnings of the Master of Cancer Sciences. Our approach to curriculum design was guided by Kern et al's Six-Step Approach to Medical Curriculum and guided by principles of online learning. These approaches were underpinned by learning theories addressing interprofessionalism and interprofessional education, cognitive load, and visual information design. The pedagogy builds on interactive, experiential, interprofessional approaches and importantly, includes healthcare professionals, researchers, and consumers as educators. In practice, learning activities include online modules peer feedback, multidisciplinary team meeting simulations, patient and multidisciplinary-focused case studies, group work and clinical role plays. The online environment was visually shaped through infographics, high-quality educational videos, gamification elements, animation, and augmented/visual reality.

**Questions for further exploration:** A preliminary evaluation framework has been established including student experience surveys during course participation and a customised survey conducted one year after graduation to assess course satisfaction and self-perception of competence. Qualitative evaluation of the impact of the Masters on graduate career trajectory and professional practice is ongoing. Repurposing of course content for other educational programs have also been implemented, including micro-certificates for continuous professional development in cancer sciences.

## Assessing the impact of the Master of Cancer Sciences on graduate career trajectory and professional practice- a qualitative study

Dr Julia Lai-Kwon<sup>1,2,3</sup>, Dr Sathana Dushyanthen<sup>4</sup>, **Mr David Seignior**<sup>5</sup>, Ms Michelle Barrett<sup>1</sup>, A/Prof Femke Buisman-Pijlman<sup>5</sup>, Mr Andrew Buntine<sup>5</sup>, A/Prof Robyn Woodward-Kron<sup>2</sup>, Prof Grant McArthur<sup>1,3,6</sup>, **A/Prof David Kok**<sup>1,3</sup>

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**Introduction:** The Master of Cancer Sciences is the first cancer-specific, multidisciplinary, wholly online Masters program in Australia. We aimed to assess the impact of the Masters on graduate career trajectory and professional practice.

**Methods:** We performed a qualitative study. Eligible participants were graduates of the Masters able to participate in an online interview. Purposive sampling was used to ensure a range of ages, genders and occupations were represented. One-hour individual qualitative interviews were conducted using a semi-structured approach. The interview explored participant occupations prior to enrolment in the Masters, occupations following graduation and how the Masters influenced their career decisions. Questions also explored how the Masters has developed or changed aspects of their professional practice. A mixed inductive/ deductive thematic approach was used to analyse responses.

**Results:** 15 participants were interviewed: 12 (80%) females, 5 (33%) were 31-40 years old and 5 (33%) were 40-51 years old. An interdisciplinary cohort was interviewed including doctors (3, 20%) and pharmacists (3, 20%).

Themes for impact on career trajectory were how the degree inspired further postgraduate study, increased competitiveness for roles, created research opportunities and promoted oncology subspecialisation. This occurred via mentorship, networking opportunities and inspiring a sense of professional identity.

Themes for impact on professional practice were acquisition of new skills and knowledge. This led to changes in patient care, including increased multidisciplinary involvement and improved confidence in delivering patient education; changes in work behaviours including increased patient-centredness; and organisational changes including promotion of postgraduate education among colleagues and increased consumer engagement.

**Discussion:** The Masters had a significant impact on participants' career trajectory including encouraging further study, increasing engagement in research and specialisation in oncology. The Masters also influenced participant's day-to-day practice, with some evidence of dissemination of learnings to colleagues and changes in organisational behaviours and processes.

## Communication in interprofessional team meetings: Learning on the job

**Mrs Julia Paxino<sup>1</sup>**

<sup>1</sup>*The University Of Melbourne, Melbourne, Australia*

### **Introduction**

Interprofessional teamwork, central to patient care in many healthcare settings, is dependent on communication between health professionals. Interprofessional meetings are a common forum for patient care discussions. Little is known about communication in interprofessional meetings and how clinicians with different levels of expertise interact while coordinating patient care. This study examines patterns of communication interactions between health professionals occurring during interprofessional meetings.

### **Methods**

An interprofessional rehabilitation team participated in this qualitative exploratory study. Interprofessional meetings were observed and recorded over four consecutive weeks. Meetings involved 21 participants, including medical (n=5), nursing (n=1), and allied health (n=10) clinicians and health professional students (n=5). Clinicians ranged from novice (n=9) to experienced clinicians (n=6). Stimulated-recall interviews were also conducted with five participants. Video data, field notes and transcripts of meetings and interviews were analysed using discourse analysis and activity systems analysis.

### **Results**

Meeting processes were coordinated by senior medical clinicians and were well established. Expertise influenced participant interactions; more experienced clinicians initiated holistic patient discussions and demonstrated confidence to clarify, elaborate on or challenge others' opinions. Whereas, novices often deferred to others and participated to respond to direct questions, usually providing discipline specific information.

Communication in meetings shifted frequently between highly structured discussion focused on overarching patient care to unstructured conversations which contributed more detailed information about individual patients. This made meetings communicatively complex. Novices sought advice from experienced clinicians and ad hoc support was observed; however, learning on the job was reported to be difficult, especially when "professional communication skills are still developing".

### **Discussion:**

This study has shown that although interprofessional team meetings are common, they may be a challenging environment for novice clinicians. It has shed light on how clinicians interact and learn as part of everyday practice. Further examination is needed to explore the learning opportunities within interprofessional meetings.

## Patient perceptions concerning student interprofessional clinical collaboration in an Australian dental school

**Dr Mark Storrs**<sup>1</sup>, Professor Amanda Henderson<sup>2</sup>, Professor Jeroen Kroon<sup>1</sup>, Professor Jane Evans<sup>1</sup>, Professor Robert Love<sup>1</sup>

<sup>1</sup>Griffith University, Gold Coast, Australia, <sup>2</sup>Queensland Health, Princess Alexandra Hospital, Brisbane, Australia

### Introduction

The Griffith University School of Medicine and Dentistry (SoMAD) facilitates an interprofessional (IP) clinical teams-based treatment planning (TBTP) process in dental education. This focusses on peer teaching where student teams comprising four separate oral health programs collaboratively plan and deliver safe, effective patient-centred oral health care. An evaluation of the IP process primarily focussed on its impact on student learning. In conjunction, this study aimed to ascertain patients' perceived satisfaction and experiences through receiving care via TBTP.

### Methods

A piloted paper-based survey collected quantitative and qualitative data prospectively in October 2013 and 2014 from eligible dental patients waiting to see students at the SOMAD dental clinic. Purposive sampling through a screening process determined eligibility which identified 910 (2013) and 964 (2014) suitable patients. Fifteen Likert scale items measured the constructs: perceived satisfaction with quality of treatment received, communication, availability, and student appearance. Open-ended questions determined patient likes and perceived improvements in relation to receiving collaborative care.

### Results

Favourable perceptions from 124 participants (14%) in 2013 and 144 (15%) in 2014 for all four constructs were received from over 80% of participants. Student teams exhibiting IP professionalism, competence, and providing clear, respectful communication were perceived as positive collaborative care qualities. Several experiences led to a statistically significant increase in patients being satisfied with care received from student teams in 2014 (mean rank=142.56) compared to 2013 (mean rank=125.14),  $U=7767.5$ ,  $z=-2.213$ ,  $p=0.027$ .

### Discussion

Our findings are supported in the literature. Patient satisfaction was reflective of teams treating patients with respect, involving patients in discussing treatment options, explaining sequential IP care delivery, organising IP referrals, and confidently executing care. Identified study biases addressed through more rigorous research will better understand the collaborative treatment needs of patients. However, patient findings from this study complement parallel student findings to augment IP clinical learning at SoMAD.

## 4G – Curriculum Frontiers

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### Charting the Development of Self-Regulated Learning in Year 4 Medical Students

**A/prof Anna Vnuk**<sup>1</sup>, Dr Aileen Traves<sup>1</sup>, Dr Lauren Finlay<sup>1</sup>, Dr Lachlan Mc Intosh<sup>1</sup>, Prof Ian Wright<sup>1</sup>

<sup>1</sup>*James Cook University, Cairns, Australia*

#### **Introduction/Background**

In order to work safely and successfully as practitioners, medical graduates need to develop self-regulated learning (SRL) skills. SRL is defined as "an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment" (1). The development of SRL skills is particularly important for those medical practitioners working in rural and remote locations as it increases autonomy, competence, safety and satisfaction (1). James Cook University (JCU) has an ideological commitment to and confirmed track record of providing graduates to work in these areas, so developing SRL skills in JCU students is a critical issue.

#### **Aim/Objectives**

- Do medical students describe the development of SRL skills during year 4, their transition year between pre-clinical (Years 1,2,3) and clinical years (Years 5&6) (year four)?
- Does change in educational context of the transition year influence the development of SRL?

This research's epistemology derives from constructionism, focusing on how our subjects construct and make meaning of the reality of being a medical student in year 4 JCU. Semi-structured individual interviews were taped, transcribed and analysed through the lens of SRL framework of Pintrich (1).

#### **Discussion**

Analysis of initial interviews highlights evidence of many SRL strategies used by the students, especially the selection and adaptation of cognitive strategies for learning, with students describing choices that they made to adapt to changes in the context of learning, which are increased clinical immersion and decreased teacher centredness.

#### **Issues/Questions for exploration OR Ideas for further discussion**

Greater understanding of the influence of the context of learning.

Further analysis from future interviews to explore whether the students are more focussed on task orientation (passing exams) or goal orientation (studying to be a doctor).

1. Pintrich, P R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 452-502). New York: Academic.

## Development of a near-peer pelvic examination module using a biopsychosocial approach

**Dr Lynette Ngothanh**<sup>1</sup>, Susan Armitage<sup>1</sup>, Dr Conor Gilligan<sup>1</sup>, Dr Penelope Fotheringham<sup>1</sup>  
<sup>1</sup>*University of Newcastle, Newcastle, Australia*

### **Introduction**

Teaching pelvic examination can be challenging, as it involves more than just a 'biomedical' element. Medical students must also be aware of the relevant 'psychological' and 'sociocultural' elements involved including broader issues such as sexuality, power dynamics, cultural safety, previous trauma, informed consent, and shared decision making. A near-peer format may increase understanding of student learning needs, constructive feedback and create a mutually beneficial learning environment.

### **Objectives**

To develop a near-peer interactional skills module in pelvic examination using a biopsychosocial approach as part of the Health Professions Education pathway course in the Joint Medical program (JMP), University of Newcastle, Australia. Development and delivery of the module was overseen by a clinical midwifery educator and Obstetrician/Gynaecologist and the module was taught during the 2022 clinical rotations at the Central Coast Clinical School.

### **Discussion**

The module was evaluated according to the relevant learning points for pelvic examination in the JMP curriculum, demonstrating that students felt more confident in their knowledge and skills following the session. The students demonstrated care and self-reflection in their approach to pelvic examination and it was observed that near-peer and peer-peer feedback improved their confidence applying these skills in a clinical setting. The multimodal approach, involving theory pre-reading, demonstration video, interactive theory revision, in person pelvic examination demonstration, and student-led assessment of practical skills was deemed useful for different learner preferences in the cohort. This approach allowed the near-peer educator to develop their skills in a range of educational approaches and gain confidence in communication in a challenging topic area.

### **Questions for exploration**

How do we balance the different facets of a biopsychosocial educational approach in a pelvic examination module?

How do we accurately reflect and emphasise the patient needs in education modules for medical students?

How do we best support near-peer teachers when teaching challenging topics?



## **Creating Rural Immersion Placement Program – Allied Health (RIPPAH) student experiences is a RIPPAH solution to the allied health workforce maldistribution in Australia.**

**Ms Rhiannon Barnes**<sup>1</sup>, Ms Helen Wassman<sup>2</sup>, Dr Belinda Gavaghan<sup>1</sup>, Mr Geoff Argus<sup>3</sup>, Ms Cristal Newman<sup>2</sup>, Ms Joanna Tutt<sup>2</sup>, Ms Kassie Shardlow<sup>1</sup>, Ms Lisa Baker<sup>2</sup>, Ms Courtney Heal<sup>2</sup>, Ms Kirsten Middleton<sup>3</sup>, Ms Liza-Jane McBride<sup>1</sup>

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Allied health professionals play a valuable role in delivering healthcare to rural and remote communities. However, there is a recognised maldistribution in the allied health workforce across Australia that contributes to inequitable access to best practice, multi-disciplinary care for rural and remote communities. Effective rural training experiences addressing barriers to rural practice is integral to building allied health workforce capacity. This requires a major change to the placement curriculum for some allied health professions with movement away from short-term clinical placements with limited opportunities for remote learning to extended rural immersion training experiences.

The Rural Immersion Placement Program – Allied Health (RIPPAH) is a wraparound support clinical education initiative, developed by South West Queensland, for South West Queensland with collaborative partnerships with the local University Department of Rural Health and Office of the Chief Allied Health Officer. An Implementation Science Framework has been used to guide the translation of research into practice throughout the planning, implementation and evaluation phases to ensure the model is both successful and sustainable. The process was designed to be shared for scale and spread across disciplines and geographical locations.

Students express interest in a RIPPAH experience to ensure those living and studying in the region have a passion for a rural health career. Students are immersed in the community during their extended placement where they are offered opportunities including social activities, rural farm stays, part-time paid employment and sporting team membership. Sharing the journey of planning and creating RIPPAH will highlight five key domains influencing implementation as well as the lessons learnt by the collaborative team. The logic model includes outcome measures such as the number of RIPPAH placements offered and provided, stakeholder satisfaction, program resourcing and individual student outcomes measured using a Reach Effectiveness Adoption Implementation Maintenance (RE-AIM) evaluation framework.

## A critical realist approach to inclusion and diversity in skin anatomy in biomedical science teaching

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### Introduction/Background

Inclusion of diversity is important to mitigate disadvantageous outcomes in health care. Despite underpinning clinical assumptions about the 'normal' body, biological diversity is rarely included in biomedical science teaching.

Anatomy recognises a range of normality, although lack of time often constrains teaching to the 'most commonly occurring', which may erroneously imply that anything else is abnormal.

Including all possible variations in teaching is not realistic. However, non-inclusive teaching may contribute to lack of appreciation of variation in skin anatomy and negatively impact perceptions of health and disease in skin of colour.

Medical programs may be considered to be situated within consumerist societies<sup>1</sup>, highlighting the importance of including people external to the discipline into decisions about anatomical education.

### Aim/Objectives

We describe using a critical realist approach to improving diversity and inclusion in teaching the anatomy of skin, and engagement external to anatomy during that process.

### Discussion

A critical realist approach asks 'what works, for whom, under what circumstances'<sup>2</sup>, something works and identifies a context, a mechanism and an outcome.

The context is a diverse cohort of second year medical students. An intervention (mechanism) aimed at improving appreciation of range of normality variation was hypothesised to improve student understanding of normal variation in skin anatomy (outcome).

Structural homogeneity is implied by most histology textbooks, which omit references to skin of colour. Evidence-based research on skin of colour, although scant, suggests knowledge of normal variation is important for clinical practice.

The intervention initially included scientific material on anatomy of skin of colour. However, input external to the discipline guided educators to articulating their assumptions, and exploring reasons for a paucity of evidence-based research.

### Issues/Questions for exploration OR Ideas for further discussion

Input from outside anatomy suggests that integration of biomedical science with sociocultural and historical teaching may yield a more effective intervention.

### References

1. Moxham BJ, Hennon H, Lignier B, Plaisant O. 2016 An assessment of the anatomical knowledge of laypersons and their attitudes towards the clinical importance of gross anatomy in medicine. *Ann Anat.* 208:194-203.
2. Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. SAGE Publications, London UK

## Using a flipped laboratory strategy to improve student engagement and to create equity in multidisciplinary, multimodal, Anatomy and Physiology units

**Dr Charmaine Ramlogan-steel**<sup>1</sup>, Associate Professor Sonia Saluja<sup>1</sup>

<sup>1</sup>*Central Queensland University, Rockhampton, Australia*

### **Introduction/Background**

The study of Anatomy and Physiology provides foundational knowledge of the normal human body to healthcare students. Its study carries a heavy cognitive load, so a stepwise approach to delivery of the content for student learning is often needed. Our teaching of this discipline entailed weekly lectures and a laboratory practical which include: (1) active engagement with anatomical models, bones and human plastinates, (2) palpations and (3) case studies/medical imaging to simulate real world examples. Multimodal delivery of this content proved to be challenging. This stepwise method worked for our internal students who attended the face-to-face practical which reinforced the weekly content. However, distance students who covered all the content at an end-of-term residential school, were found to be underprepared and overwhelmed.

### **Aim/Objectives**

Given the inequity in learning across student cohorts, we aimed to develop resources that met the needs of both internal and distance students. Additionally, we intend to use these resources in a flipped laboratory strategy to enhance student engagement and learning.

### **Discussion**

The flipped laboratory strategy was implemented using the following steps: (1) Weekly practical videos using anatomical models and bones were recorded using different orientations, planes and spatial relationships thereby allowing a 3D view of the models to be shown while discussing the anatomical structures. This was coupled with customized practical worksheets designed for more active learning. (2) Photographs of the anatomical models and bones, with contrasting backgrounds and various orientations, were provided and students encouraged to label the structures on the photographs. (3) Videos demonstrating palpations, and discussions of case studies and medical imaging were recorded to help facilitate the transition to “real-world”. Students were encouraged to engage with these weekly resources, prior to attending their practicals/residential school. The flipped laboratory strategy has positively transformed practical learning for 500+ students across diverse disciplines resulting in positive student feedback from all student cohorts.

### **Issues/Questions for exploration OR Ideas for further discussion**

How was the flipped laboratory strategy implemented?

What was the impact on student engagement?

## Clinical education: Is it what it says on the tin?

**Dr Yvonne Thomas<sup>1</sup>, Dr Merrolee Penman<sup>2</sup>**, Dr Jacqueline Raymond<sup>3</sup>, Annora Kumar<sup>4</sup>, Renae Liang<sup>5</sup>, Karen Sundar<sup>2</sup>,

<sup>1</sup> Te Pukenga, Otago, New Zealand, <sup>2</sup> Curtin University, Australia, <sup>3</sup> The University of Sydney, Australia, <sup>4</sup> The University of Western Australia, Australia, <sup>5</sup> University of Notre Dame Australia

### Introduction

Allied health regulatory authorities' education standards define (or articulate) what constitutes 'clinical education' in their profession. Inherent in these descriptions lies an implicit understanding, or conceptualisation of what 'a placement' is. Regular review of the education standards reflects the changing roles and responsibilities of the discipline and of educational theory.

### Study Aim

The aim of this study was to identify and compare education standards across AHP's in Australia to understand the concept of clinical education and its contribution to curriculum as articulated through their accreditation standards.

### Methods

An explanatory mixed methods study (Schoonenboom & Burke Johnson, 2017) was employed, comprising a document analysis (Bowen 2009) of 15 AHP accreditation standards, followed by inductive thematic analysis (Braun and Clarke, 2021) of textual data to explore conceptual understandings of clinical education.

### Results

Content analysis of AHP standards and documents resulted in a comprehensive summary and comparison of the definitions, context, and requirements of clinical education across a broad range of allied health professional education programs. Reflexive data analysis (Braun and Clarke, 2021) of the textual content of accreditation documents, provides insight into the contribution of clinical education to the overall curriculum design and to student learning. The study found a range of similarities and differences into how clinical education is conceptualised by different professions, suggesting that each profession has a unique understanding of its purpose.

### Discussion

This study provides a comprehensive review of clinical education descriptions across 15 AHP professions in Australia. While discipline-specific clinical education standards are important, we argue that much could be gained from greater alignment of our definitions and educational processes across professions.

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Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage Publications.

Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 69(S2), 107–131. [https://doi.org/10.1007/s11577-017-0454-](https://doi.org/10.1007/s11577-017-0454-1)

## **I am more than Dr ChatGPT : Preparing Human Dr for Future Practice through a Contemplative Pedagogy inspired Communication Skills Course.**

**Associate Professor KWONG DJEE CHAN<sup>1,2</sup>, Mrs Linda Humphreys<sup>1</sup>**

*<sup>1</sup>Griffith University, Gold Coast, Australia, <sup>2</sup>Kaohsiung Medical University, Kaohsiung, Taiwan*

### **Introduction**

As Artificial Intelligence (AI) becomes increasingly integrated with medical practice the human dimensions of health care will remain the primary domain of future health care practitioners. In the new Griffith University Medical Doctor Program, the communication skills curriculum implements contemplative pedagogy in the course learning and teaching activities through mindfulness, affective reflection and simulated learning in a safe learning and teaching environment, coined by the term "MaRIS" (Chan & Humphreys, 2019). We aim to equip medical students with contemplative skills that will benefit them both as humanistic medical students and as person-centred practitioners in the future AI era.

### **Methods**

Thematic analysis of students' affective reflective journals (written to learning activities) will inform the topics explored in focus group at the end of the course. The focus group will provide information on how the students' human capability development through the learning experience.

### **Results**

The learning and teaching commenced in late January and the trimester ends at the end of May. Data collection will begin in March and the final focus group will be held at the end of May. Preliminary results to be reported in the conference.

### **Discussion**

6. How do medical students see the impact of Dr ChatGPT to their occupation?
  1. Does contemplative pedagogy have a role in preparing students for future practice?
  2. What do medical students need to best develop their human capability to embrace AI technology?

### **Reference**

Chan KD, Humphreys L, Mey A, Holland C, Wu C, Rogers GD. Beyond communication training: The MaRIS model for developing medical students' human capabilities and personal resilience. *Medical Teacher*. 2020 Feb;42(2):187-195. doi: 10.1080/0142159X.2019.1670340. Epub 2019 Oct 13. PMID: 31608726.

## Creative reflective learning approaches and medical students' personal growth, interpersonal relationships, and sense of belonging: A systematic review and qualitative synthesis

**Dr William Macaskill**<sup>1,2</sup>, Dr Weng Joe Chua<sup>2</sup>, Ms Thedini Pinidiyapathirage<sup>1</sup>, Dr Hannah Woodall<sup>1,2</sup>

<sup>1</sup>Rural Medical Education Australia, Toowoomba, Australia, <sup>2</sup>Griffith University, Gold Coast, Australia

**Introduction.** In medical curricula reflective learning mostly consists of writing and small-group discussion, yet accommodating diverse learning styles is a key factor in developing lifelong reflective practitioners. Creative reflective learning approaches could cater to diverse learning styles, however, their overarching benefit to medical students' development is unknown. To understand students' perspectives of how creative reflective learning approaches contribute to their holistic development we performed a qualitative systematic review and synthesis.

**Methods.** Systematic searches of Medline OVID, PsycINFO, and EMBASE databases identified 4986 unique records, with 14 studies meeting inclusion criteria. Included studies specifically assessed the impact of reflective learning on medical students and utilized creative approaches to reflective learning. Creative approaches were defined as reflective learning methodologies not predominantly focused on reflective writing or group discussion. Studies were appraised using the Critical Appraisal Skills Programme and the Checklist for Quasi-Experimental Studies.

**Results.** We identified five distinctive reflective learning methodological categories: viewing, performing, creating, imagining, and mind-body. Thematic analysis generated three overarching themes: building and maintaining relationships, personal development, and sense of belonging. These themes incorporated eight sub-themes: recognizing multiple perspectives, empathizing with others, two-way communication skills, and patient centered care; processing thoughts and emotions, and self-care; interacting positively with peers, and developing trust and commonality.

**Discussion.** This research highlights that creative reflective learning approaches may foster students' sense of belonging, support interpersonal skills, and contribute to personal development. Additionally, they can also provide similar benefits to linguistic reflective practices such as improved empathy and bias identification. Creative reflective learning activities may have considerable potential to holistically improve overall medical student development while providing opportunities to support students through the stressors of medical school.

## 5A – Symposium

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### **When your student unexpectedly dies - the importance of a trauma-informed postvention response.**

**Ms Danielle Clayman<sup>1</sup>, Dr Hannah Sloan<sup>2</sup>, Associate Professor Stephen Lew<sup>1,3</sup>, Dr Erene Sakabetis<sup>4</sup>**

*<sup>1</sup>Department of Medical Education, The University of Melbourne, Parkville, Australia, <sup>2</sup>Department of Rural Health, The University of Melbourne, Shepparton, Australia, <sup>3</sup>Western Health, St Albans, Australia, <sup>4</sup>Bendigo Health, Bendigo, Australia*

A student death can be a challenging experience for health profession educators. Whilst processing their own grief staff are required to simultaneously support the student cohort and manage the school-based response.

A prepared, documented postvention response can support educators at this difficult time, providing a road map for supportive, ethical communication and practice. The Melbourne Medical School Guidelines for the Management of Student Safety Risk and Student Death, developed in 2016, have enabled the school to improve its' postvention response, providing trauma-informed support of students during these challenging times.

#### **Purpose/Objectives**

The symposium aims to:

Discuss the importance of a coordinated, evidence-based postvention response.

Discuss privacy considerations in postvention response and how these are best managed in a sensitive, appropriate way.

Outline considerations for educational institutions in creating and implementing postvention procedures for supporting student wellbeing after a student death.

Danielle Clayman (Lead Presenter)

Danielle will introduce the topic and speakers, and facilitate the discussion.

Dr Hannah Sloan

Presentation: "Creating guidelines for Postvention Responses to student death".

Hannah's presentation will detail the management and communication required following a student death, including the creation of a Critical Incident Response Team (CIRT), scripts for sensitive and consistent communication, ways to identify students most impacted by the loss, and appropriate, timely support approaches. Student privacy and confidentiality will also be considered.

Assoc Professor Stephen Lew

Presentation: "Handling the Local Response"

A/Prof Lew will share his insight into the subtlety and complexity of communicating with students, staff and honoraries at a local level, whilst coordinating with the wider university.

Dr Erene Sakabetis.

Presentation: "The student perspective".

Dr Sakabetis will discuss her experience of the MMS Postvention response as both a student and a student leader prior to graduation. Her presentation will provide insight into how postvention is received by students, and why it matters.

#### **Discussion**

*How should a student death be sensitively communicated to students in a timely manner when students are learning at geographically disparate locations?*

*What level of support should be provided to students by the school and for how long?*

*When and how should a school encourage a return to studies in a sensitive, supportive manner.*

### **Opportunities for enhancing interprofessional healthcare communication in Australia: leveraging the commonalities; navigating the differences of nine professions.**

**Dr Shannon Saad<sup>1</sup>, Dr Natalie Dodd<sup>2</sup>, Dr Michele Verdonck<sup>2</sup>, Associate Professor Debra Kerr<sup>3</sup>**, Professor Fiona Bogossian<sup>2</sup>, Ms Katie Healy<sup>4</sup>, Dr Stevie-Jae Hepburn<sup>2</sup>, Dr Kelly Lambert<sup>5</sup>, Professor Judy Mullan<sup>5</sup>, Dr Kerry Peek<sup>6</sup>

<sup>1</sup>Rpa Virtual Hospital, Camperdown, Australia, <sup>2</sup>University of the Sunshine Coast, Sippy Downs, Australia, <sup>3</sup>Deakin University, Geelong, Australia, <sup>4</sup>Sunshine Coast Hospital, Birtinya, Australia, <sup>5</sup>University of Wollongong, Wollongong, Australia, <sup>6</sup>University of Sydney, Camperdown, Australia

#### **Introduction/Background**

Communication in the clinical context is a core skill which operationalises safe and effective healthcare. Due to the central role communication plays between providers, consumers and their carers/families and the wider public in the provision of healthcare, most professional and accrediting bodies make specific reference to aspects of clinical communication in accreditation or professional standard documents.

While recommendations from the Australian Commission on Safety and Quality in Health Care<sup>1</sup> outline important findings on communication in healthcare settings based on literature and resource reviews, targeted interviews, and surveys, they do not examine competencies related to professional accreditation or standards. These resources provide fundamental definitional statements regarding professional expectations of healthcare workers and can be explored to understand commonalities and differences between professions.

#### **Aim/Objectives**

As an interprofessional collaboration of academic clinicians with expertise in clinical healthcare communication, we undertook an interprofessional analysis<sup>2</sup> of the standards and competency statements of our professional bodies. This analysis aimed to analyse the similarities and differences in communication skills requirements in accreditation standards and/or competency frameworks of health professions in Australia.

#### **Discussion:**

A set of common standardised principles underpinning health professions communication in Australia was derived. These principles included patient-centred communication, desirable qualities in healthcare communication, rapport building, adapting to manage barriers, information management, interprofessional collaborative practice and cultural safety. These principles may be used to facilitate an interprofessional approach to communication skills education for the health professions. Future work might include development of a shared curriculum which incorporates core communication skills competencies for healthcare professionals.

#### **Issues/Questions for exploration**

What is the perceived utility of the findings for interprofessional education?

#### **References:**

1. Australian Commission on Safety and Quality in Health Care, Communicating for safety: Improving clinical communication, collaboration and teamwork in Australian health services 2020. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/improving-clinical-communication-collaboration-and-teamwork-australian-health-services> (Accessed 12 Feb 2023).
2. Grace S, Innes E, Joffe B, East L, Coutts R, Nancarrow S. Identifying common values among seven health professions: An interprofessional analysis. *J Interprof Care*. 2017



## Partnered Pharmacist Medication Charting: a model of interprofessional practice, from training to implementation

A/prof Josephine Thomas<sup>1,2</sup>, Ms Sally Marotti<sup>1,3</sup>, Ms Caroline Earley<sup>1</sup>

<sup>1</sup>Central Adelaide Local Health Network, Adelaide, Australia, <sup>2</sup>University of Adelaide, Adelaide, Australia,

<sup>3</sup>University of South Australia, Adelaide, Australia

### Introduction/Background

Partnered Pharmacist Medication Charting (PPMC) is a model which involves a pharmacist obtaining a best possible medication history early in a patient's admission, and the development and documentation of a collaborative patient-centric medication treatment plan by the pharmacist and medical officer. Medications are then charted by the pharmacist in the electronic medical record and co-signed by the medical officer. In 2022 the Pharmacy department at Central Adelaide Local Health Network (CALHN) committed to introduce PPMC. Complex medical admissions from the Emergency Department to General Medicine units were chosen as the setting. This model is utilised in other Australian states, and has been credited with reduced length of stay, and enhanced safety, through highlighting medication issues early in admission (1). Comprehensive pharmacist training and credentialling was developed. The credentialling process involved observation of pharmacists by senior medical officers during a PPMC encounter and assessment via an entrustable professional activity (EPA) tool (2), developed by key stakeholders. During implementation of PPMC the potential for high quality interprofessional practice (IPP) interactions became apparent. The benefits of pharmacists assisting with the cognitive burden of complex medical admissions is highly attractive to trainee medical officers. For pharmacists, the opportunity to contribute to therapeutic decision making, learn new skills, and work with an interprofessional team was a rewarding experience. Despite the provision of interprofessional learning as part of university programs, opportunities for IPP are limited in many workplace contexts. This results in a hidden curriculum that undermines the importance of IPP due to poor visibility and low levels of exposure to positive collaborative models. PPMC has proven benefits for medication safety and reduced length of stay. It is likely that the model also improves staff satisfaction and provides high quality IPP opportunities: during development, training, credentialling and utilisation.

### Purpose/Objectives

Explore how to best utilise and reinforce the IPP opportunities afforded by the model.

Consider research on how the model enhances interprofessional practice.

### List of presentations

Sally Marotti- Outline of the PPMC model

Caroline Earley – EPA development for credentialling PPMC pharmacists

Josephine Thomas- Interprofessional practice opportunities with PPMC, and how these may enhance interprofessional learning between pharmacy and medicine

### Discussion: Issues/questions for exploration OR Ideas for discussion

What research would be useful to explore how the model may foster IPP?

In which other contexts would PPMC be a useful model?

Does PPMC go far enough? Should we aim for pharmacists to prescribe?

### References

1. Tong, EY, Mitra, B, Yip, G, Galbraith, K, Dooley, MJ, PPMC Research Group. Multi-site evaluation of partnered pharmacist medication charting and in-hospital length of stay. *Br J Clin Pharmacol*. 2020; 86: 285– 290. <https://doi.org/10.1111/bcp.14128>
1. Cate OT. A primer on entrustable professional activities. *Korean J Med Educ*. 2018 Mar;30(1):1-10. doi: 10.3946/kjme.2018.76. Epub 2018 Feb 28. PMID: 29510603; PMCID: PMC5840559.

## Assessing students' interprofessional collaborative practice: from evidence to practice

**Associate Professor Margo Brewer, Associate Professor Fiona Kent**

<sup>1</sup>*Curtin University, Bentley, Australia*

### **Introduction/Background**

Significant progress has been made locally and internationally to embed interprofessional education in pre-registration education programs for health professions (Thistlethwaite & Xyrichis, 2022). Providing students with opportunities to engage in authentic interprofessional interactions within a range of health professional practice settings is critical. However, the assessment of students' interprofessional competencies within such practice settings remains a challenge for both university and clinical educators.

### **Aim/Objectives**

The aim of this session is to engage the audience in a conversation about how to assess the outcomes of interprofessional learning within clinical placements.

### **Discussion**

Following a brief overview of current research on interprofessional education in practice settings, we will engage attendees in a discussion on the challenges and opportunities of assessing interprofessional collaborative practice competencies within these clinical settings.

### **Issues/questions for exploration**

1. What are the key challenges with assessing students interprofessional collaborative practice competencies in clinical placements?
2. How might we overcome some of these challenges?

### **References**

Thistlethwaite, J., & Xyrichis, A. (2022). Forecasting interprofessional education and collaborative practice: towards a dystopian or utopian future? *Journal of Interprofessional Care*, 36(2), 165-167.  
doi:10.1080/13561820.2022.2056696

## Moving beyond student satisfaction: Identifying learning design features from an interprofessional education initiative

**Dr Megan Anakin<sup>1</sup>**, Dr Ewan Kennedy<sup>1</sup>

<sup>1</sup>*University Of Otago, Dunedin, New Zealand*

### Introduction

While there has been growth in research evidence that documents outcomes, researchers continue to find measuring the outcomes of interprofessional education challenging. Rarely are resources available for scholars to perform longitudinal outcomes-focused studies. Consequently, scholarship and research evidence about interprofessional education may focus on describing initiatives or reporting student satisfaction statistics. For those of us with access to evaluation data from students, we have opportunities to investigate other important aspects of interprofessional education. The aim of this presentation is to show how students' evaluation data collected after an interprofessional education workshop can be used to generate results relevant to curriculum development.

### Methods

Evaluation feedback was generated with 65 medicine students and 23 physiotherapy students after an interprofessional education workshop that emphasised clinical reasoning skills (Kennedy & Anakin, 2022). The workshop featured three small group case-based discussions facilitated by clinicians from both professions. Content analysis was used to identify and quantify the design features reported in the feedback data and compare their prevalence by profession.

### Results

Design features noted among both groups included requests for more demonstrations of how experienced clinicians think, clearer instructions and more time to engage in case discussions, and further explanations of how to apply knowledge and specific skills to think about case information. More medicine students requested practice presenting cases, whereas more physiotherapy students suggested emphasis on management reasoning and expressed appreciation for exchanging professional perspectives and working collaboratively.

### Discussion and Conclusions

Insights for curriculum development include providing sufficient time for students to participate in case-focused discussion and observe clinical reasoning modelled by clinicians. Differences suggest balancing diagnostic and management reasoning to enhance the relevance and applicability of the case material to both professions. By adopting a curriculum developer's perspective, teachers can move beyond student satisfaction to identify learning design features that students appreciate.

### Reference

Kennedy, E., & Anakin, M. (2022). Insights about instructional design features of an interprofessional education initiative involving clinical reasoning with physiotherapy and medicine students. *New Zealand Journal of Physiotherapy*, 50(3), 126–132. <https://doi.org/10.15619/NZJP/50.3.04>

## Exploring collaborative co-learning models between consumers and health professionals

**Dr Sathana Dushyanthen**<sup>1</sup>, Dr Kara Burns<sup>1</sup>

<sup>1</sup>*University Of Melbourne, , Australia*

### **Introduction**

Though it is recognised that patients play a crucial role in research and improving healthcare delivery, there are very few examples of consumers co-learning together alongside health professionals. Using the lens of collaborative learning, we present a qualitative evaluation of an educational program; the Applied Learning Health Systems short course, designed to build workforce capacity in leading digital transformation through quality improvement methods in healthcare. This project aimed to evaluate the perspectives of patients and healthcare professionals participating in this co-learning model.

### **Methods**

In order to recruit consumers, we extended an EOI through open call amongst consumer networks. A panel then shortlisted N=5 consumers from the application, with participation from different states in Australia. One consumer was placed in five different groups, composed of various professionals working in healthcare. The participants undertook the co-learning together over 12 weeks, while participating in group activities weekly online, over a 2-hour class. At the end of the course, we undertook a focus group with consumers (N=3) who successfully completed the course. Separately, we undertook individual interviews online, with professionals (N=4) who volunteered through email recruitment. Thematic analysis was undertaken to draw out the main ideas from the consumers' and professionals' perspectives.

### **Results**

Overall, both consumers and health professionals found the experience of co-learning together useful and eye-opening. From the professionals' perspective, consumers provoked different ways of thinking; provided unique insights into their experiences of navigating the health system, digital technologies and their healthcare pathway. Additionally, they challenged clinician communication styles – inclusivity of language. Having consumers in their group allowed them to realise how they could meaningfully involve consumers in their own projects and committees.

### **Discussion**

It is evident that co-learning models between patients and health professionals, have the power to meaningfully involve lived experience, transform perceptions, provoke changes in practice and ultimately improve patient experience and outcomes.

## **A Quest towards the Case Conference of the future “Where to” with facilitating student learning through clinic-based Multi-Disciplinary Team case conferencing.**

**Mr Mark Lynch<sup>1</sup>, Mary-Anne Wallwork, Nick Steel, Mitch Hunter**

*<sup>1</sup>Griffith University, Gold Coast, Australia*

### **Introduction:**

In the distant past, health professions practised in silos, protecting their borders, and patients/clients travelled poorly marked paths on an often-arduous journey towards health – or Mt Doom.

It is now standard practice for a Fellowship of different disciplines, with different approaches and contributions to collaboratively support clients towards negotiated goals, and the Case Conference is now core to navigating the journey. Health students often have the opportunity on placement to participate in Case Conference and evidence for the value of student-led clinics and/or case conferences is solid.

Clinical Educators at the Health clinic at Griffith University have been developing case conferencing skills with students, through supported MDT meetings following real patient interaction. This is proving to be effective in supporting the IPL/IPE goals of developing awareness of other disciplines' roles, and in developing their own professional identity.

But what does Case Conference look like now and into the future? How should we as educators be enabling our students to not just 'be practice ready' for “now”, but to shape their future?

### **Purpose:**

In this PeArLS, we ask to draw on the knowledge of the IPL community – educators and practitioners, to 'up-cycle' past investments in IPL Case Conferencing education, to share 'models' and to develop agile future-facing Case Conference facilitators.

### **Key Issues/questions for discussion:**

Where do you see the future of Multi-Disciplinary Team case conferencing needing to reach?  
What type of teaching approaches do you consider to be the most effective in preparing students to be not just capable facilitators but developers of effective MDT cultures of practice?

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Quality improvement education partnerships: qualitative interviews with nursing academics and healthcare organisation participants

**Ms Verity Mak<sup>1</sup>**, Professor Julia Morphet<sup>1</sup>, Associate Professor Gabrielle Brand<sup>1,2</sup>

<sup>1</sup>Monash University, Clayton, Australia, <sup>2</sup>Monash Centre for Scholarship in Health Education, Clayton, Australia

### Introduction

Quality improvement is included as an element in pre-registration health professions education curriculum to meet the requirements of professional registration. There is evidence that an innovative education method for quality improvement is by partnering with healthcare organisations to teach this content, to provide meaningful experiential learning. The aim of this research was to explore the experiences of higher education nursing academics and healthcare organisation participants in relation to quality improvement education and partnerships in Australia.

### Methods

Fourteen higher education nursing academics and quality improvement healthcare organisation nurses participated in semi-structured interviews that explored their experiences of quality improvement education and quality improvement education partnerships. Interview themes were determined using reflexive thematic analysis.

### Results

The current state of pre-registration nursing quality improvement education was divided into three themes which described that quality improvement is; not valued, not clearly defined or understood, and that quality improvement is for other people and not part of the daily work for general nurses. The results also identified themes that considered how quality improvement education partnerships may look in the future. These included; advantages of partnerships, safety and protection for those involved, and leadership support of the innovative idea of partnerships

### Discussion

Quality improvement education partnerships are an innovative solution for teaching pre-registration nursing students, which could also be used in other health professions education settings. Fostering this culture of improvement for early career nurses through these partnerships, creates a potential for change to the current state of quality improvement education. By engaging pre-registration nursing students in this way, they will enter the healthcare organisation with quality improvement knowledge, understanding and skills that are translatable to safe, quality patient care.

## **A child development module (0-5) for emerging allied health professionals: Promoting holistic and multidisciplinary approaches to meet community needs**

**Dr Marilyn Casley**<sup>1</sup>, Dr Kelly Clanchy<sup>1</sup>, Dr Jonathon Headrick<sup>1</sup>, Dr Emmah Baque<sup>1</sup>, Ms Ramona Clark<sup>1</sup>, **Mr Shaun Ziegenfusz**<sup>1</sup>

<sup>1</sup>Griffith University, Logan and Gold Coast Campus, Australia

### **Introduction/Background**

Developmental vulnerabilities in early childhood impact social, educational and health outcomes, and can drastically change the trajectory of a person's life [1]. Early detection and implementation of targeted supports for vulnerabilities can optimise outcomes when using a holistic and multidisciplinary approach with community and stakeholder engagement [2]. To address this problem, students training to be Allied Health Professionals must have knowledge and understanding of all child development domains. There is no consensus on entry level requirements for child development content in Australian universities. Current teaching methods are impacted by overcrowded curricula, limited prioritisation of paediatric content, and piecemeal paediatric teaching over multiple units.

### **Aim/Objectives**

The diversity of Allied Health disciplines in the School of Health Sciences and Social Work (SHSSW) at Griffith University meant we were in a unique position to develop a solution. Our multidisciplinary team aimed to design an educational resource to provide a comprehensive and holistic understanding to prepare our future workforce to work with children.

### **Discussion**

The resultant module comprised of 10 separate sub-modules (aligned with the Australian Early Development Census primary domains). The module was delivered and evaluated in: (1) Speech Pathology (n=45 students); (2) Physiotherapy (n=71 students) and; (3) Exercise Science, Clinical Exercise Physiology, and Sport Development (n=16 students). Speech Pathology students participated in a focus group (n=8). Students rated their confidence in identifying child development milestones as 9.5/10 following the module delivery. Perceived confidence of Physiotherapy and Exercise Science students in identifying developmental milestones, red flags and understanding the biopsychosocial model of care improved by 42%, 45% and 40%. Early relationships and experiences have a significant and lasting influence on early learning, development and wellbeing. A professional and skilled early childhood workforce is imperative to provide children with the best opportunities to succeed at school and life.

### **References**

1. McCoy, D. C., et al. (2017). <https://doi.org/10.3102/0013189X17737739>
2. Clanchy, K.M., et al. (2022). <https://doi.org/10.1007/s13384-021-00429-9>

## 5C – Curriculum

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### A theory of practice learning to inform traditional and simulated placements

Mrs Terri Grant<sup>1</sup>, **Dr Yvonne Thomas<sup>2</sup>**

<sup>1</sup>University Of Worcester, Worcester, Great Britain, <sup>2</sup>Otago Polytechnic, Dunedin, New Zealand

**Introduction:** Occupational therapy programmes worldwide have moved to incorporate simulated practice experiences into their curricula, following evidence of comparable outcomes to traditional placements (Imms et al., 2018). In the UK, this was escalated because of Covid-19 by the implications of national lockdowns and social distancing on the availability of traditional placements. Honey and Penman (2020) found first year placements should incorporate reality and participation but few other authors have considered exactly what should be included in a simulated placement. This research therefore aimed to understand what is really learned by students during their first practice placement and how this knowledge can be used to design a simulation curriculum to replace this placement.

**Methods:** Following Grounded Theory methodology, interviews were carried out with 15 participants (pre-registration students and practice educators) and analysed using constant comparison methods.

**Results:** Four categories of learning were identified and the relationships between these categories analysed to generate a theory of practice learning. This paper will present the final theory which incorporates not only what is learned (the four categories) but also ways in which this learning is achieved.

**Discussion:** Utilisation of this theory of practice learning, generated from occupational therapy research but relevant across all health and care professions, has multiple implications. It could be used within traditional placement settings to enhance communication between student and educator. It can also be used to enable educators to develop appropriate simulation curricula to replace placements. As simulation is gaining popularity within occupational therapy education, understanding the diversity and depth of student learning on placement could more accurately and effectively support the development of simulation curricula.

References:

Honey, A. and Penman, M. (2020) “You actually see what occupational therapists do in real life”: Outcomes and critical features of first-year practice education placements’, *British Journal of Occupational Therapy*.

Imms, C. et al. (2018) ‘Simulated versus traditional occupational therapy placements: A randomised controlled trial’, *Australian Occupational Therapy Journal*, 65(6), pp. 556–564.



## Reconceptualising health education: Microcredentials

Dr Susan Grimes<sup>1</sup>, Adjunct A/prof Roderick McKay, Dr Roderick McKay<sup>1</sup>

<sup>1</sup>Health Education and Training Institute, St Leonards, Australia

### Introduction/Background

HETI higher education offers postgraduate higher education and professional development courses in mental health. Students include a wide range of health professionals, as well as those seeking to apply mental healthcare outside of health settings. In the context of rapid healthcare and education change, key challenges in meeting student and community needs in this context include varying entry capabilities and multiple goals of students, and different perceptions of the education and training in the workplace.

### Aim/Objectives

To describe the principles and outcomes of the curriculum re-structure undertaken to address the reality of our health professionals' development through use of microcredentials.

### Discussion

We have spent the past three years designing and developing a microcredential structure for our learning that allows a unit of study to be completed as professional development (no assessment), stackable credit (AQF aligned assessment that can be used within formal courses as credit) or as a formal unit as part of a postgraduate degree. This flexibility empowers students to choose the level of completion that fits with their purpose. All units offered are the same in terms of content and learning sequence/opportunities; the difference is in the degree of engagement chosen by the student, and outcome selected. This approach has proved very popular with around 60% of professional development students opting for stackable credit. Multiple pathways options meet the different student objectives, offer increased opportunity to integrate workplace learning, and improves our ability to modify units flexibly and quickly. After two and half years operation 55 microcredential units are available that stack to a graduate certificate and a graduate diploma in applied mental health studies.

### Challenges

What do you see as the opportunities and risks of a microcredential approach in your workplace and context?

What are barriers and enablers as a training or education provider?

## **Clinical Reasoning and Visual Thinking Strategies: the role of museum studies in the medical curriculum**

**Dr. Suja Pillai<sup>1,2</sup>**, Dr. Anna Efstathiadou<sup>2</sup>, Ms Tamyka Bell<sup>2</sup>, Mr Sahil Gupta<sup>2</sup>, Mr Luke Edward Waldie<sup>2</sup>, Ms Soo In Oh<sup>2</sup>

<sup>1</sup>*School Of Biomedical Sciences, faculty Of Medicine, Brisbane, Australia*, <sup>2</sup>*Faculty of Medicine, Brisbane, Australia*

### **Introduction/Background**

Observational skill is an essential talent required by health care professionals; however, it is a skill that is learnt but rarely taught in medical schools. Furthermore, image recognition and interpretation are essential in the discipline of pathology for students to understand the abnormal changes in the organs and body due to a disease. Visual Thinking Strategies (VTS) is an educational tool that uses art to develop observational skills, critical thinking, communication, and visual literacy in students, however it has been underused by medical schools in Australian universities.

### **Aim/Objectives**

By introducing and exploring the use of visual thinking strategies in medical education at The University of Queensland, this project aims to explore how Medical students can be benefited by techniques and strategies that allow them to look at a work of art from different angles and distances and to appreciate nuances that build close observational skills, paramount to diagnostic acumen and clinical reasoning. Introduced as a pilot program in Year 1 and 2 medical students, the study discusses preliminary findings of pilot program of VTS during pathology tutorials.

### **Discussion**

The findings from this study will help to identify whether visual thinking strategies can promote medical students' personal development and enrichment, allowing them to develop qualities such as observational skills, critical thinking, and reasoning and raise awareness about the potential of the arts and humanities to inform the discipline of medical education and its development. The findings will help assist Universities to reimagine their traditional way of engaging students and ways to promote networking with peers and promote a rewarding student learning experience in a way that will allow the future generation of medical students to enjoy the medical profession.

### **Issues/Questions for exploration**

The presentation promotes the dialogue about the use of VTS in the teaching of pathology, raising questions about the wider use of arts and culture in the medical curriculum. If clinical reasoning is a process that can be learnt, should VTS be trialled and evaluated as an educational tool that benefits thinking processes and ensures consistency and effectiveness of thoughts and conclusions?

## Medical students' awareness of overdiagnosis: does medical education prepare students to practice high-value care?

**Miss Lucinda Colbert**<sup>1</sup>, Dr Iman Hegazi<sup>1</sup>, Professor Kath Peters<sup>1</sup>, Dr Natalie Edmiston<sup>1</sup>

<sup>1</sup>*Western Sydney University, , Australia*

### Introduction

Overdiagnosis is a key feature of low-value care yet our understanding of medical students' exposure to this concept within medical education is limited. Our aim was to explore students' experience of diagnostic learning and their perceptions of low-value and high-value care in the clinical setting.

### Methods

During in-person and online semi-structured interviews from May-August 2021, we explored the education experience of twelve Western Sydney University medical students in clinical years 3-5. Students were recruited through poster advertisements, social media, and email announcements. Interviews were audio recorded with consent, transcribed and deidentified for analysis. Through inductive thematic analysis we identified seven themes and one sub-theme.

### Results

Themes encompassed student engagement, confidence and emotional drivers of low-value care, personal reflection, the contribution of hidden curriculum and teaching to students' perception of care, application of skills, missed learning opportunities and student experiences of low and high-value care in clinical practice. This study found that medical students develop inherent knowledge of overdiagnosis and low-value care practices through an interplay of personal factors, medical school curriculum, and the setting in which their training takes place.

### Discussion

A framework was developed through collaborative discussion outlining how curriculum and education influenced student perspectives and knowledge of overdiagnosis and high and low-value care. Foundational knowledge of clinical skills is developed throughout preclinical years and enhanced through formal teaching and role-modelling in the clinical environment. Through observation and practice, students distinguish between high-value patient-centred care and low-value care, however, their degree of understanding is relative to their exposure to high quality teaching. Recognising how aspects of medical education interplay to form students' foundational knowledge allows identification of gaps in current curricula and supports future improvement of the curriculum and the calibre of medical graduates.

## **‘Productive feedback conversations in healthcare’: A novel simulation-based pedagogy for medical students**

**Carolyn Cracknell**<sup>1</sup>, Tamara Clements<sup>1</sup>, Professor Anna Ryan<sup>1</sup>, Associate Professor Leonie Griffiths<sup>1,2</sup>, Professor Robyn Woodward-Kron<sup>1</sup>, Associate Professor Lisa Chesire<sup>1</sup>, Dr Vinita Rane<sup>1,2</sup>, Dr Louisa Ng<sup>1</sup>, Dr Jennifer Keast<sup>1</sup>, Christy Nobel<sup>1,3</sup>, Professor Elizabeth Molloy<sup>1</sup>

<sup>1</sup>University Of Melbourne, Melbourne, Australia, <sup>2</sup>Northern Health, Epping, Australia, <sup>3</sup>University of Queensland, , Australia

### **Background/Introduction:**

Feedback conversations are central for promoting productive cultures in healthcare, yet research reveals that feedback is in dire need of improvement. Creative approaches are needed for helping learners engage in feedback in authentic contexts. The University of Melbourne course has a strong focus on developing theoretical understandings of feedback and is now piloting and evaluating ways to incorporate immersive tasks that allow students to practise feedback conversations.

### **Aim:**

This presentation describes the pedagogy and research methodology for the Productive Feedback Conversations in Healthcare’ program. This simulation-program has been developed for first year medical students to practise feedback conversations. The simulation replicates an OSCE design with students working in teams through a series of authentic scenarios informed by recent research examining student ‘feedback literacy’ (Molloy, Boud, Henderson 2020). Stations give learners valuable opportunities to practise identifying sources of feedback, engaging actively with feedback, managing affect and integrating feedback into their learning goals.

### **Discussion:**

Several curriculum design features have been used to afford feedback learning and self-evaluation opportunities, including peer observation, active participation in scenarios, review of a video recording of the OSCE feedback station and an assessed reflection task. By giving students active, immersive opportunities early in their course, we seek to foster learners who can maximise feedback encounters throughout their studies, clinical placements and professional lives. Qualitative educational research will explore students’ engagement in the feedback conversations, their experiences of the program, and translation of new skills in their studies or clinical placements. Rich data will be collected including (with consent) video recordings of simulated feedback and student reflections. Applying smart research approaches to evaluate this initiative will help us further understand learners’ conceptions of, and engagement with, feedback in clinical contexts

### **References**

1. Molloy, E., Boud, D., & Henderson, M. (2020). Developing a learning-centred framework for feedback literacy. *Assessment and Evaluation in Higher Education*.  
<https://doi.org/10.1080/02602938.2019.1667955> 45 (4) 527-540

## An exploration of the effectiveness of two simulation modalities to support student nurse preparation for clinical practice

**Dr Raewyn Lesā<sup>1</sup>, Dr Chris Moir<sup>1</sup>, Professor Philippa Seaton<sup>1</sup>**

*<sup>1</sup>University of Otago, Christchurch, New Zealand*

### Introduction

Simulation encompasses an array of modalities such as anatomical models, skill trainers, role play, 'high tech' simulators, hybrid typologies and virtual realities. Simulation may be used to target the psychomotor, affective or cognitive learning domain. The focus could be procedural technique, communication skills, teamwork or problem-solving. Selecting the most appropriate simulation modality to meeting the learning outcomes is an important design characteristic because basic simulators may suffice, and these are significantly cheaper than high-fidelity simulators<sup>1</sup>. Understanding the educational value of different simulation modalities to optimise learning is important in the current fiscally constrained education and healthcare environment.

This research explored the experience of students' and facilitators' in two simulations which used different simulation modalities. The aim was to understand their educational value and how different simulation modalities may be effectively used to enhance learning.

### Methods

Two simulations were designed. The first simulation used a tag team approach<sup>2</sup> to manage a deteriorating patient, and the second used an age suit to simulate a patient experience. All first-year students in the MNSc programme at the University of Otago participated in these two simulations (n=30) in October 2022. Four students and three facilitators attended a semi-structured interview online (zoom platform) to explore their perceptions about the acceptability, usefulness, and limitations of the simulation modalities. Data was analysed using a general inductive approach to determine themes.

### Results

Preliminary findings suggest that the facilitators perceptions of the learning experience differed from the experience of the students. Preparation and pre-briefing were essential to the success of the simulation.

### Discussion

Participant quotes will be used to encourage a discussion among attendees about how different simulation modalities can be used effectively to enhance the learner experience. The sharing of personal experiences will be encouraged.

<sup>1</sup>Adamson K. A systematic review of the literature related to the NLN/Jeffries simulation framework. *Nursing Education Perspectives*. 2015 Sep 1;36(5):281-91.

<sup>2</sup>Levett-Jones T, Andersen P, Reid-Searl K, Guinea S, McAllister M, Lapkin S, Palmer L, Niddrie M. Tag team simulation: An innovative approach for promoting active engagement of participants and observers during group simulations. *Nurse Education in Practice*. 2015 Sep 1;15(5):345-52.

## Simulation-based mastery learning to teach healthcare professionals clinical procedural skills; A scoping review

Dr Michelle Schlipalius<sup>1,2,3</sup>, Dr Kate Reid<sup>3</sup>

<sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>Monash Health, Melbourne, Australia, <sup>3</sup>The University of Melbourne, Melbourne, Australia

### Introduction

The apprenticeship model of medical education has been the traditional method to teach procedural skills. However, patient safety concerns, combined with a reduction in working hours, has led to fewer opportunities to acquire procedural skills through practise in the clinical environment. As medical education develops from being based on time and procedure numbers to a competency-based approach, simulation-based mastery learning (SBML) becomes essential, as it enables learners to gain competency at their own pace, without a risk to patients and is independent of opportunities available in the clinical environment.

### Methods

A scoping review was undertaken to address the research question “what are the outcomes of using SBML to teach healthcare professionals clinical procedural skills?” Ovid Medline, CINAHL Plus, Ovid Emcare, Pubmed and Embase were searched using the terms “simulation-based mastery learning” OR “deliberate practice and mastery learning”. From 736 initially identified articles, 70 met the inclusion criteria. The methodological quality of each article was evaluated using the Medical Education Research Study Quality Instrument (MERSQI).

### Results

The studies were published between 2008 and 2022. Most were performed in the USA, involved post-graduate medical learners, had small participant numbers and involved a single institution. The median MERSQI score was 13.5. Studies evaluated outcomes at Kirkpatrick level one (47% of articles), two (83%), three (27%) and four (14%). Nearly all studies showed an improvement in Kirkpatrick level outcomes. Studies investigating skill retention showed that skill retention and skill decay occurred almost equally.

### Discussion

The current literature suggests that SBML works! The challenge is for healthcare professional learners, educators, researchers and institutions to acknowledge this, integrate SBML into their curriculums and advance research. Medical education needs to move from the old paradigm of “see one, do one, teach one” to a new era of “see one, practice many, do one”.

## What is the impact of three days of pre-placement immersive simulation on student preparedness?

**Mrs Taryn Jones<sup>1</sup>**, Mr Courtney Clark<sup>1</sup>, Mr Blayne Arnold<sup>1</sup>, Mrs Ramona Clark<sup>1</sup>, Dr Sean Horan<sup>1</sup>, Dr Neil Tuttle<sup>1</sup>, Dr Andrea Hams<sup>1</sup>

<sup>1</sup>Griffith University, Southport, Australia

**Introduction:** Simulation-based learning activities (SBL) may aid in preparing physiotherapy students for the complexity of clinical placement, through immersive high-fidelity cases in safe learning environments. The aim was to evaluate students' perception of clinical preparedness pre- and post- a shorter three-day format SBL.

**Methods:** Cases in acute, rehabilitation or musculoskeletal clinical environments were implemented across three days to focus on teamwork, communication, and management of risk. Students completed de-identified pre- (n=254) and post- (n=122) surveys rating their perceived preparedness to commence clinical placement on a five-point Likert scale (strongly disagree =1, strongly agree =5). The 32-item survey included questions related to; confidence to conduct, manage and evaluate a patient assessment and treatment (questions 1 to 18), and perceptions of simulated learning (questions 19 to 32).

**Results:** Students' perceptions of preparedness post-simulation were significantly higher for all 32 items (Mann-Whitney U test  $p < 0.01$ ). The largest positive change in perceived clinical capabilities was for interpersonal skills. Specifically, students scored higher for speaking (from 1, 1 - 3 to 4, 4 - 5; median, interquartile range), listening (from 1, 1 - 3 to 4, 4 - 5), non-verbal cues (from 1, 1 - 3, to 5, 4 - 5) and professional interactions with patients (from 1, 1 - 3 to 5, 4 - 5). Student perception of simulation as a learning activity demonstrated the largest change for enjoyment, engagement, interest and attention (from 1, 1 - 3, to 5, 4 - 5).

**Discussion:** It is an expectation of clinical partners, and the universities responsibility, that students are appropriately prepared to support success on placement. Students view simulation as an engaging learning activity that improves their perception of placement preparedness. It is vital that students are prepared to 'hit the ground running' no matter their placement environment given the ongoing risk of reduced placement time that is occurring due to Covid-19.

### How can programmatic assessment principles be implemented within the limitations of resources and program/course structures?

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#### Introduction

Programmatic assessment principles, such as the abandonment of high-stakes single assessments and the surpassing of formative/summative dichotomy, are broadly recognised as beneficial in health professions education. However, “programmatic assessment is an assessment concept not a recipe” (Heeneman et al., 2021, p.1140) and it has been recognised that there are many practical and contextual implementation challenges, particularly when working within an established program.

#### Purpose

The Joint Medical Program (JMP) is a five-year undergraduate entry MD program, with a focus on of classroom-based learning in the first two years, including simulated learning of clinical skills. In 2023, we are seeking to incorporate the principles of programmatic assessment into our existing OSCEs (Objective Structured Clinical Examinations) model for first- and second-year students.

By doing so, we aim to enhance the learning value of these assessments and ensure that students demonstrate competency across a number of key skills prior to embarking on their clinical rotations.

However, to achieve this we must navigate several challenges, particularly in terms of the structure of the assessment timetable, its relationship to learning opportunities, and the impact on resourcing of staff and teaching spaces. In this session we hope to discuss our experience and compare with similar initiatives in other programs, to better understand the challenges and identify creative solutions that may assist educators in navigating these challenges.

#### Issues/Questions for exploration

Are less resource intensive standard setting procedures appropriate for lower stakes assessments?

How can we support meaningful remediation and student reflection within staffing limitations?

How can we encourage students to engage with assessment as an opportunity for learning rather than a punitive measure to ensure the opportunities established are taken up?

How can we maintain students' psychological safety while navigating to view assessment as a continuum from formative to summative?

#### References:

Heeneman, S., De Jong, L., Dawson, L., Wilkinson, T., Ryan, A., Tait, G., Rice, N., Torre, D., Freeman, A., van der Vleuten, C.(2021). Ottawa 2020 consensus statement for programmatic assessment – 1. Agreement on the principles. *Med Teach.* 43(10), 1139-1148. DOI:10.1080/0142159X.2021.1957088.



## **Inclusive Multiple Mini Interview (MMI) designs: feasible or a pipe dream?**

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<sup>1</sup>*Bond University, Robina, Australia*

### **Introduction/Background:**

Multiple Mini Interviews (MMI) are widely used for high stakes assessment of candidates' personal and professional behaviours for selection into Medical Programs and health professional education in Australia and across the globe. Established by McMaster University, the MMI was introduced to assess non-cognitive characteristics of potential students through a series of independent interviewers at different 'stations'. Overall, research shows that the MMI is more reliable than traditional interviews and has widely been adopted as best-practice. However, the MMI does pose a potential problem regarding inclusive practice. Are we inadvertently excluding excellent candidates because of entry design?

### **Purpose/Objectives**

The purpose of this session is to explore current practice in MMI with regards to inclusive practice and to identify future opportunities in Medical Program Admissions.

### **Issues/Questions for exploration OR Ideas for discussion**

What are the current admissions processes for MMI in relation to inclusive practice (accommodations, considerations, etc.)?

What processes might inadvertently exclude those with disability during the admissions process?

What are the barriers to achieving more inclusive practices?

What are the enablers to achieving more inclusive practices?

What evaluation processes and/or strategies can be implemented to determine if admission process changes are more inclusive?

What are the future opportunities of Health Professional Education providers with relation to MMI and inclusive practice?

### **References:**

<https://sds.ucsf.edu/sites/g/files/tkssra2986/f/aamc-ucsf-disability-special-report-accessible.pdf>

## Longitudinal empathy profile of medical students in Singapore: Lessons learnt

**Dr Dujeepa Samarasekera**<sup>1</sup>, Mr Su Ping Yeo<sup>1</sup>, Dr Shuh Shing Lee<sup>1</sup>, Prof Gominda Ponnampereuma<sup>2</sup>

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### Introduction

Nurturing undergraduate students in empathy is crucial in developing empathetic clinicians and ensuring quality patient care. Empathy has been observed to often decrease when medical undergraduates move to the clinical years, particularly in Western countries. However, empathy either remain similar or increases in many Asian medical schools. This study investigated the longitudinal empathy profile of medical students in Singapore.

### Methods

A quantitative study was conducted prior to COVID-19 involving the 5-year tracking of two cohorts of medical students who enrolled in 2013 and 2014 to the National University of Singapore. The Jefferson Scale of Empathy - Student Version was used. Analyses on the mean of the empathy level and individual factors, year-wise and gender comparison were conducted.

### Results

Average response rates for Cohort 1 and 2 were 68.1% (n=181-263) and 55.4% (n=81-265) respectively. No significant change in the mean empathy score across year of study was observed for both cohorts. For both cohorts, there was no significant change across year of study in the mean empathy score. Average scores were 113.94 and 115.66 and ranged from 112.74 to 118.42 for both cohorts. Analysis of subcomponents of empathy only showed a significant difference for Cohort one Factor 1 (Perspective Taking) and Factor 3 (Standing in Patients' Shoes) across the study years.

### Discussion

Possible explanations for the findings include the socio-cultural factors in Singapore such as the deep-rooted heritage and inherent cultural values, which possibly led to the confluence of Asian and Western cultures and mean empathy scores that is in between that of most medical schools in the West and East.

Moreover, educational interventions such as the Longitudinal Patient Experience programme, clerkships in certain specialties in Year 4 (e.g. geriatrics) might have sustained or increased students' empathy. Schools can consider planning appropriate and timely interventions aligned with the cultural values.

# Australian medical regulations and the use of eHealth data analytics to strengthen Continuing Professional Development (CPD). A policy implementation gap analysis with the Australian Specialist Medical Colleges

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## Background

Starting from 2023, Australian medical practitioners must meet mandatory CPD Standards to renew their registration to practice medicine [1]. Among other requirements, they are asked to undertake “Measuring Outcomes” CPD activities for a set minimum hours per year. According to the regulatory frameworks developed by the Medical Board of Australia (MBA), these activities require the analysis of patient health data to be completed and, ideally, the use of large eHealth datasets and big data analytics technologies for better insights [2]. Australian Specialist Medical Colleges are currently working on the implementation of these requirements - even though many of them have voiced their concern around eHealth data accessibility and outcome measurement challenges.

## Aim

This study aims to identify the factors that can be addressed by the Colleges to successfully implement MBA regulatory policies and foster data strengthened CPD. A policy implementation gap analysis was conducted together with participating Colleges. Specifically, semi-structured interviews were conducted with the teams responsible of CPD Standards implementation with the aim of identifying existing barriers and challenges.

## Discussion

Historically, most Colleges have focused on trainees’ education and curricula, considering original research on CPD of secondary importance. Also, Colleges’ CPD units currently dedicate time and resources almost exclusively to the development of traditional educational activities. Considering the ongoing shift in CPD requirements, both these practices have created operational barriers for a smooth change in CPD management and development. In addition to this, some internal environmental factors □ such as organisational operations, structure, and culture □ are hindering Colleges’ efforts in implementing the MBA standards and promoting data-driven CPD. Final considerations and related recommendations will be made at study completion.

## Ideas for further discussion

Policy implementation barriers and organisational culture and operations are delaying the use of eHealth data analytics for CPD purposes in the Australian landscape.

## References

[1] Medical Board of Australia (MBA). Registration standard: Continuing professional development. 2021. Available at:

<https://www.ahpra.gov.au/documents/default.aspx?record=WD21%2f31046&dbid=AP&checksum=TqPI98CYQYIlvPkGwiAz%2fw%3d%3d>. Accessed December 6, 2022.

[2] Medical Board of Australia (MBA). Building a Professional Performance Framework. 2018. Available at:

<https://www.medicalboard.gov.au/documents/default.aspx?record=WD17%2f24293&dbid=AP&checksum=GO%2b6DZkJeoSSVvg%2fxcDoMQ%3d%3d>. Accessed December 7, 2022.

## GP registrars' perception of cultural safety and Aboriginal and Torres Strait Islander patients

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<sup>1</sup>Rural Medical Education Australia, Toowoomba, Australia, <sup>2</sup>University of Southern Queensland, Toowoomba, Australia, <sup>3</sup>James Cook University, Townsville, Australia, <sup>4</sup>Anton Breinl Research Centre for Health Systems Strengthening, Australia, Townsville, Australia, <sup>5</sup>Australian Institute of Tropical Health and Medicine, Townsville, Australia, <sup>6</sup>Griffith University Rural Clinical School, Toowoomba, Australia, <sup>7</sup>Adelaide University, Adelaide, Australia

### Introduction:

Understanding how general practice (GP) registrars define, develop, and perceive cultural safety, could assist identifying areas where cultural safety is lacking or needs improvement.

### Methods:

Our research explored the following questions:

1. How do GP registrars define and develop cultural safety?
2. What do registrars view as unique to consultations with Indigenous patients?
3. Which of the components of the Australian Health Practitioner Regulation Agency (AHPRA) definition of cultural safety are identifiable by a GP registrar?

All GP registrars undertaking training with JCUGP were invited to participate in the study.

Data collection was in three parts:

- 1: Survey with demographic details, experience, cultural capability measurement tool, measurement of attitude change scale and self-reflection and insight scale
- 2: Semi-structured interviews exploring registrar understanding of cultural safety
- 3: Detailed exploration of registrars' perception of key areas identified in the cultural safety literature

Survey data was descriptively analysed. Interviews were studied using a content analysis approach.

### Results:

26 registrars completed the survey. 16 registrars completed both the survey and the interview. Most registrars described cultural safety as being aware of and respecting cultural beliefs and customs. Registrars described four main factors that contribute to their development of cultural safety: shared or similar life experiences, cultural safety training, experiential learning, and critical reflection. Most registrars considered that a Western medical model of health care did not meet the needs of patients. However, nearly half of the registrars indicated they would treat Aboriginal and Torres Strait Islander patients the same as all other patients. No registrars referred to the AHPRA consensus state of cultural safety or explicitly indicated that cultural safety should be determined by Aboriginal and Torres Strait Islander people.

### Discussion:

This study identifies a gap between registrars' perception of cultural safety compared to the AHPRA definition.

## Developing Professionalism in a Pandemic: A Qualitative Exploration of the Impact of COVID-19 on Professional Identity Formation in Medical Students

**Dr Fiona Moir**<sup>1</sup>, Dr Rebecca Gandhi<sup>1,2</sup>, **Dr Yan Chen**<sup>1</sup>, Mr Matt Yang<sup>1</sup>, Dr Nick Hoeh<sup>1</sup>, A/Prof Andy Wearn<sup>1</sup>

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### Introduction

As students navigate their journey from layperson to graduate health professional, they develop their professional identity through active learning, interactions with others and observing role-models (Monrouxe 2016). The COVID-19 pandemic disrupted all of these factors, affecting students' professional identity formation (PIF). This study aimed to examine the effect of the COVID-19 pandemic, and associated 'lockdowns', on PIF in junior medical students.

### Methods

Medical students in their second year of study at the University of Auckland were invited to reflect on their identity development following a first year of significant disruption. A phenomenological position was adopted, with data collected using focus group methodology. We aimed to draw out the lived experience of PIF. Analysis used inductive coding to identify themes, and was considered in the light of PIF.

### Results

Three focus groups were held, with four themes identified: Connectivity, Wellbeing, Expectations, and Personal Development. Within connectivity, the experiences of isolation, lack of in-person contact and active learning, were all aspects which might negatively impact PIF. There is an intersection between wellbeing and PIF, with resilience-building being a particularly important trait. The high and unmet expectations were part of the students' experience, but not directly related to PIF. However, grappling with loss of control and their need for 'meaningful individualised support' does relate to aspects of PIF, namely issues of autonomy, belonging and role-modelling. The personal growth described by the students demonstrates reflection and a desire to thrive through crisis.

### Discussion

Our data shows that identify formation was impacted by the effects of the pandemic. Students revealed an awareness of this, along with action or inaction taken by themselves or others to address it, and considered its impact. Students' reflections, along with the types of future experience required to potentially help them get back on track will be discussed.

Monrouxe, L. (2016). Theoretical insights into the nature and nurture of professional identities. *Teaching medical professionalism*, 2, 37-53.

## Medical specialists' participation in wellbeing education activities: Analyses of the first 12 months of CPD data

**Nadja Kaye<sup>1</sup>**

<sup>1</sup>*Australian and New Zealand College of Anaesthetists (ANZCA), Melbourne, Australia*

### Introduction

Throughout the medical skill acquisition cycle – and indeed the entire career cycle – medical specialists' health and wellbeing may suffer as they acquire and maintain the skills to help others. In 2021, the Australian and New Zealand College of Anaesthetists (ANZCA) and Faculty of Pain Medicine (FPM) Continuing Professional Development (CPD) program introduced the *CPD Wellbeing Education Session* activity, a project which acknowledges the bi-directional relationship between doctors' wellbeing and patient care<sup>1</sup>. The aim of the project was to promote awareness among anaesthesia and pain medicine CPD participants of the need to maintain and improve their health and wellbeing and thereby assist them to provide the best patient care.

### Methods

All eligible CPD wellbeing education activities logged by CPD participants in their online portfolio for the 12-month period, April 2021-2022, were analysed. Eligible wellbeing activities met the following two criteria: (i) the activity maintained or improved wellbeing through structured educational sessions and (ii) participants provided sufficient detail to identify the wellbeing activity and its appropriateness. Content analyses identified major categories of wellbeing activities and major topics within each category.

### Results

Ninety-three percent ( $n=992$ ) of wellbeing activities were eligible for analyses. Three major categories of activities were identified: (1) Mental wellbeing (71% of eligible activities), (2) Professional/workplace wellbeing (44%) and, (3) Physical wellbeing (17%). Major topics within each category provided insight into CPD participants' understanding of each wellbeing facet. For example, major topics within mental wellbeing were: *emotional wellbeing*; *interventions* to assist wellbeing; *cognitive re-appraisal* of failure; and *clinical manifestations/harmful behaviours* (e.g., burnout, suicide).

### Discussion

CPD participants' understanding of wellbeing included psychological, social, physical, and environmental components, which is consistent with Wilson et al.'s (2017) definition of wellbeing<sup>2</sup>. Future research could explore how these results could promote awareness beyond anaesthesia/pain medicine of the need to maintain/improve doctors' health and wellbeing.

### References

1. Australian and New Zealand College of Anaesthetists (ANZCA). (2022). *Wellbeing CPD education sessions activity*. April 22, 2021. <https://www.anzca.edu.au/news/cpd-news/new-wellbeing-cpd-education-sessions-activity>
2. Wilson, G., Larkin, V., Redfern, N., Stewart, J., & Steven, A. (2017). Exploring the relationship between mentoring and doctors' health and wellbeing: A narrative review. *Journal of the Royal Society of Medicine*, 110, 188-197. <https://doi.org/10.1177/0141076817700848>

## Mental wellbeing in allied health academic staff: where to next?

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<sup>1</sup>University of Queensland, St Lucia, Australia, <sup>2</sup>Bond University, Gold Coast, Australia, <sup>3</sup>University of Tasmania, Hobart, Australia, <sup>4</sup>Central Queensland University, Brisbane, Australia

### Introduction

The last decade has seen an escalation of mental health concerns in academic staff to crisis levels internationally (Urbina-Garcia, 2020). This has been compounded by: the COVID pandemic; changes in market-orientation of institutions and competition; increasing job demands and performance expectations causing work-life conflict; precariousness of work; technological advances; increasing pastoral care of student; reduction in autonomy, and lack of leadership support (Kinman, 2019). In Australia, there has also been a steep increase in: staff to student ratios; duty of care secondary to greater internationalisation of cohorts, and student expectations of teaching quality. This has led to high levels of stress, burnout, and attrition of staff in the academic arena (Urbina-Garcia, 2020).

### Aims

This presentation will explore this problem, using frameworks, current interventions, and considering where to next for mental health solutions in higher education.

### Discussion

Despite the large body of research indicating the problem, studies have only explored preliminary solutions and possible interventions for supporting academic wellbeing. Health initiatives have predominately focused on student mental health and tend to be reactive. Therefore, further work using a whole university approach is required.

### Ideas for further discussion

Few studies have focused on the casual academic staff within allied health education, and this may form a population of interest given the high levels of casualisation and emotional labour in the health professions.

### References

- Kinman, G. (2019). Effort-reward imbalance in academic employees: Examining different reward systems. *International Journal of Stress Management*, 26(2), 184.
- Urbina-Garcia, A. (2020). What do we know about university academics' mental health? A systematic literature review. *Stress and Health*, 36(5), 563-585. <https://doi.org/https://doi.org/10.1002/smi.2956>

## How does teaching in a near-peer program influence junior doctors' perceptions of their clinical ability, professional qualities and attitudes towards medical education?

**Dr David Medveczky**<sup>1,2</sup>, Dr Alicia Mitchell<sup>1,2</sup>, Dr Eleonora Leopardi<sup>2</sup>, Associate Professor Amanda Dawson<sup>1,2</sup>

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### Introduction

There are established self-perceived benefits for tutors in 'resident-as-teacher' programs internationally (1), but less is known about the Australian experience. Since 2016, the Near Peer Medical Teaching (NPMT) program has been run by junior doctors in conjunction with the Joint Medical Program on the Central Coast north of Sydney. This study aimed to evaluate self-perceived improvements in knowledge and professional development qualities of tutors, through the framework of evaluative judgement (2). We additionally investigated tutors' perspectives regarding medical education and desires for continuing involvement in teaching.

### Methods

Following ethics approval, all NPMT tutors (2016-2023) were asked to complete an online anonymous questionnaire hosted on REDCap. Visual analogue scales (ranged 0 – 100) were used to answer questions. Means and 95% confidence intervals were calculated using SPSS and are presented as (mean, 95%CI).

### Results

32 tutors responded to the questionnaire. 75% of tutors were PGY2 or less. 93% of tutors had previous teaching experience and 31% participated in the program themselves as a student. Bedside teaching and tutorials were the most commonly undertaken activities. Overall, tutors reported that they benefited from and enjoyed the program. Respondents indicated significant self-perceived improvements in clinical knowledge (71.7, 65.7-77.7), communication (75.5, 68.9-82.2) and feedback delivery (75.0, 68.3-81.8) (0=no improvement, 100=strong improvement). Respondents reported a substantial desire to make teaching a major part of their career (84.9, 80.1-89.7) (0=no likelihood, 100=strong likelihood), and that their experience in the program significantly influenced this desire (74.6, 65.6-83.6) (0=no influence, 100=strong influence).

### Discussion

These results suggest that our near peer program is associated with significant perceived benefits to tutors and influences desire for ongoing involvement in medical education. Collaboration between the undergraduate program and hospital network provides a sustainable framework for empowering medical students to transition to educators early in their clinical careers.

1. Hill AG, Yu T-C, Barrow M, Hattie J. A systematic review of resident-as-teacher programmes. *Medical Education*. 2009;43(12):1129-40.
2. Tai J, Ajjawi R, Boud D, Dawson P, Panadero E. Developing evaluative judgement: enabling students to make decisions about the quality of work. *Higher Education*. 2018;76(3):467-81.



## Turning the tide: Using a novel conceptual framework to evaluate your start-up plans for a new education or health initiative

**A/prof. Sneha Kirubakaran**<sup>1,2</sup>, A/Prof. Koshila Kumar<sup>2</sup>, Emeritus Prof. Paul Worley<sup>2,5</sup>, Dr Joanne Pimlott<sup>2,3</sup>, Prof. Jennene Greenhill<sup>2,4</sup>

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### Introduction/Background

Establishing new health services or educational programs can involve many complex political, social, economic, educational, and organisational considerations. The process requires intricate negotiations with multiple stakeholders and can be riddled with obstacles and problems.

A novel conceptual framework for successfully navigating the establishment gauntlet has been developed by the primary author through her doctoral research on successfully establishing new medical schools in medically under-served areas. The Eight C's Framework (8CF) is based on Institutional Entrepreneurship theory and Critical Realist Multiple Case Study research spanning three continents. It is a multi-dimensional, interleaved framework that takes a system-wide view to starting up a new educational/health initiative. 8CF describes that new ventures can be successfully set up when "*Catalysts act within their Contexts to undertake various tasks of Conducting, Convincing, Collecting, and Connecting in order to produce desired Consequences and overcome Challenges*". This workshop will use the elements of 8CF to allow participants to evaluate their own plans or processes to start up a new education or health undertaking. It will allow them to strategically identify innovations, new solutions, gaps, or potential problems for their project.

### Purpose and outcomes

Academics, clinicians, administrators, politicians, and community members, who are involved in the planning or set up of a new educational or health venture should participate.

By the end of this workshop, participants will be able to:

- evaluate their own project processes for setting up a new health/educational initiative using the author's theory-based and empirically-supported novel Eight C's Framework for successful establishment
- critique 8CF as an evaluation tool for the efficient and effective establishment of a new health/educational venture
- identify the value of theoretical concepts (such as Institutional Entrepreneurship, field structure, human agency, power dynamics, political diplomacy, and social accountability) to drive practical strategic action when setting up new ventures
- gain new insights into possible innovations, new solutions, gaps, or problems for their own new educational/health project

### **Distress and wellbeing in psychology trainees: A systemic problem**

**Associate Professor Melissa Davis<sup>2</sup>, Dr Alyssa Sawyer<sup>1</sup>, Dr Amanda Taylor<sup>1</sup>**

*<sup>1</sup>The University Of Adelaide, Adelaide, Australia, <sup>2</sup>Edith Cowan University, Perth, Australia*

#### **Introduction**

Psychology training involves quota-based progression from undergraduate to postgraduate study which contributes to a culture of competitiveness that may be a risk factor for psychological ill-health in aspiring psychologists. The objectives of this research are to explore evidence related to psychological distress as a systemic issue in psychology training and to compare the focus on student wellbeing as evidenced by professional accreditation requirements for psychology and other health professions.

#### **Methods**

The paper presents on three studies. The first is a systematic review of 41 studies that investigated psychological distress and wellbeing in psychology undergraduate and postgraduate students. The second is a qualitative study involving thematic analysis of text responses of 67 postgraduate psychology students on their views of the support for psychological wellbeing within their program. The final study involves a desktop review of professional accreditation standards for nine health professions, including psychology.

#### **Results**

Preliminary findings of the systematic review indicate that psychology students show tendencies toward higher distress than the general population and students from other health disciplines. Postgraduate psychology students expressed a diverse views about the culture of wellbeing in their programs, ranging from that wellbeing is valued, modelled and supported by staff through to the demands and expectations of professional training being incompatible with wellbeing. Results of the desktop review of accreditation standards show that the psychology accreditation requirements are significantly less developed for mandating training for students to develop their competencies in managing self-care.

#### **Discussion**

Our findings support the need for greater attention to wellbeing and self-care within the training of psychologists. Maintaining personal wellbeing is an ethical and personal imperative in work as a psychologist. Other disciplines, particularly medicine and social work, are advanced compared with psychology in accreditation requirements to support self-care and wellbeing from the start of undergraduate training.

## Trends in health professional education research: A state-of-the-art review

**Dr Mahbub Sarkar**<sup>1</sup>, Charlotte Barber<sup>1</sup>, Taylor Reynen<sup>1</sup>, Poojani Pathirana<sup>1</sup>, Eleni Proimos<sup>1</sup>, Prof Charlotte Rees<sup>1,2</sup>, Prof Claire Palermo<sup>1</sup>

<sup>1</sup>Monash University, , Australia, <sup>2</sup>The University of Newcastle, , Australia

### Introduction/background:

Empirical research papers published in health professions education research (HPER) journals vary in terms of topics and the methodological approaches used. Methodologies and methods used in the papers are typically aligned with scientific (quantitative), interpretivist (qualitative), and pragmatic (mixed methods) approaches. This study aimed to identify trends in research topics and methodologies used in empirical studies published in reputable HPER journals over the past 20 years.

### Methods:

Underpinned by relativism and subjectivism, this study employed a state-of-the-art review approach.<sup>1</sup> Empirical studies published in five Q1 HPER journals, defined by InCites-Clarivate, (Academic Medicine, Advances in Health Sciences Education, Medical Education, Medical Teacher, and Nurse Education Today) were included from three sample years across three decades (2000, 2010, and 2020). Each study was coded for demographics (e.g., country of origin), topic area, and methodological approach, including philosophical positioning, study design, and methods. Data were descriptively analysed using SPSS.

### Results:

A total of 1128 empirical studies were published across the three time-points, with the majority from North American and European contexts. More papers were published in recent years, with publications doubling in 2020 (n=489) compared with 2000 (n=225). The top three research priority topics included: (1) effective teaching methods; (2) developing required skills for practice; and (3) fitness of curriculum for purpose. Over half of the methodologies were quantitative, followed by qualitative, and mixed methods. The use of qualitative methodologies and the reporting of philosophical positioning (mostly in qualitative studies) has gradually increased over time. Many studies, however, still fail to report key markers of methodological quality (e.g., data integration in mixed methods studies).

### Discussion:

The number of HPER publications has grown in recent years, as has the articulation of philosophical positioning underpinning research methodologies. However, this review reinforces the need to include methodological appraisal reports within manuscripts to maximise methodological transparency.

### References

<sup>1</sup>Barry, E.S. et al. (2022) State-of-the-art literature review methodology: A six-step approach for knowledge synthesis. *Perspect Med Educ* 11, 281–288. <https://doi.org/10.1007/s40037-022-00725-9>

## Navigating diversity in adversity: compensating for local COVID-19 impacts while delivering bi-national clinical examinations

Ms Renate Fellingner<sup>1</sup>, **A Curtis Lee (PhD)**<sup>1</sup>, Dr Imogene Rothnie (PhD)<sup>1</sup>, Ms Libby Newton<sup>1</sup>, Associate Professor Elizabeth Whiting<sup>1,2,3</sup>

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### Introduction/Background

COVID-19 impacts and responses varied across Australian and Aotearoa New Zealand jurisdictions. This context led the Royal Australasian College of Physicians (RACP) to adjust the delivery of bi-national clinical examinations whilst maintaining the validity and robustness of assessment processes.

### Aim/Objectives

This paper showcases the tension between drivers to deliver bi-national clinical examinations in a consistent format and the need to accommodate regional variations in COVID-19 impacts, how to navigate this tension and what to learn from it. The objectives are to provide an insight into the experiences and lessons learnt by one bi-national health professional education organisation, and to share strategies to futureproof assessments.

### Discussion

The RACP undertook a proactive planning process to adapt its examinations. Strategies were collaboratively developed and refined with assessment experts and local stakeholders to ensure effective navigation of the tension to deliver annual bi-national clinical examinations for ~1300 candidates across diverse COVID-19 contexts. An array of examination modifications were selectively implemented to accommodate local needs yet maintain test integrity. These included modularising the exam, staging exam modules across multiple sittings and hybridising delivery methods (virtual and face-to-face assessments), bolstered by digital marking innovations.

The examinations were psychometrically consistent. Feedback from candidates and examiners was mostly positive regarding the acceptability of the selected adaptations. Candidate feedback following the examinations confirmed regional and cohort variations in COVID-19 impacts on learning opportunities and examination preparation, corroborating the RACP's approach to locally adjusting examination delivery.

### Ideas for further discussion

The diversity of the adversity experienced throughout the COVID-19 pandemic and relative success of our locally tailored adaptations to examination delivery underscore the importance of robust yet flexible assessment. Following this experience, the RACP translated its learnings into policy reform. Other health professional education organisations may similarly benefit from establishing assessment frameworks that are sufficiently flexible to mitigate future disruptions while maintaining assessment validity and fairness.

## Driving learning through program-level assessment planning removes the negative impact of artificial intelligence.

**Mr Nicholas Charlton<sup>1</sup>**, Associate Professor Richard Newsham-West<sup>2</sup>

<sup>1</sup>Griffith University, Southport, Australia, <sup>2</sup>La Trobe University, Bundoora, Australia

### Introduction

The rise of artificial intelligence (AI) in higher education is driving concern for the integrity of assessments. Programmatic assessment (Dijkstra et al., 2010) shifts students learning to a holistic view and graduate attributes, so they do not see each assessment as an individual hurdle. It also removes the regurgitation of knowledge to the use of skills and their application therefore downplaying the impact of AI on assessment outcomes. However, the uptake of program-level assessment planning has not progressed in the last decade, due to resource constraints, workload pressures on academics and the structural arrangement of programs. The objective of this research was to identify what assessment practices academics recognised as important at the program-level.

### Methods

Grounded Theory was the methodological approach used in this research. Semi-structured interviews were conducted with 18 Associate Deans and Program Directors at seven universities in the allied health, science and biomedical science disciplines. Thematic analysis was conducted to reveal the assessment practices that would support program-level assessment planning.

### Results

The academics identified that the alignment of assessment tasks to course learning outcomes is fundamental to support students learning, but not program learning outcomes. Furthermore, the inclusion of a range of assessment tasks that are authentic and provide relevance to their future profession are needed. The benefit of ongoing feedback and the principles of feedforward and feedback spirals are integral to encourage self-directed learning from assessment tasks.

### Discussion

The purpose of program-level assessment planning' is to arrange assessment items within the program in a holistic way to support learners to develop knowledge and skills sequentially so that assessment drives learning. A focus on authentic assessment tasks that align to program learning outcomes provide students with an incentive to learn from their assessments and develop the employability skills and core competencies valued by industry.

### References

Dijkstra, J., Van der Vleuten, C. P., & Schuwirth, L. W. (2010). A new framework for designing programmes of assessment. *Advances in Health Sciences Education*, 15(3), 379-393.  
<https://doi.org/10.1007/s10459-009-9205-z>

## Putting students in the driver's seat by using an assessment portfolio available 24/7

**Professor Catherine Dean**<sup>1</sup>, Ms Hayley Harris<sup>1</sup>, Professor Chris Hughes<sup>1</sup>, Mr Domenico Garzo<sup>1</sup>, Professor Patrick McNeil<sup>1</sup>  
<sup>1</sup>*Macquarie University, Macquarie Park, Australia*

### Introduction

Constructive alignment of course, unit and assessment components to each other and to regulatory, curricula and professional requirements underpins best practice in course design. However, this alignment is often invisible to students as universities focus on units. This project aimed to describe the development and implementation of a course-level assessment portfolio in the Macquarie MD and to quantify the amount of self-directed learning and the graduate outcomes.

### Methods

The course is organised into two 2-year stages. Outcomes are expressed through a capability framework comprising four graduate capabilities, each having two aspects and defined expectation standards for each stage. Most assessments are graded on a 4-point letter scale anchored to end-of-stage expectations. The assessment of Entrustable Professional Activities (EPAs) is embedded in each stage and entrustment is quantified by the level of supervision required. Assessment data is stored in the student's online portfolio built using the Office 365 tools and accessible 24/7, with data summarised on dashboards presented chronologically and mapped to capability aspects and EPAs. Traffic lights provide an overview of development across the course. Portfolio data were analysed descriptively.

### Results

Data were extracted from the portfolios of all (104) graduates of the course. All students undertook additional assessments to strengthen their evidence for capability and EPA development. On average, students completed 119% (SD 6) of the required number of assessments and 107% (SD 3) and 130% (SD 11) for stages 1 and 2 respectively. Additionally, all students met all expectations for capability aspects and EPAs.

### Discussion

Using a capability framework to explicitly communicate the constructive alignment - between course, unit and assessment level - as well as giving students access to their assessment data is a powerful way to put students in the drivers' seat. Adoption of this approach in other health courses may be beneficial.

## **On the same page: Creation and application of an inter-disciplinary, case-presentation rubric.**

**Associate Professor Lucy Gilkes<sup>1</sup>**, Ms Grace Mullen<sup>1</sup>

<sup>1</sup>*University of Notre Dame Australia, Fremantle, Australia*

### **Introduction**

Despite the ubiquitous presence of the case presentation in clinical environments students often struggle with case presentation skills due to lack of clarity and consistency from clinician supervisors who may not identify student need for structural rules. (Green et al, 2009).

### **Methods**

A rubric for case presentations was developed with input from all discipline leads at UNDA Fremantle. Through an iterative process a consensus was reached on the final rubric. During their GP rotation, in their first clinical year of a 4-year MD, students prepared a patient case presentation using the rubric as guidance and presented their case to peers, giving peer feedback using the rubric.

Participating students completed a Qualtrics questionnaire of Likert questions and free text responses before and after the teaching session. Questions related to both case presentations and peer feedback and assessed their feelings and confidence relating to these educational activities generally and more specifically regarding the new case presentation rubric.

### **Results**

Data collection will be completed in April 2023. In preliminary data, the majority of the 34 participating students rated the case presentation template and peer feedback as useful. Paired data indicates that student confidence in giving a case presentation and in giving feedback to peers increased following the session. Free text analysis shows many positive comments regarding the usefulness of the rubric including the structure, ease of understanding, simplicity, clarity, and holistic range of content.

### **Discussion**

Students describe benefits both for preparing the student's own presentation and giving a framework to guide students when giving peer feedback. Many students commented that they would have found the session more valuable if it had been given earlier in their clinical curriculum to prepare them for case presentations in their first clinical placement.

## What factors promote and mitigate against failure to fail in vocational medical training?

**Ms Salma Nasimi<sup>1</sup>**, Associated Professor Kate Reid<sup>1</sup>, Dr Cate Scarff<sup>1</sup>

<sup>1</sup>*University Of Melbourne, , Australia*

### **Introduction:**

'Failure to fail', a phenomenon whereby assessors award passing grades to students who do not meet required standards, is a concern in all areas of health professional education. In a vocational training context, where medical professionals engage in independent practice with patients, the outcomes of failure to fail can be more profound than in other educational contexts. The reasons for failure to fail have been explored in many health professional settings, but the literature is limited within vocational training. This presentation presents the findings of a narrative literature review which explored the published literature on failure to fail in vocational trainees to identify the factors that promote and mitigate against failure to fail for vocational medical trainees.

### **Methods:**

Using a systematic approach to explore the literature, an initial search of the Ovid Medline, Embase and APA PsychInfo data bases was undertaken in June 2022, using search terms related to failure to fail and underperformance in the context of vocational medical trainees. Searching identified 200 publications; subsequent review of abstracts and full-text articles identified nine publications that met the inclusion criteria for the review. The data extracted were analysed thematically. Three themes were identified that described how failure to fail is promoted in vocational training and two themes were identified that mitigated against it.

### **Results and Discussion:**

The themes identified as factors which promote failure to fail were: repercussions assessors may face if they should fail a trainee, systemic barriers to failing trainees (e.g. a lack of training) and the emotional projection of the assessors. Themes that mitigated against failure to fail were: assessors feeling a sense of duty to uphold the reputation of medicine, and systemic enablers (e.g. available remediation). The themes identified highlight the challenges of failure to fail and supports the need for development of multifaceted solutions. Addressing failure to fail is a priority for health professions education in order that doctors in training may receive the feedback they require to support their development into the best clinicians possible. The results of this study provide direction on key areas to target to minimise the occurrence of failure to fail in the vocational training context.



## Innovations in Feedback to Students and Examiners: Graphics for Growth

**Dr Vikki O'Neill<sup>1</sup>**, Dr Kathy Cullen<sup>1</sup>

<sup>1</sup>*Queen's University Belfast, Belfast, United Kingdom*

### **Introduction/Background**

In the ongoing drive towards 'assessment for learning', feedback plays a crucial role, both in terms of reinforcing and encouraging areas of good performance whilst also identifying and correcting areas of poor performance. Undergraduate Medical students regularly take two types of summative assessment: Single Best Answer (SBA) Multiple-Choice Questions (MCQs) and Objective Structured Clinical Examinations (OSCEs). Typically, students would only receive their final mark post-assessment, with detailed feedback reserved for those in the bottom percentile of their cohort, usually bottom 5%. The National Student Survey (administered to all UK medical students in their final year) frequently highlights students' satisfaction with 'Assessment and Feedback' as being relatively low compared to other areas of satisfaction.

### **Aim/Objectives**

Following consultations with both staff and students, an innovative and comprehensive feedback report, individualised for each student, was developed. The report, automatically sent out to all the student's post-assessment, contained a variety of key features, including crucial learning objectives clustered into domains. Furthermore, through the process of developing detailed feedback, staff are ensuring that their assessments are refined, of good quality, and relevant to the learning outcomes of the course.

### **Discussion**

Three key themes emerged; students found the visual and appealing nature of the report easy to understand, the provision of learning outcomes allowed for identification of areas of personal strength and weakness, and the ability to compare performance to their cohort was useful in terms of tracking assessment performance. The project has made a significant impact on the Undergraduate Medical Curriculum; never before has such detailed feedback been provided on assessments. Students benefit significantly from personalised feedback; by supporting students with tools to consolidate their learning, developing deeper knowledge, we can help them to achieve more. Moreover, providing detailed feedback also gives students reassurance and encourages them to engage more with assessment processes.

### **Developing a community of practice to support clinical facilitators preparing student nurses for practice.**

**Dr Felicity Walker**<sup>1</sup>, Dr Nicola Whiteing<sup>1</sup>, Assoc Prof Christina Aggar<sup>1</sup>

<sup>1</sup>*Southern Cross University, Bilanga, Australia*

#### **Introduction**

Clinical placement is an essential element of student preparation for nursing practice. High-quality clinical facilitation has a significant impact on student learning and placement satisfaction. This study aimed to explore the role of university-employed clinical facilitators and their perspectives on enhancing clinical facilitation and student learning on placement.

#### **Methods**

An exploratory, descriptive research design was used to examine the perspectives of university-employed clinical facilitators working in regional New South Wales. Semi-structured, individual interviews were used to collect the experiences of a purposeful sample of ten university-employed clinical facilitators. Data was thematically analysed.

#### **Results**

Six key themes were identified; 1) relationships at the core of quality, 2) a culture of commitment to student learning, 3) connection to the curriculum, 4) no single best model, 5) safety at the heart of assessment, and 6) empowering growth and development. In addition, three sub-themes were identified; building community and connection with clinical facilitators, building rapport and trust with nurses, and developing an understanding of the individual student.

#### **Discussion**

Supporting, teaching, and supervising students on clinical placement is a multi-stakeholder team responsibility. Clinical facilitators rely heavily on the nurses in the clinical setting and the students to actively engage in and give feedback on learning experiences during clinical placement. Building rapport and an understanding with managers, nurses, and students is key to providing effective clinical facilitation. Performing the clinical facilitation role provides opportunities for personal growth and development. It also enables nurses an opportunity to give back to the profession. However, clinical facilitators often work autonomously and sometimes feel isolated, unprepared, and disconnected from the ward and curriculum. This study found that clinical facilitators wanted to be part of a community of practice and have the opportunity to connect, collaborate, and moderate with other clinical facilitators and academic staff to help them improve their preparation of students for practice.

## Final Year Medical Students' self-reported goals towards Intern Preparedness

Dr Pieter Jansen<sup>1</sup>, Dr Asela Olupeliyawa

<sup>1</sup>*The University of Queensland, Brisbane, Australia*

### **Background:**

The final year of study is a crucial year for medical students in their transition to internship. To support this transition, it is important to identify and address any gaps in "Intern Preparedness". Facilitating students to self-identify their learning needs may be particularly useful at this stage of learning. The University of Queensland Doctor of Medicine (MD) Program final year includes a six-week Elective. During the Elective, students formulate their personal learning goals through a standardised learning plan which they reflect on at the end of the elective. We developed a list of Intern Preparedness competencies based on the Medical Deans Australia and New Zealand Guidance Statement: Clinical Practice Core Competencies for Graduating Medical Students (2020). From 2023, we included a learning plan section for students to identify and specify own goals related to these competencies.

### **Aims:**

To evaluate medical students' self-reported learning goals and progress related to Intern Preparedness in their final year.

### **Discussion:**

Learning plans and Reflective Essays from MD students enrolled over Semester 1, 2023 will be reviewed for their learning goals and progress related to Intern Preparedness. Of the 197 students enrolled in this semester, data from students who provide informed consent will be included. Responses will be grouped in alignment with core competencies and thematically analysed.

### **Issues/questions for exploration:**

This study will help identify the self-reported learning needs of final-year medical students related to Intern Preparedness and their development in these. In addition to informing the design of competency-specific educational interventions in the program, guiding students to formulate their personal learning goals and reflect on their progress may in itself be an intervention to foster lifelong self-directed learning and development.

## Single facilitator higher fidelity simulation

**Dr Pip Wills**<sup>1,2</sup>, Associate Professor Leonie Griffiths<sup>1,2</sup>

<sup>1</sup>University Of Melbourne, Melbourne, Australia, <sup>2</sup>Northern Hospital, Epping, Australia

### Introduction/Background

Many health professions educational facilities have access to higher fidelity simulation mannequins and educators are keen to use them. However, best practice guidelines and research for this type of simulation education generally describes or implies, multiple faculty involvement (Barry Issenberg), which is not feasible for many educators given resource constraints. There is little research on single facilitator higher fidelity simulation, what the barriers are, does it benefit students, and what strategies can be used to improve best practice? Given these single facilitators often work in relative isolation, they are navigating this role alone. Many of us have faced these issues. Together, we can share ideas and develop strategies for practical use.

### Purpose/Objectives

To discuss the issues around single facilitator higher fidelity simulation, and strategies to improve best practice in this area.

### Issues/Questions for exploration OR Ideas for discussion

Should single facilitators even be using higher fidelity simulation? Is it feasible? Does it benefit students? What are the barriers? What strategies can we use to improve best practice in this area?

### Reference

Barry Issenberg, S., MCGAGHIE, W. C., PETRUSA, E. R., LEE GORDON, D., & SCALESE, R. J. (2005). Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. *Medical teacher*, 27(1), 10-28.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Creativity in Context – what are the research skills expected of graduates in the health professions?

**Dr Joanne Hart<sup>1</sup>, Prof Diane Eley<sup>2</sup>, Prof Wendy Hu<sup>3</sup>**

<sup>1</sup>University Of Sydney, Sydney, Australia, <sup>2</sup>University of Queensland, Brisbane, Australia, <sup>3</sup>Western Sydney University, Sydney, Australia

### **Introduction/Background**

Graduates in medicine and the health professions are expected to be research literate and become evidence-based practitioners. How this is achieved varies greatly between educational programs, depending on institutional context, mission and research teaching capacity (1). Such variability arises when it is not clear what *should* be expected of graduates, leading students, supervisors, teachers, and program directors to creatively deliver what they *can* teach and learn in their context, rather than a purposively designed curriculum.

### **Aim/Objectives**

This presentation investigates pedagogical, institutional mission, researcher, health service and community perspectives, as well as student expectations for career and progression – using case studies to illustrate what, how and why research is taught in health professions programs in Australia and New Zealand.

### **Discussion**

We will provide exemplars of current research teaching models in different medical programs to explore perspectives on what are “core” research skills learning outcomes, and what are “nice to know”. Participants will be invited to reflect on how the context of their medical and health professions programs may influence these learning outcomes. The session aims to summarise issues to consider when teaching research skills to health professions students.

### **Issues/Questions for exploration**

What skills should all students in the health professions learn vs what could be “nice to know”? What should be considered core, or elective research topics?

Should all students learn by *doing* research? If so, what is the threshold for meaningful experiential learning?

Does this vary across the different health professions? How much should institutional context be taken into account? e.g. research intensive vs community engaged mission?

1. Eley DS, Hu W, Talley NJ. Educating future clinician academics: the role of medical schools. Medical journal of Australia. 2022;217(1):16-9.

## Faculty development begins with our students: A framework for students to build their educator portfolio.

**Dr Megan Kalucy<sup>1</sup>, Professor Annette Burgess<sup>1</sup>, Dr Melanie Fentoulis<sup>1</sup>**

<sup>1</sup>University Of New South Wales, Kensington, Australia

### Introduction/Background

Health professional students and junior healthcare professionals contribute significantly to the teaching 'workforce'. On graduation, health professionals are expected to supervise, teach, assess and provide feedback to their colleagues, from both within their own discipline and across disciplines within health (Burgess & McGregor, 2018), with these skills increasingly listed internationally as graduate attributes.

Student-as-Teacher training is emerging across the globe. Recent literature-informed recommendations for Student-as-Teacher curricula focusses on the duration, content, and delivery of programs; feedback and assessment of students' teaching skills; and approaches to the evaluation of the teacher training programs. Professionalism includes self-awareness and self-reflection and requires health professionals to reflect regularly on and refine their practice and its effectiveness (Medical Board of Australia, 2020). However, there is a paucity of evidence demonstrating how students can develop their own professional portfolios as educators.

Burgess, A., McGregor, D. Peer teacher training for health professional students: a systematic review of formal programs. *BMC Med Educ* 18, 263 (2018). <https://doi.org/10.1186/s12909-018-1356-2>

Medical Board of Australia. Good medical practice: a code of conduct for doctors in Australia. (2018). <https://www.medicalboard.gov.au/codes-guidelines-policies/code-of-conduct.aspx>

### Purpose/Objectives

Participants will have the opportunity to evaluate novel scaffolded frameworks that will assist their students to build their professional portfolio as an educator. The portfolios will be designed to evidence teaching skills and practice and identify areas for improvement. They will be encouraged to consider how a portfolio framework can be applied in their context to enable student opportunities for professional recognition as educators.

### List of presentations

Megan Kalucy **Faculty development begins with our students: A framework for students to build their educator portfolio**

We will discuss the rationale for developing students' skills to evaluate their teaching and record their progress.

Megan Kalucy **UNSW Learning to Teach Professional Development Program: Student Experience**

Participants will have the opportunity to evaluate a novel scaffolded framework that will assist their students to build their professional portfolio as an educator.

### Discussion: Issues/questions for exploration OR Ideas for discussion

This will be an active workshop. We will discuss the rationale for developing students' skills to evaluate their teaching and record their progress. In small groups participants will explore how Student-as-Teacher programs can implement frameworks that can be strategically prioritised to maximise student engagement in professional recognition opportunities (such as the Advance HE Fellowship), career mobility and development.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## What method is this? Combining a narrative with group reflection: A novel data collection method used to explore health professions education leadership perspectives

**Dr Sinead Kado<sup>1</sup>, Ms Jane Bolster<sup>2</sup>**, Mr Paul Kneath Jones<sup>3</sup>, Dr Ping-tak Chan<sup>4</sup>, Dr Julie-Lyn Noel<sup>5</sup>, Associate Professor Nada Abdelrahman<sup>6</sup>, Dr Siham Al Sinani<sup>7</sup>, Professor Judy McKimm<sup>3</sup>

<sup>1</sup>University Of Western Australia, Perth, Australia, <sup>2</sup>Western Sydney Local Health Board, Sydney, Australia, <sup>3</sup>Swansea Medical School, Swansea, UK, <sup>4</sup>Tuen Men Hospital Orthopaedics and Traumatology, Tuen Mun, Hong Kong, <sup>5</sup>Eurospine - The Spine Society of Europe, Uster-Zurich, Switzerland, <sup>6</sup>Almaarefa University, Riyadh, Saudi Arabia, <sup>7</sup>Oman Medical Speciality Board, Muscat, Oman

### Introduction

Following an online international HPE leadership course we asked a question: 'What are the perspectives of a global group of HPE leaders on becoming a leader?' To explore this question we met monthly for a year via Zoom with one participant sharing their leadership story, with guiding questions. The group then asked clarifying questions, reflected and discussed aspects, facilitated by the research lead. We pondered what to name this method and was it valuable.

### Objectives

Acknowledging the time-honoured qualitative methods of semi-structured interviews and focus groups, is there a place for combining methods to gather more nuanced perspectives? Our research utilised a narrative-based enquiry combining 'telling your story' followed by group reflection. This presentation focuses on the affordances and constraints experienced and asks if we should consider more nuanced methods to gain richer perspectives.

### Discussion

Reflection is central to understanding professional practice, developing self-insight and making change. Our novel method allowed individuals to reflect on their leadership stories both individually and collectively. Enabling one participant to share their story in a semi-structured way, which was then reflected on by their peers, led to greater data richness. Additionally, the research process enabled a community of practice and support. However, constraints included waning attendance due to time differences, schedules and difficult internet access. Researching by Zoom allowed global access but reduced the ability to build rapport and commitment to the research. Despite the constraints, we found combining the precepts of narrative enquiry with group reflective conversation enhanced the data collection tool.

### Questions for exploration

Can we combine data collection tools to explore more nuanced ways of gaining rich data? What should this be method we used be called? How can we ensure that rigour is maintained in qualitative research and yet allow novel ways of data collection to be explored?

## Plenary 3

### **Prof Shaun Ewen, Griffith University and Panel**

Professor Shaun Ewen B.App.Sc. (Physio) (UniSA), M.Int.St. (UniSA), and D.Ed. (Melb)

Professor Shaun Ewen is the Deputy Vice Chancellor (Education) at Griffith University, a role he commenced in January 2022.

Prior to joining Griffith, Professor Ewen was Pro Vice-Chancellor (Place and Indigenous) (2017-2022) and Foundation Director of the Melbourne Poche Centre for Indigenous Health, Faculty of Medicine, Dentistry and Health Sciences, (2015-2022) at the University of Melbourne. In 2020 Professor Ewen was visiting Professor of Indigenous Health and Leadership in the School of Global Affairs, King's College London.

Shaun has degrees in Applied Science (Physiotherapy) and International Studies from the University of South Australia, and a Doctorate of Education focussing on medical education, from the University of Melbourne. He practiced as a physio for around a decade, in remote, regional and urban Australia, the United Kingdom, and South Africa.

Shaun's research interests are in Indigenous health workforce development, and health professional education. He has provided the academic and Indigenous leadership for the Leaders in Indigenous Medical Education (LIME) project, a bi-national project bringing together all medical schools across Australia and New Zealand.

Shaun is a Board Member of Queensland Museum Network, Director of the Australian Medical Council (and Chair of the Aboriginal and Torres Strait Islander Committee), and Board Member of the Menzies Australia Institute, King's College London.

Shaun is passionate about the importance of diversity and inclusion as a precondition for excellence in higher education.

\*Please note, no abstract available as this is a panel session





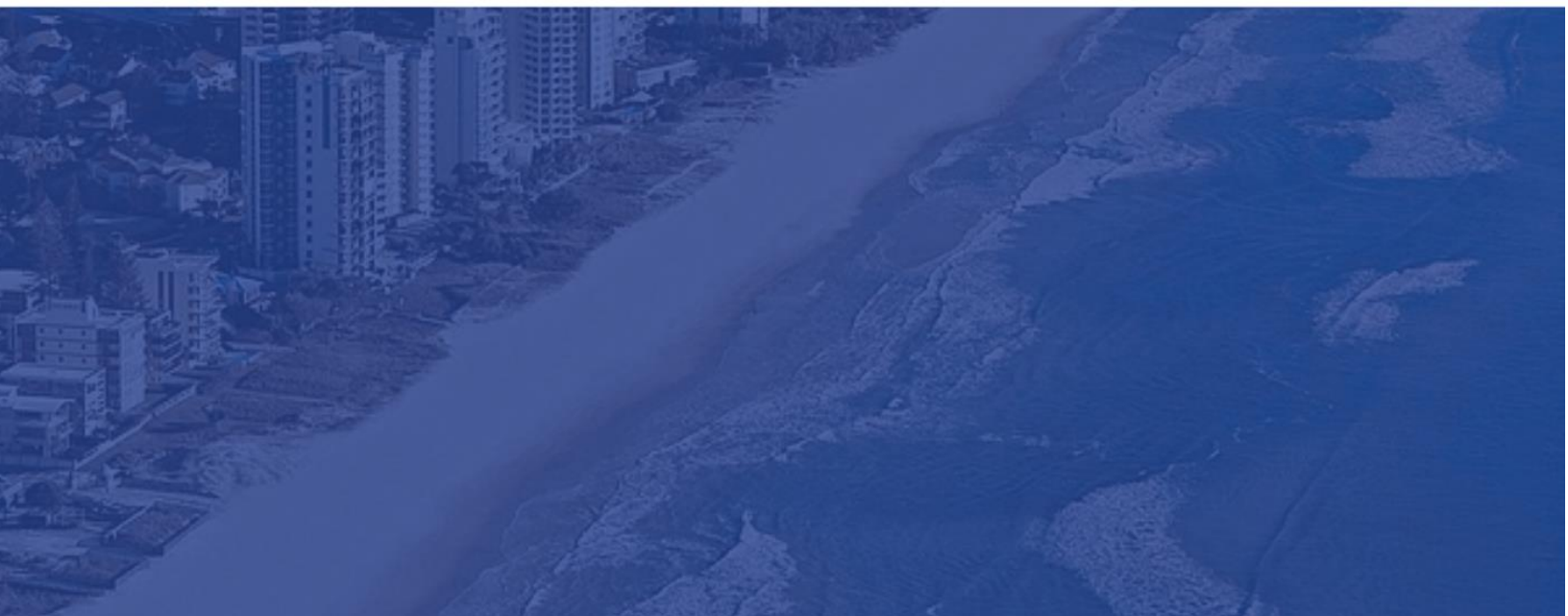
# ANZAHPE 2023

TURNING TIDES  
Navigating the Opportunities

## PROGRAM

DAY THREE

Thursday 29 June 2023



## 6A – Assessment

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### **A foundation in anatomy supported by pathology provides the bases for success in the USA medical licencing exam Step 1**

**Dr Christian Gray**<sup>1</sup>

<sup>1</sup>*Academy For Medical Education, Medical School, The University of Queensland, Brisbane, Australia*

#### **Introduction**

As more countries move towards the need for standardised medical licencing exams, students are finding it difficult to simultaneously navigate learning for their own medical school's curriculum and prepare for licencing exams. Students report feeling overwhelmed and begin to not trust their medical education. In partnership with the University of Queensland, MD students from the Ochsner Health System (New Orleans, LA) complete their first two years in Australia, before completing two additional years of medical training in the USA. UQ-Ochsner MD students must attempt the first of three National Board of Medical Examiners (NBME) United States Medical Licensing Examination (USMLE) Step exams (Step 1) prior to starting year 3. A dedicated USMLE preparation course was established to support students' preparation for Step 1. The aim of this study was to evaluate discipline areas within Clinical Science that predict success in Step 1.

#### **Methods**

Longitudinal performances in Clinical Science Multiple Choice Questions (MCQ) in years 1 and 2 of the MD program were correlated with NBME Comprehensive Based Science Exam (CBSE) performance. MCQ were tagged based on discipline area.

#### **Results**

The CBSE significantly correlates with performances in Step 1 and is used to assess students' readiness to take the Step 1 exam. Students who passed the CBSE showed a higher correlation in performances in Anatomy, Pathology and Clinical domains. Anatomy in year 1, followed by strong performances in Pathology across years 1 and 2 provided the strongest prediction of success.

#### **Discussion**

There is strong evidence that performance in clinical science across years 1 and 2 strongly correlates with success in CBSE. The UQ MD program supports success in Step 1, with high correlations in performances within Step 1 discipline areas. A foundation in Anatomy learning followed by strong performance in Pathology provides the bases for success in medical licencing exams.

## Co-designing digital dashboards to enhance student engagement in work-integrated learning (WIL)

**Assoc Prof Justine Gibson<sup>1</sup>, Assoc Prof Helen Wozniak<sup>1</sup>**, Dr Christy Noble<sup>1</sup>, Dr Rachel Claydon<sup>1</sup>, Ms Shari Bowker<sup>1</sup>, Dr Aneesha Bakharia<sup>1</sup>, Dr Anna Kull<sup>1</sup>, Ms Kym Ward<sup>1</sup>, Dr Robert Garrard<sup>1</sup>, Dr Asela Olupeliyawa<sup>1</sup>, Ms Kathryn Bird<sup>1</sup>, Mr Daniel Ochayi<sup>1</sup>, Mr Zach Kodyattu<sup>1</sup>, Mr Zachary Low<sup>1</sup>

<sup>1</sup>University Of Queensland, Brisbane, Australia

### Introduction/Background

Work-integrated learning (WIL) provides the essential authentic context for students to apply theoretical knowledge gained from their classroom activities to real-world activities and forms the foundations of all professional programs. However, students often struggle with transition into WIL settings. A teaching innovation grant between the Schools of Medicine and Veterinary Science and the central teaching and learning centre is adopting a participatory co-design approach (Sarmiento, 2022; Treasure-Jones et al, 2018) with student partners to develop digital dashboards depicting engagement in workplace-based assessments (WBAs). This aims to enable students, staff and clinical supervisors to monitor longitudinal progress during WIL placements.

### Aim/Objectives

The aim of this presentation is to showcase key outcomes from this co-design process.

### Discussion

The co-design process started with an exploration and analysis phase to evaluate the available digital data sets, review the literature and seek advice about dashboard requirements from both local stakeholders (students and staff) and our international reference group members. This background created a solid base for the first co-design workshop between the project team and student partners. Collaboratively we have developed an initial dashboard prototype that includes real-time visualisations of learner engagement in WBAs. We will present insights from our work completed to date, focusing on strategies that can enable students and supervisors to monitor learning longitudinally, as well as supporting students to set realistic goals and actions in response to feedback they receive from their clinical supervisors. This cross-discipline inclusive approach acknowledges the wider context of student learning in the WIL setting and provides insights for the health professions education community to navigate opportunities for utilising WIL digital datasets.

### Issues/Questions for exploration OR Ideas for further discussion

Using data visualisations to *turn the tide* and support proactive engagement in WIL.  
Co-design as an approach to *navigate the turbulent WIL waters*.

### References:

Sarmiento, J. P., & Wise, A. F. (2022). Participatory and co-design of learning analytics: An initial review of the literature. *ACM International Conference Proceeding Series*, pp. 535-541.

<https://doi.org/10.1145/3506860.3506910>

Treasure-Jones, T., Dent-Spargo, R. & Dharmaratne, S. (2018). How do students want their workplace-based feedback visualised in order to support self-regulated learning? Initial results & reflections from a co-design study in medical education. *CEUR Workshop Proceedings*, 2193. Available: <http://ceur-ws.org/Vol-2193/>

## Speech Pathology Students' Experiences of a Pilot Objective Structured Clinical Examination Assessing Graduate-Ready Competency.

**Dr Lydia Timms<sup>1</sup>**, Dr Lizz Hill<sup>1</sup>, Associate Professor Margo Brewer<sup>1</sup>

<sup>1</sup>*Curtin University, Bentley, Australia*

### Introduction

Assessment of clinical competence is essential to ensure speech pathology graduates are ready to practice. Updated accreditation requirements and assessment pedagogy have required universities to shift from a reliance on clinical educator reports of placement competence to include additional standardised assessment of competence. One standardised assessment is an Objective Structured Clinical Examination (OSCE), which some view as the gold standard of clinical assessments. This pilot study documents the first OSCE in an Australian post-graduate speech pathology course to assess graduate ready competency.

### Methods

A mixed method approach was adopted. An anonymous online survey was completed by 15 speech pathology students (45% of cohort) at the end of their course and 11 examiners (95% of cohort). Participants rated a series of statements designed to capture their experience with the assessment on a 5-point Likert scale. They were asked to respond qualitatively to three questions to further explore their experience.

### Results

Despite high levels of anxiety, most students reported understanding the purpose of the OSCE, embraced the assessment as a learning opportunity, and could see the value of this assessment in their course. However, students did not see the OSCEs as reflecting real life practice and were equivocal about the fairness of this assessment type. Their qualitative responses reflected similar sentiments with expansion on points related to a) authenticity, b) emotions/experience and c) learning and logistics. Examiners, who were all experienced speech pathologists but new to marking OSCEs, provided positive ratings for all items, excluding statements related to clarity of marking guides.

### Discussion

Following the success of this pilot OSCE, this assessment type remains embedded in the course with updates to examiner training, student preparedness and the authenticity of the simulated client and clinical scenario.

## Just “get more experience”: Strategies to optimise the assessment for learning function of work-based assessments

**Ms Alyssa Anderson<sup>1</sup>**, Dr Imogene Rothnie<sup>1</sup>, Ms Libby Newton<sup>1</sup>, Ms Susi McCarthy<sup>1</sup>  
*<sup>1</sup>Royal Australasian College Of Physicians, Sydney, Australia*

### **Introduction:**

Work-based assessments (WBAs) are central to competency-based health professions curricula, providing authentic opportunities for tailored feedback for learning. Research shows that specific, timely, and actionable feedback is most beneficial for learning, however, common problems in WBA implementation include low trainee engagement and non-specific assessor feedback (Massie and Ali 2015). This study stems from an evaluation of the Royal Australasian College of Physicians' new Basic Training Program and explores to what extent trainees/assessors engage with WBAs to optimise assessment for learning.

**Method:** Data from WBA feedback records (n=73), a trainee survey (n=16, 21%), and interviews (n=4) were triangulated to explore how participants engaged with WBAs. Trainee and assessor responses on WBA feedback forms to “what went well” and “what could be improved” were rated using a three-point specificity scale (Pelgrim et al. 2012) and results analysed.

**Results:** While 90% (n=57) of WBAs rated trainees at the expected level for their stage, interview and survey results showed evidence of trainees employing a compliance mindset to assessment rather than deliberately seeking WBAs that align with their learning plan. Analysis of WBA comments revealed a higher proportion of non-specific comments from both assessors and trainees regarding what could be improved compared to what went well. Common non-specific feedback included unclear suggestions for mechanisms for trainees to gain more experience or confidence. Feedback quality was also negatively impacted by the educational technology, which caused delays between the observed activity and assessors documenting feedback.

**Discussion:** Our findings highlighted areas for improvement in the way trainees/assessors engaged with WBAs, which negatively affected assessment for learning. The use of WBAs to support trainee learning could be bolstered by: 1) providing trainees with guidance in identifying relevant opportunities for WBAs within training rotations, 2) developing assessor skills in delivering quality feedback, and 3) ensuring educational technology permits real-time documentation of assessor feedback for WBAs.

## Choose your own adventure: Redesigning a final year portfolio in oral health

Associate Professor Melanie Aley, Mr William Carlson-Jones<sup>1</sup>

<sup>1</sup>*The University Of Sydney, Westmead, Australia*

### Introduction

Portfolios are routinely used for assessment of final year health students, as they encourage students to deeply explore multiple areas of practice and support their learning with evidence-based resources and reflections. In dental education, portfolios are often used to assess a student's ability to provide patient-centred and evidence-based care through documenting patient cases and justifying their clinical decisions. A mapping of our Bachelor of Oral Health program assessments found these learning outcomes were already being assessed during workplace-based placements and in oral examinations. Further, the portfolios were onerous to mark, and student performance and feedback indicated poor engagement with the portfolio assessment.

### Aim

The aim of this project was to redesign our final year portfolio assessment to provide students with an opportunity to choose and explore multiple alternative areas of professional practice and development.

### Discussion

A range of authentic activities have been designed for students to choose from for inclusion in their portfolio. The design process required alignment with the unit of study learning outcomes and professional competencies determined by the regulatory authority, and intentionally aimed to design activities that would prepare students for the challenges of future practice across multiple diverse areas of practice. Portfolio activities designed include developing a philosophy of practice, self-care planning, reflection on interprofessional practice, product review, community oral health analysis, planning an oral health promotion project, evaluation of sustainability in dental service, and a report on alternative (ie non-clinical) career paths for oral health therapists.

### Issues for exploration

It is anticipated that the student-driven focus of the portfolios will drive student engagement, by allowing them to choose the activities which interest them to explore more deeply. We are interested in exploring strategies for evaluating the success of the portfolio redesign and exploring avenues for involving students in the co-design of additional portfolio activities.

## In the era of ChatGPT/artificial intelligence, what should be the new design of text-based assessments?

**Ms Haley Vu<sup>1</sup>**, Ms Kerry Johnson<sup>1</sup>

<sup>1</sup>*University of South Australia, Adelaide, Australia*

As the use of artificial intelligence (AI) for writing advances, its impact on the academic integrity of traditional, text-based, asynchronous assessment cannot be denied. With the right prompting, it can be difficult to distinguish the text produced by text-based AIs from that of human beings. Even OpenAI – the company behind the popular ChatGPT – has come out with a detector that is, at their estimates, likely only 26% accurate at detecting AI-generated text and produced 9% false positives<sup>1</sup>. These text generators have sounded a wake-up call for teachers and academics across the sectors to review and potentially redesign their text-based assessments to maintain assessment quality and integrity in the era of ChatGPT/AI.

The aim of this collaboration between an academic staff member and an online education designer is to review and redesign a text-based assessment in our Medical Radiation Science Program to limit or eliminate the unauthorised use of text generators such as ChatGPT. The project will review our course's stated AI policies, examine the learning activities and resources that scaffold and support students to complete the assessment, analyse the strengths and weaknesses of the assessment itself and identify key considerations for redesigning these so that students get the benefit of an assessment that is both of and for their learning.

<sup>1</sup>Kirchner JH, Ahmad L, Aaronson S, et al. (2023, January 31). *New AI classifier for indicating AI-written text*. OpenAI. <https://openai.com/blog/new-ai-classifier-for-indicating-ai-written-text/>

## Staff and student experiences using entrustable professional activities (EPAs): a review across entry-level health professions

**Mr Prashant Jhala**<sup>1</sup>, Associate Professor Arvin Damodaran<sup>1</sup>, Mr Toby Wilcox<sup>1</sup>, Miss Tayla Douglas<sup>1</sup>, Professor Annette Katelaris<sup>1</sup>, Associate Professor Ben Taylor<sup>1</sup>, Professor Adrienne Torda<sup>1</sup>

<sup>1</sup>*University of New South Wales, Kensington, Australia*

### Introduction

Recently, there has been increased uptake in the use of EPAs to assess healthcare student competency. EPAs translate the daily activities of clinicians into observable episodes of care enabling supervising clinicians to perform their daily duties while assessing the competency of students. No previous review has evaluated staff and student experiences to inform or shape EPA development or implementation. The purpose of this paper was to review staff and student experiences using EPAs.

### Methods

A systematic search of the global healthcare education literature was conducted to review staff and student experiences using EPAs as part of their curricula within medicine, pharmacy, dietetics, optometry, physiotherapy and exercise physiology programs. Included articles were analysed thematically and the publication quality was assessed using the QuADS assessment tool.

### Results

Nine of 788 publications were identified across medicine (n=7), dietetics (n=1) and pharmacy (n=1). Five studies reported on staff and seven studies reported on student experiences. Variations in approaches to reporting staff experiences made thematic analysis difficult. Overall, staff reported positive experiences using EPA-based assessment, commonly that EPAs clearly identified the levels of competence expected of the student and increased student accountability for their learning thus freeing up staff for more clinical and teaching time. Staff challenges included difficulty with interpreting entrustment scales and observer bias. Students reported increases in motivation, goal setting, empowerment and self-confidence and feedback interactions. Students noted that improved staff training on the use of EPAs may enhance their utility, and decrease the incidence of sub-optimal supervision potentially resulting in entrustment decisions that were based on supervisors' assumptions.

### Discussion

Utilising EPAs was mostly a positive experience for both staff and students enabling greater transparency about the student expectations, improved student confidence, and improved feedback interactions. Standardised training for supervising clinicians may improve experiences and maximise the utility of EPAs in clinical assessment.



### "Towards an Ethical Approach to Disability Simulation in Education"

**Prof Mary Butler**, Ms Keri McMullan

<sup>1</sup>*University Of South Australia, Adelaide, Australia*

#### **Aim/Purpose:**

The study aimed to evaluate the pedagogical value of disability simulation and its potential for promoting authentic learning experiences. A VI awareness workshop was consulted, developed, and evaluated using a mixed-methods approach. Key stakeholders were consulted and workshop outcomes were assessed to provide a critical evaluation of disability simulation as a pedagogical tool.

#### **Methods:**

The study consisted of two phases. In phase one, five stakeholders were interviewed to provide perspectives on disability simulation. In phase two, a VI awareness workshop was delivered using the information gathered from stakeholders. The workshop was attended by 27 participants who engaged in various activities using simulation equipment. Pre and post-measures were taken using the "Social Responsibility about Blindness Scale" (SRBS) and qualitative data was collected from workshop participants and stakeholders.

#### **Results:**

The stakeholders agreed on the importance of including people with disabilities in the training experience, but had differing views on the rationale for using disability simulation in education. No significant statistical differences were found between pre and post SRBS scores, but there were significant shifts in perspective for some individuals. Qualitative data showed that participants learned about the condition, empathy, problem-solving, and ergonomics and gained a greater understanding of expert perspectives.

#### **Discussion:**

The results emphasize the need for a critical examination of disability simulation and aligning learning experiences with valid learning outcomes. Disability awareness should be viewed as a spectrum and a checklist is recommended to ensure responsible and ethical use of simulation. The study provides valuable insights into the pedagogical value of disability simulation and its potential for promoting authentic learning experiences. The use of simulation requires careful consideration and a critical approach to ensure responsible and effective use.

## What makes a good disability awareness program? Perspectives and experiences of university students

**Miss Monique Schoebel<sup>1</sup>**, Doctor Rebecca Barton<sup>1</sup>, Doctor Kim Bulkeley<sup>1</sup>, Associate Professor Ilektra Spandagou<sup>1</sup>, Doctor Michelle Bonati<sup>1</sup>

<sup>1</sup>*The University of Sydney, Sydney, Australia*

### Introduction

Despite disability affecting approximately 15% of the world's population, negative attitudes towards people with disability remain prevalent, impacting their wellbeing and opportunities for participation. Although health professionals have the potential to support improved quality of life and participation of people with disability, there is evidence that they too often hold negative attitudes towards disability. People with disability experience poorer health outcomes than those without disability and they report experiencing discrimination within healthcare settings and lack of adequate access to health services. It is therefore important to improve attitudes and awareness towards disability, for example through disability awareness programs which target the fear, uncertainty and misconceptions that are thought to contribute to negative attitudes. Despite a growing number of these programs, there is limited research exploring their effectiveness and the experiences of those who participate in them.

### Methods

A mixed-method approach, involving a survey and in-depth interviews, was implemented to investigate the perspectives and experiences of university students who participated in an online disability awareness program developed at The University of Sydney. The qualitative component of the study presented included interviews with seven students, the majority of whom were studying health-related degrees, and utilised reflexive thematic analysis to explore and identify themes.

### Results

Emerging results indicate that experiences were nuanced and varied, however overall participants reported that the program promoted positive change in their disability awareness and responsiveness. A relationship was identified between two key themes: perceived impacts of the program and the effective and engaging features of the program.

### Discussion

The online, self-paced design feature and multi-modal learning components such as real-life narratives reportedly supported participants' in improving their knowledge around disability which further developed their confidence to engage with people with disability. This study adds a unique Australian perspective to emerging research around the effectiveness of online disability awareness programs.

## **What digital and health competencies are required of emerging professionals to work inclusively with vulnerable, marginalized, and disadvantaged people?**

**Ms. Sahar Khan**<sup>1</sup>, Dr. Anna Vnuk<sup>1,2</sup>, Dr. David Lim<sup>1,3</sup>

<sup>1</sup>Flinders University, Bedford Park, Australia, <sup>2</sup>James Cook University, Cairns, Australia, <sup>3</sup>Western Sydney University, Campbelltown, Australia

### **Introduction/Background**

Improving outcomes for vulnerable, marginalized, and disadvantaged populations, which includes, but is not limited to, people with disabilities, Aboriginal and Torres Strait Islander peoples, people seeking asylum and refugees, and those living in rural areas, requires institutional and personal support that must be enacted by health professionals from a wide range of disciplines. Active listening to patient concerns, and active inclusion of the patient's perspective in decision-making while maintaining respect for their perspectives, are a few of the identified areas critical to providing inclusive care for patients who experience vulnerabilities.

### **Purpose/Objectives**

To explore the current state of digital and health competencies taught across medicine, nursing, allied health and other health professional curricula to facilitate inclusive care of patients who experienced vulnerabilities.

We aim to utilise discussion from this workshop towards a medical student's coursework research project, ethics approval received from Flinders University and Western Sydney University.

### **Issues/Questions for exploration OR Ideas for discussion**

1. What digital and health competencies in the current health professional curricula would help foster inclusive practice?
2. How are students (or how can students be) assessed in the competencies that focus on inclusivity in their programs?

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## Leveraging virtual learning environments to enhance student learning

**Dr Kwang Meng Cham**<sup>1</sup>, Dr Andrew Huhtanen<sup>1</sup>, Mr Keenan Hellyer<sup>1</sup>, Dr Jairus Bowne<sup>1</sup>,  
Miss Tiffany Chan<sup>1</sup>

<sup>1</sup>*University Of Melbourne, Australia*

### Introduction

The constraints set by lockdowns and physical distancing during COVID-19 led to the development and extensive focus on digital learning. Digital learning offers multifaceted flexibility, allowing students to learn and work at their own pace and in the environment of their choosing.

Technologies such as online simulators and immersive virtual reality (VR) have been used to support student learning. This study focused on non-immersive VR as an accessible and low-friction mean of accessing virtual learning environments (VLEs) to reduce students' learning burden.

### Methods

93 optometry students across all year levels explored 360° panoramic VLEs of preclinical and clinical teaching spaces that were digitized using a Insta360 Pro 2 camera and hosted on Roslin, an online educational platform. Clinical equipment was scanned using a 3D scanner, the Artec Space Spider, and were accessible through Pedestal, a web content management system for 3D data.

Students participated in an online Qualtrics survey and individual semi-structured interviews. Quantitative data was analyzed, and thematic analysis was performed on qualitative data from students' responses to identify key takeaways from the use of VLEs towards students' learning.

### Results

86% of students agreed that the digitization of the learning spaces was beneficial to their learning, with 73% reporting feeling less stressed before physically attending classes. Furthermore, 85% agreed that VLEs assisted in helping them feel more confident using the equipment and navigating through the physical learning spaces. They appreciated the novelty of including high quality reproductions of the learning spaces and felt the navigation through the spaces and equipment was fun and enjoyable.

### Discussion

Introductory digital resources like non-immersive VR are an accessible platform to helping students orient and familiarise themselves with new environments. VLEs can potentially help to relieve student stress and reduce the learning load associated with entering practicum or new learning spaces.

## Why do medical students engage in academic misconduct?

**Dr Sarah Rennie<sup>1</sup>**, Associate Professor Joy Rudland<sup>1</sup>

<sup>1</sup>*University of Otago, Dunedin, New Zealand*

### Introduction

Medical practice relies on public trust. Professional behaviour is essential for therapeutic relationships and provision of quality health care. Academic misconduct can be understood as an action which attempts to provide unfair advantage for the student and can cast doubt on validity of medical qualifications. Of concern is research showing medical students that engage in academic misconduct are more likely to engage in unprofessional behaviour as doctors<sup>1</sup>.

This study aims to understand the motivations of medical students for engaging in academic misconduct.

### Methods

Medical students from New Zealand and Scottish medical schools were invited to take part in focus groups exploring academic misconduct. The discussions were recorded, transcribed and coded using Nvivo. Key themes were identified independently by two researchers and a consensus arrived at with the research group. A model was then developed.

### Results

The MOJO model considers four factors that work together to influence whether a student will engage in academic misconduct:

#### Motive (intent)

- Too much work
- Unreasonable requests
- Not good for patients
- Lazy, cannot be bothered

#### Opportunity

- No one knows
- Systems allow misconduct

#### Justification

- Everyone does it
- No one cares
- Low level - won't make a difference to practice
- Better for patients
- Survival

#### Outcome (consequences)

- To self
  - Impact of getting caught - penalty
  - Transgressing Integrity/moral compass/feeling of shame
  - Worry about other students
- To patients
  - Undermine credibility and professionalism

**Discussion**

The MOJO model allows medical schools to reflect on current or future strategies that may be adopted to reduce the likelihood of academic misconduct. These may vary between medical schools influenced by policies and local context.

**Issues/Questions for exploration OR Ideas for further discussion**

The MOJO model was generated from focus groups with medical students. Does the model resonate with other health professional groups or are there obvious differences?

1. Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND. 2004. Unprofessional Behavior in Medical School Is Associated with Subsequent Disciplinary Action by a State Medical Board. *Academic Medicine*. 79(3):244-249.

## Understanding stakeholders' perspectives of paediatric nursing competency frameworks to inform future design

**Ms Yolly Gangemi**<sup>1,2</sup>, A/Prof Amy Gray<sup>1,2</sup>, A/Prof Fiona Newell<sup>1,2</sup>

<sup>1</sup>Royal Children's Hospital, Melbourne, Australia, <sup>2</sup>University of Melbourne, Melbourne, Australia

### Introduction/Background

The Royal Children's Hospital (RCH) Nursing Competency Framework was introduced in 2010 to facilitate standardised care and support nursing clinical development across a variety of areas. The Nursing Education Department is reviewing the Nursing Competency Framework with the vision to utilise digital technologies in the delivery of content and online competency completion.

### Aim/Objectives

The primary objective of this qualitative study based on focus group discussion is to explore how clinical nurses, nurse educators, advanced practice nurses and nurse unit managers experience nursing competencies in their workplace. These experiences will inform the development of a future approach to nursing competencies.

### Discussion

The evolution of healthcare requires education, training, and research practices to remain up-to-date and meet the requirements of the clinicians and professional bodies. Competencies are the core abilities required of healthcare professionals to fulfil their roles. In the present climate, clinicians require contemporary, evidence-based resources at their fingertips. This has prompted the movement towards accessible, multimodal education materials that are innovative and engaging for the end-user. The opportunity exists to review the current RCH Nursing Competency Framework to ensure we are optimally enabling workforce development in a manner aligned to the organization's strategic vision using contemporary and evidence based learning platforms

### Issues/Questions for exploration OR Ideas for further discussion

This project will illuminate understanding about nurses' engagement with a framework designed to support competency attainment, answering important questions such as; what constitutes an essential paediatric nursing competency, how can a competency framework be used to support professional development across a range of practice areas and continuum clinical acumen, and how can we best determine the attainment of a competency?

### **Integrating Aboriginal and Torres Strait Islander health education into an optometry program: What do optometry students think so far?**

**Ms Kate Pecar<sup>1</sup>, Dr Shelley Hopkins<sup>1</sup>, Associate Professor Kristopher Rallah-Baker<sup>1</sup>, Professor Sharon Bentley<sup>1</sup>**

*<sup>1</sup>Queensland University of Technology, Brisbane, Australia*

#### **Introduction**

The requirement for all optometry programs in Australia to integrate Aboriginal and Torres Strait Islander health into curricula was introduced in 2019. Evaluating early progress is important for ensuring student engagement and high-quality learning. The purpose of this study was to explore student satisfaction with the Aboriginal and Torres Strait Islander health curriculum in the optometry program at Queensland University of Technology (QUT).

#### **Methods**

The QUT optometry program comprises a three-year Bachelor of Vision Science followed by a two-year Master of Optometry. In 2021, approximately 20 hours of content on Aboriginal and Torres Strait Islander health had been integrated into lectures and modules, with opportunities for community clinical placements and a cultural experience. Students from across the program were asked for their perspectives on the Aboriginal and Torres Strait Islander health curriculum using a ten-question survey based on the Student Experience of Courses survey.

#### **Results**

Five percent (n=16) of students responded. Sixty-three percent agreed that overall, they were satisfied with the quality of the curriculum. There was strong agreement that the curriculum had increased their awareness of and respect for the values and knowledges of Aboriginal and Torres Strait Islander Peoples, and developed their sense of social responsibility. However, there was a perceived overall lack of content and need to focus on strengths-based teaching, avoid tokenism, increase learning from Aboriginal and Torres Strait Islander guest lecturers and provide more clinical placements.

#### **Discussion**

To improve student learning and combat the hidden curriculum, additional strengths-based content and assessments should be integrated throughout the program by educators who have received adequate training. Additionally, the program should strive to develop stronger reciprocal relationships with Aboriginal and Torres Strait Islander educators and organisations, to increase opportunities for learning and clinical placements. Addressing these areas is essential for producing graduates who can provide equitable and culturally safe healthcare.



## ANZAHPE LEAPS into action... Discussion!

**Simone Ross<sup>1</sup>, Professor Tarun Sen Gupta<sup>1</sup>, A/Prof Peter Johnson<sup>1</sup>**

<sup>1</sup>James Cook University, Townsville, Australia

### **Introduction/Background**

There are multiple leadership frameworks available for medical professionals. We have developed a Leadership Education for Australasian health Professional Students (LEAPS) framework for use in medical schools.

More prominent medical professional frameworks include the: Health LEADS Australia (2013); Canadian Leads in a Caring Environment (revised in 2019), and recently published NSW Health Leadership and Management Framework (2020). The LEAPS framework has been created using transformative leadership and has student leadership skills development for all healthcare stakeholders, including the students themselves, their patients, their patients' families and carers, and colleagues. The framework encourages students to take a leadership leap forward to build emotional agility for long-term resilience as well and learning agility for high performance. While also developing leadership skills for patient and teamwork communication, collaboration, and education.

The proposed audience for this PeArLS presentation is medical student learners, health professional academics, clinicians, clinical educators, medical educators, and agencies that teach leadership skills in clinical context. Although LEAPS was created for medical education, the framework could also be relevant for other health professional professions.

### **Purpose/Objectives**

The purpose of this session is to explore the complexities of this framework, the domains, competencies, and suggested learning and assessment. The main outcomes are to share ideas on how to maximise the benefit of this Framework at your medical school and explore other non-traditional medical leadership learning opportunities.

### **Issues/Questions for exploration OR Ideas for discussion**

There are a few aspects raised from the presenter's research for which broad discussion could benefit all participants.

- 1) How to reframe leadership training in medical or health professional education?
- 2) What are some short-term leadership teaching actions for immediate use?
- 3) What can medical students do to advocate for leadership training in their medical school?

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## **On the merits of ignorance: Teaching “not knowing” through simulation.**

Dr Matthew Dunbar<sup>1</sup>, Jon Jureidini<sup>1</sup>

<sup>1</sup>University of Adelaide, North Adelaide, Australia

### **Introduction**

Dr. Matt Dunbar, Child and Adolescent Psychiatrist, Paediatric Mental Health Training Unit, has been involved for 13 years in delivering simulation-based training to medical students through a program known as "iLab."

### **Aim/Objectives**

Dunbar will discuss the use of Character Based Improvisation, a specialized acting methodology, for the creation of immersive mental health simulations. Additionally, Dunbar will explore how these simulation encounters can enhance students' ability to adopt a psychotherapeutically informed "not knowing" stance during clinical interviewing.

### **Discussion**

For more than a decade, the University of Adelaide has been providing an intensive eight-day teaching program to all senior medical students. In this program, small groups of students engage in in-depth interviews with a minimum of six distinct families, each presenting different medical conditions that involve social and emotional challenges like domestic violence, trauma, grief, drug use, familial discord, and the impact of chronic illness. The primary objective of this teaching program is to cultivate a reflective and therapeutically informed approach to interviewing, aiming to establish strong foundational skills for junior doctors entering the workforce.

Central to the success of the programme has been the development of rich and complex mental health vignettes with an emphasis on Social Determinants of Health. An experienced director employs Character Based Improvisation to assist actors in developing intricate and authentic characters. Using this technique, actors can instinctively respond to any situation that arises during simulation interviews, ensuring the continuity of their characters throughout an entire hour of medical assessment.

### **Issues for exploration**

Key steps in vignette development and CBI preparation of actors as well as core components of simulation workshop methodology will be discussed.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## A story of embedding Aboriginal and Torres Strait Islander health into a large-scale medical program

**Jack Delacy**<sup>1</sup>, Ms Emma Walke<sup>1</sup>, Dr Priya Khanna<sup>1</sup>

<sup>1</sup>*The University of Sydney, Sydney, Australia*

### Introduction

Authentic integration of Aboriginal and Torres Strait Islander (Indigenous Health) curriculum within core medical curriculum has been a challenge for Australian medical programs. A major curricular renewal at Sydney Medical School provided an opportunity to redesign the Indigenous health content, activities, and assessments in a way that they are horizontally, spirally, and vertically integrated across and within the core curriculum in all the four years. In this paper, we describe a five-year journey of integrating, implementing, and improving an Indigenous health curriculum for a large-scale program.

### Methods

The educational ethos and design principles of the renewed curriculum was underpinned by Indigenous ways of knowing, being and doing. The content was drafted based on extensive consultations with Aboriginal academics, reference groups, and national and international Indigenous health frameworks. The final curriculum comprises three core domains: history, knowledges, and Culture; understanding health and disease among Aboriginal and Torres Strait Islander Populations and applying knowledge into culturally safe practice. Key activities and assessments included participation in cultural immersion days; workshops on intergenerational trauma, yarning sessions with Aboriginal patients, and engagement with clinical yarning e-modules.

### Results

Longitudinal investigation of students' perspectives of key culturally immersive activities in years 1 and 2 revealed significant increments in knowledge of Indigenous history and cultures, and confidence in interacting with Indigenous patients and healthcare issues. Senior students' engagement was favourable in a preliminary evaluation of newly designed e-learning modules on clinical yarning.

### Discussion

Authentic integration of indigenous health into core medical curriculum is achievable when underpinned with explicit Indigenous epistemologies and ontologies; co-designed with Indigenous leaders, academics, and educators, and evaluated using Indigenous methodologies. Iterative improvements using student voice and community engagement can positively impact students' understanding and confidence in managing Aboriginal and Torres Strait Islander patients in a culturally appropriate manner.

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## Online postgraduate nursing education - at what cost?

**Anita Dunn**<sup>1</sup>, Professor Melanie Birks<sup>1</sup>, Doctor Helena Harrison<sup>1</sup>, Associate Professor Holly Northam<sup>2</sup>

<sup>1</sup>James Cook University, Townsville, Australia, <sup>2</sup>University of Canberra, Bruce, Australia

### Introduction/Background

Nurses work in a competitive labour market across Australia's vast landscape. They require flexible, convenient, and accessible educational options to counter geographical boundaries and accommodate competing personal and professional priorities. Online postgraduate education is proving to be a critical strategy in developing and maintaining a workforce prepared for the increasing complexity of healthcare. Ethical considerations of the wholesale move to online education have, however, received little consideration. The unparalleled accessibility of online education should not be used by higher education providers as an excuse for gratuitous use of technology or the unchecked mass enrolment of students.

### Aim/Objectives

To promulgate further discussion around the uncertainties and limitations of online education, and their impact on design, delivery, and student engagement.

### Discussion

The convenience and flexibility of online education comes at a cost to students, potentially paradoxically blurring work, home, and study responsibilities. The resultant challenges this raises for students places them at increased risk of failure. Online education therefore has the potential to become an inflexible and inconvenient option that can impact students' personal, financial, and professional circumstance.

Higher education institutions who offer online postgraduate programs have vastly increased accessibility for geographically or contextually distant students. Faculty need to be skilled, however, in delivering 'distance' education without being distant to students. There is a real risk that educators who lack the necessary skills to develop and deliver online education can increase, rather than reduce, the conceptual distance between themselves and their students. Online postgraduate nursing education is not a panacea, and little is known whether the costs outweigh benefits for students and healthcare organisations.

### Issues/Questions for exploration OR Ideas for further discussion

1. Are online faculty adequate resourced and funded to transition to online education?

## The future doctor will have an online medical school, too.

**Dr Nidhi Garg<sup>1</sup>, Professor Stephen Tobin<sup>2</sup>**

*<sup>1</sup>The University Of Sydney, Sydney, Australia, <sup>2</sup>Western Sydney University, Sydney, Australia*

### **Introduction/Background**

The cycle of curriculum reform, subsequent implementation and evaluation appears to be a universal and recurring process in medical education.

### **Aim/Objectives**

To consider the potential 'turning tide' of curriculum development from a predominantly content creation model to alternative forms of educational development.

### **Discussion**

Curriculum reforms are driven largely by the exponentially advancing speed of scientific knowledge in the hope of ensuring new graduates are appropriately equipped for entering the workforce. A tsunami of educational content is available online, including whole platforms dedicated to covering the theoretical content of a medical degree for a minute fraction of the cost of a university degree. Acknowledging the need and complexities of maintaining quality control of online material, this presentation will explore medical education in the context of this changing landscape.

### **Issues/Questions for exploration OR Ideas for discussion**

1. Should we be focusing our energy and time on creating new resources (e.g., videos, cases) or can we utilise our time better by focusing on development of alternative educational models (e.g., Team-based learning)?
1. What types of teaching methods could be utilised to develop skills that cannot be learned from online material?
2. Is this an opportunity to equip medical students with skills that are not traditionally taught e.g., how to be good educators and managers in addition to good clinicians?
3. Clinical decision-making and prescribing are not always formally taught well. Could these resources provide a platform for interactively facilitating such essential skills?
4. Where do we educate re digital health literacy?
5. Artificial intelligence (AI) is an added complexity. What role does AI play as an educational resource? How can we ensure students' develop a patient-centred approach when assessing and managing the individual?

## Cross college collaboration to enhance rural generalist anaesthesia training and support rural and remote communities

**Stephenie Cook**<sup>1</sup>, Ellen Webber<sup>1</sup>, Associate Professor Deborah Wilson<sup>1,2</sup>, Jodie Atkin<sup>3</sup>  
<sup>1</sup>Australia And New Zealand College of Anaesthetists, Melbourne, Australia, <sup>2</sup>North West Regional Hospital, Burnie, Australia, <sup>3</sup>Nikta Projects, Sydney, Australia

### Introduction/Background

Rural generalist practitioners with advanced training in anaesthesia play vital roles in providing life-saving services in many rural and remote communities across Australia. The Australia and New Zealand College of Anaesthetists, the Royal Australia College General Practitioners and the Australian College of Rural and Remote Medicine collaborated to develop a new training program to support rural generalist anaesthetists (RGAs) to provide safe and high-quality care.

### Aim/Objectives

The objective of the tripartite collaboration was to develop and implement a diploma for rural generalist anaesthetists using contemporary educational methods designed to ensure standardised training and assessment.

### Discussion

Discussions to replace the Joint Consultative Committee on Anaesthesia (JCCA) with a new Diploma of Rural Generalist Anaesthesia (DipRGA) began in 2015. The desire was to reform the program to a more contemporary education model with a formal recognition of the scope of training and assessment attained through the program.

In 2021 the Tripartite Committee of Rural Generalist Anaesthesia (TC-RGA) was formally established and included members from the three colleges. The TC-RGA was tasked with the development and implementation of the DipRGA. Multiple working groups and committees were established to develop the curriculum, assessment strategies, grandparenting guidelines, regulations, and training resources to implement the program in February 2023.

### Ideas for further discussion

The DipRGA certifies diplomates to anaesthetise children to the age of 5 years. The TC-RGA now is collaborating with the Society of Paediatric Anaesthesia in New Zealand and Australia (SPANZA) to develop a training pathway for RGAs required to provide anaesthesia to children aged 3 and 4 years.

Successful collaboration requires trust and goodwill from both the organisation executives and from their representatives engaged with the project. Reflections from the project team on the strategies, processes to create a successful collaboration for the development of the DipRGA could benefit future multi-organisation projects.

## Building AOD Capability through Clinician-Consumer Co-designed Education

**Mr Stuart Wall<sup>1</sup>**, Ms Kirsty Morgan<sup>1,2</sup>, Ms Jessica Reece<sup>1</sup>, Ms Belinda Berry<sup>1</sup>

<sup>1</sup>Peninsula Health, Frankston, Australia, <sup>2</sup>Monash University, Frankston, Australia

Building capability amongst the nursing and medical workforce to care for hospitalised people who have co-occurring mental illness and alcohol and other drugs (AOD) needs is a challenge for public hospitals. Early engagement and referral to specialist services can assist in minimising complications arising from co-occurring substance use disorders (Charalambous, 2002). Research has found that stigma towards people with alcohol or drug concerns is a significant barrier to early intervention and that changing clinicians' attitudes is key (Haber PS & Riordan, 2021).

This presentation will showcase a model that has been implemented at a Melbourne public hospital utilising an AOD clinical educator and AOD lived experience educator. Together they diagnosed key capability gaps related to caring for people with substance use disorders and have co-designed training content in response. Delivery of training is also co-facilitated to enable hospital staff to be exposed to people with lived experience of substance use disorder outside of their role as 'patients'.

Emerging feedback from clinicians indicates that incorporating lived experience in education encourages clinicians to reflect on how they interact with patients presenting with complex needs and further evaluations plan to assess its effectiveness in reducing individual-level drivers of stigma.

Embedding a lived experience educator is transforming the way training is designed and delivered at the health service. Sharing our model will provide learnings for participants so they can consider application in their workplace settings.

### References

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## 6D – Assessment

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### **Modified Team Based Learning in Public Health Medicine: Lessons learnt from pandemic teaching**

**Dr Vanessa Vaughan**<sup>1,2</sup>, Dr Erik Martin<sup>2</sup>, Prof Colin Bell<sup>2</sup>, Dr Scott McCoombe<sup>1</sup>

<sup>1</sup>University Of Western Australia, Perth, Australia, <sup>2</sup>Deakin University, Geelong, Australia

#### **Introduction:**

Team-Based Learning (TBL) is a teaching strategy fostering active learning of positive professional behaviours, including critical appraisal, problem solving, and communication. Useful for peer-to-peer learning, TBL has been shown to be effective when developed alongside discipline-specific competencies in numerous health degrees. In medical education, the acquisition and assessment of public health competencies, including determinants of health, epidemiology and management of chronic disease, continue to pose a challenge for medical educators. This is due to multi-factorial impacts of health risks and multi-morbidity which can be difficult for learners from biomedical backgrounds to comprehend. TBL provides opportunities to practice these difficult concepts in a 'little and often' learning style that has proved successful.

#### **Methods:**

A series of modified TBLs were developed to facilitate learning for first year Doctor of Medicine students in the Public Health Medicine subject. Students undertake 10-minutes of individual and 20 minutes of team testing, and 30-minutes of discussion of an "application" problem. Applications are open-ended, posing a wicked problem present in their future community of practice. This provides opportunities to reflect on public health as it relates to students' future practice, and promotes integration of knowledge from other areas of the medical curricula. Students submit summaries of the applied solution for formative and summative assessment.

#### **Issues for Exploration:**

The role of TBL in facilitating public health medicine learning had been initially implemented with evaluation in progress when in-person teaching was put on hold due to pandemic restrictions. We will discuss how the modified-TBL translated into the online learning environment, challenges that arose, and further modifications the team developed in order to optimise delivery. The modified approach may provide a useful tool for assessing and refining student understanding of complex public health concepts, and providing individualised feedback in a timely and efficient manner.



## Quality assurance measures undertaken to enhance consistency and reliability of marking process: Results from marking of medical student research project reports

**Dr Rajneesh Kaur**<sup>1</sup>, Professor Richmond Jeremy<sup>1</sup>, Ms Sally Middleton<sup>1</sup>, Dr Joanne Hart<sup>1</sup>

<sup>1</sup>University of Sydney, Australia

### Introduction

Consistency and reliability of the assessment marks ensures that the marks are free of subjectivity and bias. An average of 280 mandatory research projects are undertaken by Doctor of Medicine (MD) degree students at the University of Sydney annually. Around 150 assessors from the Faculty of Medicine are involved in double marking of these projects. Given the large and fluctuating pool of markers, calibration process is not used. Therefore, this study aimed to understand other quality assurance measures used in the assessment of these projects.

### Methods:

A detailed marking rubric was provided to examiners for a 3000 words research report including 10 components with a thorough description of marking criteria for each component. Final mark was awarded out of 100. Marking of first and second examiners for 526 reports from 2019 and 2022 MD cohorts was compared using descriptive statistics including box plots. This was followed by calculations of intraclass correlation coefficient (ICC) comparing total mark as well as marks awarded for individual components.

### Results:

There was not a significant difference in the mean of total marks awarded by first (73.9+/-10.9) and second examiner (74.6+/-11.7, P=0.341), however only a moderate ICC (0.508 (95% CI: 0.411-0.588) was seen for total marks. Low to moderate ICC was seen for individual components of the report with the highest correlation seen for discussion section and lowest correlation for the presentation sections of the report.

### Discussion:

Final marks were awarded by averaging the marks of first and second examiner thus resolving the issues around low correlation. Reports with high discrepancy of marks between first and second examiner were re-marked by a third and sometimes a fourth examiner to ensure grades reflected academic standards. To further improve the quality of assessment marking additional measures such as examiner training and seeking student feedback on grading process should be explored.

## Assessment of First Nations' cultural safety in general practice consultations

**Dr Kay Brumpton**<sup>1</sup>, Dr Rebecca Evans<sup>2,5,6</sup>, Dr Raelene Ward<sup>4</sup>, Prof Tarun Sen Gupta<sup>2</sup>  
*<sup>1</sup>Rural Medical Education Australia, Toowoomba, Australia, <sup>2</sup>James Cook University, Townsville, Australia, <sup>3</sup>Griffith University Rural Clinical School, Toowoomba, Australia, <sup>4</sup>University of Southern Queensland, Toowoomba, Australia, <sup>5</sup>Anton Breinl Research Centre for Health Systems Strengthening, Townsville, Australia, <sup>6</sup>Australian Institute of Tropical Health and Medicine, Townsville, Australia*

### Introduction

Assessment of cultural safety in GP consultations for Indigenous patients is complex. We are unaware of assessment tools of culturally safety based on community-derived definitions, such as the AHPRA consensus statement. Any assessment tool needs to ensure that cultural safety is determined by Indigenous peoples, incorporates defined components of cultural safety, and considers of the impact of social, historical, and political determinants of health.

### Objectives

We explored patient perception of culturally safe consultations and report on preliminary data. From this we aim to develop an assessment tool of GP registrar consultations, where cultural safety is determined by Aboriginal and Torres Strait Islander peoples.

### Methods

Adult Aboriginal and Torres Strait Islander patients attending participating private general practices and ACCHOs in Queensland were invited to participate. Data was gathered through a survey considering demographic details and social determinants of health, semi-structured interviews with patients to explore their understanding of cultural safety, and patients rating the importance of GP's practicing behaviours and skills.

### Results

76 Aboriginal and Torres Strait Islander participants were recruited.

Participants perception of cultural safety varied between individuals, and sites. Participants described the importance of respectful, non-judgemental, and personable GPs whose communication style was more conversational. Listening was emphasised as being important. Most participants considered eye contact important and were ambivalent about family involvement in consultations. Participants expressed no clear gender preference for their GP.

### Discussion

Many attributes of culturally safe care identified in this study, align with patient-centred care. However, currently there are no validated, Australian quality indicators for cultural safety in patient-centred care using a community derived definition of cultural safety. Our preliminary findings suggest we need to consider an assessment approach that combines patient-centred care metrics, patient feedback and self-reflection.

## Turning the tide away from traditional teaching, learning and assessment: Exploring structured peer learning on clinical placements

**Dr Joanna Tai<sup>1</sup>, Dr Samantha Sevenhuysen<sup>2</sup>, A/Prof Merrolee Penman<sup>3</sup>, Mrs Gretel Evans<sup>4,5</sup>, Dr Belinda Judd<sup>4</sup>, Dr Jennie Brentnall<sup>4</sup>**

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### Introduction/background

Peer learning (same or near peer level) is increasingly being adopted as a clinical placement model for health professional students (Markowski et al., 2021). The benefits for students include developing a sense of professional community, additional opportunities for feedback, consolidating clinical learning, developing teamwork and communication skills and, in the case of near peers, developing teaching skills. Clinical supervisors and service users have also reported positive experiences (Tai et al., 2016). Implementing peer learning in the clinical environment can present challenges, and specific activities must be identified and facilitated for peer learning to be successful. The literature contains accounts of peer learning configurations, however it is unclear in practice how widespread structured peer learning is as part of clinical placements, and moreover, how assessment functions in relation to these learning experiences.

### Aim/Objectives

Through this presentation, we aim to provide an overview of common peer learning strategies on clinical placements, and then discuss with those interested in peer learning – practitioners and researchers – to share strategies for peer and near peer learning on clinical placements.

### Discussion

In this session, we will discuss how structured activities, feedback, and assessment can be enacted with maximal benefits to and consideration of the needs of students, clinical educators, and service users. We will also explore common challenges such as resourcing, preparation, attitudes, and clinical needs, and how they can be addressed.

### Issues, questions & ideas for exploration and discussion

How have you used peer learning on clinical placements? (context, configuration, objectives, assessment and feedback)

What challenges did you face in implementing peer learning on clinical placements?

What benefits did you note? (for students, educators, service users)

What further guidance or evidence would you like to support peer learning on clinical placements?

### References

- Markowski, M., Bower, H., Essex, R., & Yearley, C. (2021). Peer learning and collaborative placement models in health care: a systematic review and qualitative synthesis of the literature. *Journal of Clinical Nursing*, 30(11–12), 1519–1541. <https://doi.org/10.1111/jocn.15661>
- Tai, J., Molloy, E., Haines, T., & Canny, B. (2016). Same-level peer-assisted learning in medical clinical placements: A narrative systematic review. *Medical Education*, 50(4), 469–484. <https://doi.org/10.1111/medu.12898>

### **“Staring down the barrel”: A qualitative study of underperforming surgical trainee perspectives on remediation processes**

**Dr Kathryn McLeod<sup>1</sup>**, Prof Robyn Woodward-Kron<sup>1</sup>, A/Prof Prem Rashid<sup>2</sup>, Prof Julian Archer<sup>3</sup>, Prof Debra Nestel<sup>1</sup>

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#### **Introduction**

Surgical trainees with serious underperformance issues are required to undergo formal remediation processes. However, there is a “very apparent gap in the lived experience” (1) of these trainees and their perceptions of remediation processes(2).

The aim of this study is to explore trainees’ perspectives of remediation processes. Understanding these processes should help training regulators better support underperforming trainees and improve remediation outcomes.

#### **Methods**

In this qualitative study, semi-structured interviews were used. A constructivist approach using reflexive thematic analysis methodology guided data collection and analysis. Ethics approval was obtained. To be eligible, participants must have been accredited surgical trainees who have direct experience of formal remediation.

#### **Results**

Semi-structured interviews of 11 participants were undertaken. At the time of interview, the cohort included 3 current trainees, 1 fellow and 7 consultants. Interviews lasted approximately 50 minutes. Three major themes were identified. The first theme of “a harrowing experience” showed that there were overwhelming emotions that were long-lasting. The emotions of feeling unfairly treated and unheard were prominent. Feeling “blindsided” was very common, along with being “tarred” and experiencing a change in identity. The second theme of “a state of confusion” focused on the lack of clear explanation of their underperformance, as well as lack of clarity regarding remediation goals and a lack of understanding regarding processes. The final theme of “the ‘performance’ of remediation” focused on the superficiality of remediation plans, the contributory factors of underperforming supervisors and training posts, and the need to prove remediation.

#### **Discussion**

While remediation is a necessary part of training, trainees’ experiences shows that the current processes need to be significantly improved. The emotional impact of undergoing remediation was long-lasting. Improving all aspects of communication before, during and after remediation processes is likely to yield better outcomes. Additionally, specific attention to remediation plan development is required.

#### **References**

1. Davenport R, Hewat, S., Ferguson, A., McAllister, S., & Lincoln, M. . Struggle and failure on clinical placement: a critical narrative review. *International Journal of Language & Communication Disorders*. 2018;53(2):218-27.
2. Krzyzaniak S, Kaplan B, Lucas D, Bradley E, Wolf S. Unheard Voices: A Qualitative Study of Resident Perspectives on Remediation. *Journal of Graduate Medical Education*. 2021:507-14.

## A needs analysis for training faculty supervisors of medical student research projects

**Dr Joanne Hart<sup>1</sup>**, Ms Mary-Jane Yang<sup>1</sup>, Prof Annette Burgess<sup>1</sup>, Prof Richmond Jeremy<sup>1</sup>,  
Dr Rajneesh Kaur<sup>1</sup>

<sup>1</sup>*University of Sydney, Camperdown, Australia*

### Introduction

Research skills are included as graduate competencies within medical programs. Development of these skills helps to support evidence-based practice and promote future research endeavours. The University of Sydney Doctor of Medicine (MD) Program includes a mandatory, 14-week research project (MD Project). This involves >260 individual student research projects and >180 project supervisors including clinicians, biomedical scientists, public health experts and other academics, who may not be trained in research supervision. This contrasts with higher degree research (HDR) project supervisors, who are required to undertake significant training. The objective was to perform a needs analysis for training supervisors of short medical student research projects.

### Methods

We used two information sources to summarise training goals for MD Project supervisors: a scoping review of the literature and exploring supervisors' views through surveys and in-depth interviews. Data were analysed using descriptive statistics and thematic analysis.

### Results

Although much has been written regarding HDR supervisor training, we found a paucity of literature regarding supervisor training for non-HDR projects. Common training topics included: program administration requirements, managing timelines and goals, and managing student-supervisor relationships and expectations. Surveying research supervisors (n=197, 77% response rate) indicated a third wanted more guidance. Of these, 62% needed information on program delivery requirements, 17% on study design and statistics and 10% wanted advice on dealing with student difficulties. In-depth interviews supported the survey findings, also revealing a need for greater access to library services. Supervisors also reported gaining satisfaction from their roles and developing their skills through collaborations with other supervisors.

### Discussion

Training needs for MD Project supervisors are consistent with reported training courses for HDR supervisors. MD Project supervisors are time-poor clinical and academic staff, a consideration for effective uptake and success of any training program. Further investigations regarding the best methods of delivering a training program are needed.

## Development and formative evaluation of Multidisciplinary Professional Standards for Health Professions Educators

**Dr Jennifer Davids<sup>1</sup>, Ms Monica Hughes<sup>1</sup>**

*<sup>1</sup>Western Sydney Local Health District, Sydney, Australia*

### **Background**

Education is widely delivered within the healthcare setting, yet most healthcare professionals have little teacher training. The drive to identify the core competencies of health profession educators has resulted in the development of various professional standards and capability frameworks. On review, we found that none of the models met the requirements of multidisciplinary health profession educators. We developed a set of Multidisciplinary Professional Standards for Health Professions Educators outlining the qualities and core capabilities required of educators, and clear criterion in various domains and at different levels of expertise.

### **Aim**

We set out to evaluate the usability of the Multidisciplinary Professional Standards for Health Professions Educators to support its design, introduction and implementation.

### **Methods**

We held seven focus groups consisting of clinicians, educators and education managers to evaluate the usability of the Multidisciplinary Professional Standards for Health Profession Educators. Data were analysed through theoretical thematic analysis using Guba and Lincoln's evaluation framework. Post-analysis, the findings were re-distributed to the focus groups along with the amended professional standards for confirmation and for final input.

### **Findings**

The professional standards were received favourably as a path to understanding and building the capacity and capability of health profession educators. However, anxiety regarding its punitive use for performance management and lack of career pathways means that substantial work is required to contextualise and integrate the standards positively with current institutional goals and practices.

### **Conclusions**

Multi-disciplinary health profession education managers and educators welcomed the professional standards to help understand and implement professional development pathways through clearly defined and tangible expectations. However, a positive implementation of the standards require integration with existing guides and career pathways within the health service, in ways that are clear, feasible, acceptable to educators and soundly linked to practice.

## Navigating successful establishment of new medical schools: a novel conceptual framework

**A/prof. Sneha Kirubakaran**<sup>1,2</sup>, A/Prof Koshila Kumar<sup>2</sup>, Emeritus Prof. Paul Worley<sup>2,5</sup>, Dr Joanne Pimlott<sup>2,3</sup>, Prof. Jennene Greenhill<sup>2,4</sup>

<sup>1</sup>*University of Queensland, Rockhampton, Australia*, <sup>2</sup>*Flinders University, Adelaide, Australia*, <sup>3</sup>*University of South Australia, Adelaide, Australia*, <sup>4</sup>*Southern Cross University, Gold Coast, Australia*, <sup>5</sup>*Riverland Mallee Coorong Local Health Network, Murray Bridge, Australia*

### Introduction

Establishing a new medical school involves many complex political, social, economic, educational, and organisational considerations. The process of establishment, however, is empirically and theoretically underdeveloped with limited literature, no explicit reference to applicable theory, and minimal research on the critical success factors. We aimed to identify critical success factors for establishing new medical schools, through Critical Realist research informed by Institutional Entrepreneurship theory.

### Methods

Our Multiple Case Study research spanned three continents and examined the establishment of new medical schools in Australia, Canada, and Botswana. We adapted and extended Institutional Entrepreneurship theory to develop a novel conceptual framework for successful establishment - the Eight C's Framework (8CF). 8CF examines the critical elements of Context, Catalysts, Conducting, Convincing, Collecting, Connecting, Challenges, and Consequences, and explores key aspects of each that contribute to success.

### Results

New medical schools are successfully established when Catalysts act within their Contexts to undertake various tasks of Conducting, Convincing, Collecting, and Connecting in order to produce desired Consequences and overcome Challenges.

### Discussion

Catalysts are the human agents of change and innovation. They are creative, visionary leaders who use mechanisms of agency and power to collectively and individually effect change. They identify the beneficial or detrimental field conditions of their Context and utilise them to advantage. They use entrepreneurial skills when Conducting (making more favourable) their Contexts. They use socio-political devices such as power, persuasion, trust, symbiosis, sharing, and bricolage when Convincing stakeholders with various arguments; when Connecting with various partners, and when Collecting required resources. Catalysts harness the utility of field structure, human agency, power dynamics, political diplomacy, and social accountability to produce desired Consequences and to overcome Challenges and obstacles. 8CF could guide stakeholders such as academics, clinicians, administrators, politicians, universities, health facilities, health systems, and communities, to strategically consider these elements when establishing a new medical school.

## Setting International Medical Graduates Up for Success

Dr Brooke Sheldon, **Dr Kajal Patel**, Ms Angela Degetto  
Launceston General Hospital

### **Background**

It is estimated 32.2% of the Australian Medical workforce is comprised of IMGs. It is vital for IMGs to successfully integrate into the Australian Health system, with the majority of support structures being fixated on individual or training factors. Recent studies have shown IMGs undergo significant cultural transitions and that they are poorly understood, even by those invested in IMG support and education. Understanding these transitions is essential not only to the IMGs but also the organisations. In order to enhance shared understanding of these transitions, faculty development is key, however remains limited in organisational settings.

At the Launceston General Hospital considerations on improving understanding the transitions experienced by IMGs, and how to sensitise faculty to these transitions through faculty development have become key focus in supporting IMGs.

### **Discussion**

Discussion will involve the key concepts in creating a faculty development program focussed on IMG support and considerations for generating buy in from clinicians. Faculty development as a component of IMG support is a relatively new concept within Australia and will be of interest to educators passionate about providing supportive working and educational environments for IMGs.



## Developing a communication strategy for a large medical student cohort

**Dr Iulia Oancea<sup>1</sup>**, A/Prof Margo Lane<sup>1</sup>

<sup>1</sup>Medical School, Faculty of Medicine, The University of Queensland, Queensland, Australia, Brisbane, Australia

### Introduction/Background

The University of Queensland Medical School is rolling out the new Doctor of Medicine (MD) program, MD Design, which commenced in January 2023. Year 1 is a year-long, fully integrated course with student learning experiences delivered by the Year 1 Course Team, permanent and casual academic staff, supported by experienced professional staff. The Program enrolls a total of approximately 500 students annually. The cohort comprises domestic and international students including students entering via an innovative partnership pathway with Ochsner Health Services in Louisiana, United States of America. It is clear that students enter the program with diverse life and educational experiences and a range of expectations.

### Aim/Objectives

The aim is to identify approaches on bi-directional communication strategy for the staff and students involved in the Year 1 Course and consider:

- Individual staff communication load
- Consistency and clarity, reducing duplication
- Time-efficiency on responses

### Discussion

A communication strategy was developed and endorsed by colleagues. This current strategy involves:

- One way communication from staff to students through a weekly bulletin on Blackboard. This includes key announcements and reminders with general messages and curriculum area specific communications
- Embedding of a user-friendly online communication platform supported by the University. This allows all staff and students to have visibility and contribute for various discussion areas, whilst also have ownership for a particular domain
- Use of generic email accounts which can be monitored by multiple staff who are able to either manage the enquiry locally or re-direct individual student queries to appropriate channels utilizing an agreed triaging algorithm.

### Issues/Questions for exploration OR Ideas for further discussion

- What is an efficient communication strategy between staff and students for a large medical student cohort?
- What is an efficient communication strategy between colleagues, including professional and academic, who are involved in the delivery of a year-long course?

## Professional Learning Communities: A novel approach to training medical students how to teach

**Associate Professor Leonie Griffiths**<sup>1</sup>, Dr Pam Anjara<sup>1</sup>, Dr Zoe Brown<sup>1</sup>, Ms Sharanya Menon<sup>2</sup>, Dr Vinita Rane<sup>1</sup>, Dr David Steed<sup>1</sup>, Dr Joshua Waring<sup>1</sup>

<sup>1</sup>The University of Melbourne, Melbourne, Australia, <sup>2</sup>Deakin University, Melbourne, Australia

### Introduction

Acquiring teaching skills may be viewed as a prerequisite for future careers in healthcare. While many medical schools incorporate peer assisted learning in their programs, the provision of teacher skills training is variable, leading to reports of students feeling unprepared for their teaching roles (Cohen et al., 2022). Professional Learning Communities (PLCs) are a model that support the professional development of teachers in higher education. Through collaboration, reflection, feedback discussions and experimentation, PLCs can enhance teaching practice. In this study, final year medical students were recruited as Teaching Assistants and participated in a longitudinal PLC teacher development program.

### Methods

Semi-structured online focus groups with Teaching Assistants (n=14) and academic PLC facilitators (n=3) were undertaken. Participants were asked to share and reflect on their experiences of the PLC and explore their views on teaching and learning. Thematic analysis of qualitative data was undertaken through the sociocultural lens of participatory practice.

### Results

Participants highly valued their experiences of the PLC which provided a safe space to cultivate relationships, brainstorm common problems and provide reassurance and perspective. The PLC provided a space for participants to reflect and process a range of challenging teaching moments such as balancing patient and learner needs, creating psychological safety for the learner, engaging learners in effective feedback conversations and adapting their teaching in the dynamic clinical environment. Facilitators of the PLCs appreciated the Teaching Assistants' 'fresh perspective' and reflected on their own teaching practices.

### Discussion

Providing regular opportunities to meet in a PLC throughout the academic year enabled participants to build confidence and experiment with various teaching strategies. PLCs provide a useful model that can be integrated into the professional development of healthcare students and professionals to support longitudinal development in teaching practice.

### References:

Cohen, A., Steinert, Y., & Ruano Cea, E. (2022). Teaching Medical Students to Teach: A Narrative Review and Literature-Informed Recommendations for Student-as-Teacher Curricula. *Academic Medicine*, 97(6), 909.

## Turning the Tide for Person Centred Health Care – Teaching & Learning Compassion

**Charley Greentree<sup>1</sup>**, Venkat Reddy<sup>1</sup>, Gillian McIlwain<sup>1</sup>

<sup>1</sup>University of Queensland, Australia

### Introduction/Background

Compassion is characterised as a desired quality of a healthcare worker. Although compassion is proven to improve patient outcomes, it is not necessarily valued as an attribute that could be learnt and assessed academically. Clinical practice and education focus on self-care, kindness and empathy as components/shared concepts with compassion. Wang et al's systematic review concludes "Predictors of greater compassion included maturity; work and life experiences; personality traits of openness to experience and agreeableness; skills such as perspective taking, reflection, and mindfulness; and positive role modelling."

What if compassion is a skill and this skill could be acquired? Learnt? Has Compassion sufficiently been separated from Kindness and Empathy to stand alone as an entity that can be researched and taught?

### Purpose/Objectives

We propose in this presentation that the tide is turning and that compassion in person-focused healthcare is integral for healthcare educators to be skilled in teaching, that indeed compassion can be taught, learnt and assessed and that we should focus on building our capacity in these areas to ensure well rounded healthcare workers practicing person-focused clinical care.

We plan to co-create, with the attendees, a set of outcomes that would inform a paper to assist in the foundation and building of a collegiate community of Compassion Health Educators

### Issues/Questions for exploration OR Ideas for discussion

We will explore what Compassion looks like to and how it is experienced/operationalized by health care professionals. How does compassion differ from kindness and empathy?

How do we, as educators, measure and assess the teaching and learning of compassion in both students and educators? Does learning and assessing compassion cause its own ethical dilemmas for educators and programs?

Online learning and teaching has been a particular challenge to the learning of compassion– we propose to explore rationales to succeed in all formats.

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

### Lived Experience Educators: transforming health professional education

**Dr Gisselle Gallego<sup>1,2</sup>, Associate Professor Lise Mogensen<sup>3</sup>, Dr Kim Bulkeley<sup>4</sup>, Ms Fiona Murphy<sup>5</sup>, Dr Claudia Ng<sup>1</sup>, Dr Aishah Moore<sup>1</sup>, Associate Professor Mary-Ann O'Donovan<sup>2,4</sup>**

<sup>1</sup>School Of Medicine, The University Of Notre Dame, Australia, Darlinghurst, Australia, <sup>2</sup>Centre for Disability Studies, Camperdown, Australia, <sup>3</sup>School of Medicine, Western Sydney University, Campbelltown, Australia, <sup>4</sup>Faculty of Medicine and Health, The University of Sydney, Camperdown, Australia, <sup>5</sup>Communication for Safe Care, South Western Sydney Local Health District, Australia, Liverpool, Australia

As highlighted by the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability, Australia's mainstream health services are not always well informed or well equipped to respond to the needs of people with disability (PWD). People have also reported negative attitudes and the devaluing of PWD as well as lack of understanding amongst staff regarding their health needs. How do we change these attitudes? Health professional education (HPE) plays a pivotal role in changing health care students (HCSs) attitudes, improving knowledge and comfort. Yet health curriculum can be light on disability specific content and limited if any direct experience working with PWD. A combined approach including specific education about disability, and interventions to enhance contact with PWD may be more effective in generating attitudinal change, level of comfort and skills towards caring for PWD. Despite this there has been widespread acknowledgement that there is currently insufficient training for HCSs with regard to understanding and appropriately treating PWD.

This PeARL will introduce key concepts of Critical Disability Studies (CDS) as a lens to explore and invite participants to share examples of integration, barriers and opportunities for lived experienced educators to contribute into HPE.

The facilitated group discussion will focus on key areas:

1. How is disability currently included in HPE curricula?
2. How best can we include people with lived experiences as educators to improve attitudes, knowledge and ultimately improve the health outcomes of PWD.
3. What are the factors associated with successful partnerships between facilitators with lived experience and educators?

## Where does the consumer voice live in competency framework development?

**Ms Nicole Murray<sup>1</sup>**, Dr Alan Batt<sup>1,2</sup>, Dr Kristie Bell<sup>3</sup>, Prof Claire Palermo<sup>1</sup>

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Competency frameworks typically describe the perceived knowledge, skills, attitudes, and other characteristics required for a health professional to practice safely and effectively. In addition to describing professional practice, competency frameworks are also used to inform health professions education, assessment, and workforce regulation. Consumers (including patients, potential patients, caregivers, families and people who use health services [1]) are rarely involved in the development of competency frameworks, despite person-centred care being a universal feature of a competent health professional [2]. They are considered central stakeholders in the delivery of person-centred care and bring different knowledge, needs and concerns to a health care encounter. Consumers are well placed to define the knowledge, skills and attributes they desire in delivery of their care, and this may be overlooked by a health professional.

Little guidance exists on the optimal methodological approaches to engaging consumers in health professions education [1], including competency framework development. Where consumers have contributed to the development of competencies, their involvement has been predominately consultative rather than collaborative [2]. The process and outcome of consumer involvement has been poorly described and evaluated making it difficult to ascertain the most successful and meaningful approaches to their involvement [2].

The purpose of this session is to explore consumer involvement in the development of competency frameworks with the participants, including who, how, when and for what purpose consumers could be involved.

### **Discussion topics:**

Are consumers an end user of competency frameworks? Should they be involved in competency framework development? For what purpose?

How could we meaningfully include consumers in the development of competency frameworks? Is co-design an appropriate approach? At what stage of the development process could they be included?

How could we report and evaluate consumer contribution to the development and outcome of competency frameworks?

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2. Murray, N., et al., *Does patient and public involvement influence the development of competency frameworks for the health professions? A systematic review*. Frontiers in Medicine, 2022. 9: p. 918915.

### **On your marks! Evaluating the reliability of the revised online-Multiple-Mini-Interview for specialist Sport & Exercise Physician trainee selection – a three-year evaluation.**

**Dr Kylie Fitzgerald<sup>1</sup>, Dr Brett Vaughan<sup>1</sup>**, Associate Professor Jane Fitzpatrick<sup>1</sup>

<sup>1</sup>*The University Of Melbourne, Parkville, Australia*

#### **Introduction**

Evaluating selection methods informs best practice in specialist medical selection. Applicants undertake a Multiple-Mini-Interview (MMI) as part of the trainee selection process at the Australasian College of Sport and Exercise Physicians (ACSEP). The marks achieved in the MMI contribute 70% of the score used to rank the candidates, thus candidates must achieve high marks to be successful. The ACSEP MMI was run face-to-face in 2019, then to navigate COVID-19 impacts, the MMI shifted online from 2020. We report the MMI reliability for high-stakes selection decisions for 2019-2021 and describe the improvements made throughout this three-year evaluation.

#### **Methods**

A prospective observational design was used. Candidates participated in MMIs each September 2019-2021. Stations aligned with CANMEDs domains and expected knowledge was assessed at CANMEDs entry to specialty level. All stations were developed by an education and content experts and reviewed by annually, based on evaluation data of the previous year. Interviewers participated firstly in general MMI training in 2019, then online training session for their specific MMI station in 2020-21. Generalisability analysis evaluated reliability and internal consistency of each stations marking was investigated using Cronbach's alpha for MMI iteration 2019-2021.

#### **Results**

The seven-station 2019 overall reliability was ( $\alpha=0.43$ ) therefore major changes were applied for 2020, including an extra station, a shift from two to one examiners per station, and station specific training. The 2020 reliability was ( $\alpha=0.8$ ), however several stations questions were reviewed to increase their internal consistency (stations 2,3 and 4,  $\alpha<0.7$ ). The 2021 reliability was  $\alpha=0.84$ , with 7 of 8 stations reporting reliability  $> \alpha=0.7$ .

#### **Discussion**

The process of cyclical review and evaluation over three years resulted in a substantial improvement in the reliability of the ACSEP MMI for high-stakes trainee selection. Navigating the shifting sands successfully was achieved by our education and college content experts pulling together and blending their areas of expertise.

## Widening access to medicine: A realist evaluation of Selection Pathways in Australian Medical Schools

**Dr Emma Bartle**<sup>1</sup>, Professor Sandra Carr<sup>1</sup>, Dr Lise Mogensen<sup>2</sup>, Associate Professor Rebecca Olson<sup>3</sup>, Professor Wendy Hu<sup>2</sup>, Dr Annelise Cocco<sup>2</sup>, Dr Sarah Hyde<sup>4</sup>, Associate Professor Alexia Pena<sup>5</sup>, Dr Ryan Dashwood<sup>2</sup>, Professor Jennifer Cleland<sup>6</sup>, Dr Scott McCoombe<sup>1</sup>, Dr Nicole Shepherd<sup>3</sup>, Associate Professor Phillip Roberts<sup>7</sup>, Miss Natalie Downes<sup>7</sup>

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### Introduction/Background

Since the mid 1990's medical schools in Australia and New Zealand (ANZ) have used different selection strategies, tools, and criteria to widen access for under-represented groups in medical education and training. To some extent, these have been successful, as reported in medical program evaluation and accreditation reports and some longitudinal single medical school studies. However, these have largely focussed on quantitative evaluations of the robustness of selection criteria, processes and tools, or on intentions to practice in certain locations or specialty of practice. There has been less published on the outcomes and experiences of selection pathways for applicants in targeted groups, and on how these pathways work to enhance accessibility and participation in medical education. In recognition of these limitations, the Asia-Pacific Network for **Qualitative Research of Widening Access** to the Health Professions (WAQR) was formed in 2021.

### Aim/Objectives

The aim of this study is to undertake a participatory inquiry on existing widening access selection pathways in a diverse sample of Australian medical schools. This study is the first in a program of research for WAQR and is funded by the UCAT Consortium.

### Discussion

A realist synthesis and evaluation approach is being employed to develop explanatory theory about implementing and evaluating widening access pathways. All ANZ medical schools will be invited to participate with 6 schools the target.

Widening access is essential to meeting the healthcare needs of our increasingly diverse communities, and imperative to the social accountability mission of universities and medical schools. This research offers coherence to this emerging field of research across our region to provide transferable findings that will enable medical schools to consider their practices and policies.

### Issues/Questions for exploration OR Ideas for further discussion

Findings of the realist synthesis will be presented, offering insight into what works for whom, in what context.

## Navigating ebbs & flows of digital dashboards used in medical student assessments during clinical placements

**Dr Asela Olupeliyawa<sup>1</sup>, Prof Stephen Tobin<sup>2</sup>**, Dr Anna Kull<sup>1</sup>, Assoc Prof Helen Wozniak<sup>1</sup>, Assoc Prof Justine Gibson<sup>1</sup>, Dr Robert Garrard<sup>1</sup>, Mr Samuel Monk<sup>1</sup>, Mrs Chantal Bailey<sup>1</sup>, Assoc Prof Kent Robinson<sup>2</sup>

<sup>1</sup>University Of Queensland, Brisbane, Australia, <sup>2</sup>Western Sydney University, Sydney, Australia

### Introduction/Background

Digital dashboards provide information about student engagement in learning activities, assessment performance and comparative cohort metrics<sup>1</sup>. They are often focused in university examination contexts, with limited development work being undertaken in health professions education and in clinical settings.

Over recent years, medical schools at University of Queensland and Western Sydney University have embarked on workplace-based assessments of their medical students using the same IT provider (MKM Myprogress™). The general philosophy of programmatic assessment as part of an assessment system is used by both, but bespoke WBA assessments are used at each. How each institution is adopting learning analytics is different.

### Aim/Objectives

We aim to present the learnings from each medical school. We will demonstrate some analytic dashboards and show how dynamic review of this information can enable understand about student learning in the clinical setting.

### Discussion

We will propose why digital dashboards need to link to a whole of assessment system and consider how they can be used for coaching students, how they link individual tasks to longer term reports and progress, and how they can be used for remediation. Both medical schools focus on developing feedback literacy when implementing digital dashboards to support the integration of information e.g. learner understanding about when and how to take action. We propose that this whole of system approach could eventually replace high stakes single event clinical examinations.

### Issues/Questions for exploration OR Ideas for further discussion

What do you believe about WBAs for medical students?

How much can you find about student engagement in clinical placements by using digital dashboards?

Do you have views about future directions for assessment in medical schools? For example, the use of standardised OSCEs (or similar) compared to the in-situ rating of performance by many for WBAs?

### References:

1. Boscardin, Fergus, K. B., Hellevig, B., & Hauer, K. E. (2018). Twelve tips to promote successful development of a learner performance dashboard within a medical education program. *Medical Teacher*, 40(8), 855–861. <https://doi.org/10.1080/0142159X.2017.1396306>



## Opportunities and innovation in enhancing the rural medical workforce

### **Mrs Sharon Frahn<sup>1</sup>**

<sup>1</sup>Riverland Mallee Coorong Local Health Network, Berri, Australia, <sup>2</sup>Flinders University, Bedford Park, Australia

#### **Introduction/Background**

For over 25 years, Australian rural communities have been frustrated by a maldistribution of medical workforce. For the same period of time the Riverland health service has worked in partnership with Flinders University to create the Parallel Rural Community Curriculum (PRCC) in rural South Australia. What started as a workforce program quickly became a successful disruptive technology for broader pedagogy in medical education.

#### **Aim/Objectives**

Despite more graduates of the PRCC choosing rural practice compared to their urban rotation-based colleagues, local medical workforce crises have persisted. In February 2021, as a vehicle to take responsibility for their own health professional workforce the Local Health Network decided to implement the National Rural Generalist Pathway in its local region as a first step. It was identified that medical students and trainee Medical Officers were seeking a region that could provide a pathway from medical student all the way through to fellowship. It created the innovative Riverland Academy of Clinical Excellence (RACE) clinical training program.

#### **Discussion**

In 2022 RACE increased the region's medical workforce by over 20% over the year. It gained accreditation as a provider of junior doctor and advanced skills training and recruited five interns (all of whom had previously undertaken one-year rural clinical school placements), six second year and above doctors (many who also had rural experience), and four advanced skills registrars. RACE has linked with GPEx Rural Generalist registrars and formed a Public Health Unit from those registrars who also have MPH qualifications. RACE and Flinders University are expanding teaching facilities in the region and enabling medical students to complete their MD in the region.

In February 2023, RACE has widened its training options to include a higher number of training placements in general practice and an increased range of rotations available over several special interest areas, further enhancing rural medical workforce experiences and opportunities. RACE has been able to achieve complete retention of its new workforce, 100% of participants remaining in the program.

#### **Issues/Questions for exploration OR Ideas for further discussion**

Is it possible as a standard for rural health services to become training organisations and what can necessitate other rural local health networks to increase their medical workforce through an educational system? What are the factors within such an arrangement that might influence Trainee Medical Officer recruitment and retention, and how can public and private divisions of the health sector collaborate to make this arrangement mutually beneficial?

## **Mentoring/Preceptorship Manual of the transition of newly graduated nurses in Clinical Practice in Fiji.**

**Mrs. Samsun Ayub<sup>1</sup>**

<sup>1</sup>*Fiji National University, Nasinu,, Fiji*

### **Introduction/Background**

Transition into clinical practice for newly graduated nurses has been reported to be a challenging event whereby registered nurses feel incapable of carrying out duties independently in a clinical area soon after graduation. As reported by Hofler and Thomas (2016; Ayub, 2021, Goundan, 2018) mention that a host of challenges are faced by new graduate nurses (NGNs) during their transition into the workforce.

Senior nurses who supervise and guide NGNs during transition are also assigned to provide patient care, managerial duties, supervision of student nurses in the hospitals are usually overwhelmed with the enormous task placed on them. Senior nurses need to be given ample time, training, and a proper guide that will assist in training the NGNs during transition.

Currently, there is no mentorship available in Fiji to assist senior nurses to guide the new nurses in the clinical placements in Fiji.

### **Aim/Objectives**

The following research questions will be explored

2. Do senior nurses face difficulty while supervising new nurses in the wards?
1. What type of support do senior nurses need during this transition?
2. What type of activities do senior nurses carry out during the transition?
3. What activities should be included in the preceptorship book?

### **Research Questions**

- Q1. Is there a need for a mentoring/preceptorship program for senior nurses to guide new nurses?
- Q2. What would senior nurses like to have in the mentoring program to assist them to guide new nurses?

### **Discussion**

Results will show some challenges that participants face during the supervision and guidance of the NGNs and the need for training and support for the senior nurses with super-numerations for the extra tasks they carry out.

### **Issues/Questions for exploration OR Ideas for further discussion**

Experiences and challenges faced by of senior nurses and what support do they require?

## **Assessment of International Medical Graduates (IMG): navigating improved system outcomes and personal journeys**

Professor Amanda Barnard<sup>1</sup>, **Dr Julie Gustavs**<sup>1</sup>, Ms Jen Desrossiers<sup>1</sup>, Ms Theanne Walters<sup>1</sup>, Dr Kim Ashwin<sup>1</sup>, Ms Sidonie Frerotte<sup>1</sup>, **Ms Megan Lovett**<sup>1</sup>

<sup>1</sup>*Australian Medical Council, Canberra, Australia*

### **Introduction**

Australia, similar to other OECD countries, has experienced long-term growth in demand for healthcare services which has outstripped growth. International Medical Graduates (IMGs) comprise over 30% of the Australian medical workforce, over 50% of general practitioners, and are the mainstay of medical workforce in rural and remote areas. The COVID-19 pandemic has further impacted workforce supply.

The Australian Medical Council is responsible for the examination of international medical graduates seeking to practise medicine in Australia. The AMC is undertaking a program of work to review and improve IMG assessment experiences and performance and in doing so to reduce barriers to workforce supply. This presentation seeks to share insights into those innovations and explore the challenges and opportunities for change.

### **Methods**

The AMC's change agenda focuses on the future of assessment and IMG pathways and use of personas and journey mapping methodologies. Led by multi-stakeholder expert groups and involving co-design methods, our evidence-based approach draws on survey and interview data as well as in-depth analysis of the literature including international case studies and existing data sets at the AMC, as well as medical registration data.

### **Results**

In this presentation, we will also discuss a quick wins report which seeks to recommend achievable solutions to improve IMG assessment; culturally safe personas which reflect the heterogeneity of IMGs and can be used to inform future innovations across the sector and a journey map which aims to capture the key milestones in IMG journeys as well as system requirements and ideas for further support.

### **Discussion**

In this presentation, we conclude with how we can undertake joint research to make evidence-based future change across the health sector.

### Global surgery education, knowledge and perspectives of senior medical students in Australia and New Zealand

**Mr Samuel Robinson**<sup>1,2</sup>, Dr Chen Lew<sup>1,3</sup>, Dr Sarah Goh<sup>1,4</sup>, Dr Nazmul Karim<sup>1</sup>, Professor Dragan Ilic<sup>1</sup>

<sup>1</sup>School of Public Health and Preventative Medicine, Monash University, Melbourne, Australia, <sup>2</sup>Department of Paediatrics, School of Clinical Sciences, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia, <sup>3</sup>Alfred Health, Melbourne, Australia, <sup>4</sup>Monash Health, Melbourne, Australia

#### Introduction

Since the Lancet Commission on Global Surgery highlighted the five billion people lacking sufficient access to surgery, there has been increasing recognition of the global surgery field. <sup>1</sup> The impact of university curriculum on career trajectory suggests that education of future healthcare professionals will be an important step in developing Australian and New Zealand (ANZ) involvement in this area. <sup>2</sup> This is the first study of global surgery education among ANZ medical students.

#### Methods

We conducted a cross-sectional survey of senior medical students in all ANZ medical schools (n=24) from August to October 2022. Participants were recruited using purposive and snowball sampling. Through 35 multiple choice (MCQ) and short answer questions, participants were asked about their attitudes and exposures to global surgery, and tested on relevant knowledge. Data was analysed using descriptive statistical analysis, chi-square tests and inferential t-tests.

#### Results

Of 851 participants, 22.2% had prior global surgery exposure, most commonly through student organisations (10.9%). While 80.6% believed global surgery to be relevant, only 8.5% reported timetabled teaching of global surgery content. This is despite 66.7% supporting it becoming mandatory. Prior global surgery exposure was significantly associated with viewing global surgery as relevant (p<0.001), desiring further exposure (p<0.001) and supporting mandatory teaching (p<0.001). The mean score for MCQs assessing global surgery knowledge was 4.3/10 (SD: 1.7). Students who received MCQ assessments at university scored higher than any other method of previous assessment (4.3 vs 2.4, p<0.001). Preferred methods of global surgery exposure are elective rotations (499/659, 75.7%), timetabled teaching (390/659, 59.2%) and optional university modules (319/659, 48.4%)

#### Discussion

ANZ medical students report limited exposure to global surgery. Despite significant student interest and perceived relevance, global surgery education is led by non-academic organisations. Our findings support the inclusion of high-quality global surgery education into ANZ medical school curricula.

#### References:

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1. Querido SJ, Vergouw D, Wigtersma L, Batenburg RS, De Rond ME, et al. Dynamics of career choice among students in undergraduate medical courses. A BEME systematic review: BEME Guide No. 33. *Med Teach*. 2016;38(1):18-29.

## Identification of the Wellbeing Health In-reach Nurse (WHIN) Capability Framework

**Mrs Suzanne Kelpsa**<sup>1</sup>, Mrs Gail Forrest

<sup>1</sup>*Health Education Training Institute, St Leonards, Australia*

**Background:** The Wellbeing and Health In-reach Nurse (WHIN) program is a new partnership agreement between NSW Health and the NSW Department of Education whereby 'wellbeing nurses' work in primary and secondary school settings. Wellbeing nurses aim to connect students, families and the school community to health services to promote and improve overall health and educational outcomes.

The Health Education Training Institute (HETI) project for the WHIN education and training was established to support and grow the varied professional development requirements of the wellbeing nurse workforce in NSW Health. To achieve a purpose-built education and training program for wellbeing nurses, it was identified that a standardised evidenced-based WHIN capability framework was required.

**Method:** A review of current WHIN position descriptions was conducted to identify similarities or variation of nursing capabilities within the WHIN program. Concurrently, a rapid review was conducted of international and national literature to explore comparable competencies, frameworks and practice standards aligned to capabilities within health and school-based nursing roles. Knowledge, skills and attributes were themed and coded to categorise nursing capabilities, grouped into corresponding domains and descriptive elements to create the draft WHIN Capability Framework. Consensus and endorsement of the Framework was met via a modified Delphi process involving relevant stakeholders.

**Outcomes:** The domains and elements identified in the framework were developed following review of current WHIN position descriptions, a rapid literature review and a modified Delphi process. The development of a WHIN Capability Framework ensures the development of evidence-based capabilities for wellbeing nurses across NSW and will inform and support standardisation of associated education and training.

## “For a lot of people, this is their first job”: Exploring Intern Preparedness

**Dr Susanne Pearce<sup>1</sup>**, Professor Alison Jones<sup>1</sup>, Associate Professor Koshila Kumar<sup>1</sup>

<sup>1</sup>*Flinders University/College of Medicine & Public Health, Adelaide, Australia*

### Introduction

Graduate transition is a significant time for medical graduates, not only to consolidate theory and practice, but to manage the shift in expectations and responsibility as a paid employee. A world-wide shortage of doctors and the ever-present challenges of delivering quality health care now and into the future add to the importance of investing and improving medical graduate preparedness (Monrouxe, 2018). In 2015, the Australian government undertook a major review of medical intern training, partly in response to concerns that graduates from Australian medical programs were not ‘work-ready’ (AHMAC, 2015), however national data and reports provide insufficient detail to unpick what the issues are.

The work preparedness of Flinders University Doctor of Medicine (MD) graduates research project explores the experiences of junior doctors in their first and second year of clinical practice and their preparedness for this transition.

### Methods

The study adopted a qualitative research approach, of a four-year graduate-entry Doctor of Medicine (MD) program which has undergone significant changes over several years. Graduates in their first and second year of clinical practice took part in a 30-minute one on one interview. Data were transcribed and analysed using thematic analysis. Approval was granted by Flinders University’s Research Ethics Committee. Data collection and analysis are ongoing and will be finalised by mid-2023.

### Results

Emerging themes indicate that Flinders graduates feel adequately prepared for their transition to internship, particularly in relation to providing person centred care. Participants struggled with some ‘hidden’ routine aspects of the intern role, as well as adjusting to varying workplace cultures within each rotation. The most notable realisation was the gravity of being a junior doctor and level of responsibility.

### Discussion

Given the importance of adequate preparedness for practice, not only for graduates, but for employers and patients, it is imperative to identify challenges interns face and make curriculum adjustments to optimally prepare future doctors.

### References

- Australian Health Ministers’ Advisory Council (AHMAC), 2015. Review of Medical Intern Training. Discussion Paper. <https://www.samet.org.au/wp-content/uploads/2015/03/Medical-Intern-Training-Review-Discussion-Paper-February-2015.pdf>
- Monrouxe, L. V., Bullock, A., Gormley, G., Kaufhold, K., Kelly, N., Roberts, C. E., & Rees, C. (2018). New graduate doctors’ preparedness for practice: a multistakeholder, multicentre narrative study. *BMJ Open*, 8(8), e023146.

## Game-based learning: an innovative approach to teaching the social determinants of health

Dr Heather Russell<sup>1</sup>, Dr Christopher Harrison<sup>2</sup>, **Ms Lisa Hampshire<sup>1</sup>**, Dr Jayne Crew<sup>1</sup>, Dr Alice Henschke<sup>1</sup>, Professor Catherine Hawke<sup>1</sup>, Professor Annette Burgess<sup>3</sup>

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### Introduction/Background

Educators and clinicians at the University of Sydney's School of Rural Health have developed an innovative board game centred around Australian rural social determinants of health (SDoH). The game forms part of a strategy including an evidence-based guide, team teaching and blended learning across the Sydney Medical School to facilitate nuanced understanding of why rural patients have markedly different health outcomes to their urban counterparts. This multifaceted approach is supported by de Freitas' (2018) work in effective game-based learning.

### Aim/Objectives

The SDoH are commonly taught at the population level which removes learners from the lived experience of the patient with whom they are engaging. Game-based learning, through the *Rural Social Determinants of Health Board Game*, allows players to live a year in the life of a rural patient, experiencing both positive and negative aspects of rural living on their health. The Game applies fun and challenge (Dale, 2014) by personifying the rural SDoH through eight character profiles.

### Discussion

Players select a patient profile whose social health determinants contribute to the health outcomes they might experience during their "year" in the game. Gameplay is disrupted through the application of *Risk* and *Protective Factor* cards collected during the game. Playing the game gives agency to learners to understand how the rural SDoH might apply to the patients they will encounter during their clinical placement and beyond as clinicians.

### Issues/Questions for exploration OR Ideas for further discussion

Qualitative focus groups and survey responses illustrate learners enjoy the gameplay, finding the experience both insightful and useful. The game will be available to download and customise. Information from users is being sought on their experience of using *The Rural Social Determinants of Health Game*.

Dale, S. (2014). Gamification: Making work fun, or making fun of work? *Business Information Review*, 31(2), 82–90. <https://doi.org/10.1177/0266382114538350>

de Freitas, S. (2018). Are Games Effective Learning Tools? A Review of Educational Games. *Educational Technology & Society*, 21(2), 74–84.

## Medical graduates' career intentions in psychiatry

**Dr Yan Chen**<sup>1</sup>, Miss Annie Wang<sup>1</sup>, Miss Antonia Verstappen<sup>1</sup>, Associate Professor Marcus Henning<sup>1</sup>, Dr Mataroria Lyndon<sup>1</sup>, Associate Professor Frederick Sundram<sup>1</sup>, Professor Phillippa Poole<sup>1</sup>, Professor Tim Wilkinson<sup>2</sup>, Associate Professor Craig Webster<sup>1</sup>  
<sup>1</sup>University Of Auckland, Auckland, New Zealand, <sup>2</sup>Christchurch School of Medicine, Christchurch, New Zealand

### Introduction

Multiple factors influence medical graduates' career intentions, such as experiences during medical school and clinical rotations, mentorship and role models, financial considerations, and personal values and interests (Yang et al. 2019). In New Zealand, there is a psychiatry workforce shortage, which is further compounded by an increasing demand for specialist mental health services, high levels of burnout among psychiatrists, and heavy reliance on overseas-trained medical graduates (Chambers, 2021). This study aimed to explore factors that influence medical graduates' career intentions in psychiatry.

### Methods

Using data from three cohorts (2007, 2008 & 2009) from the Medical Schools Outcomes Database and Longitudinal Tracking (MSOD) project, we identified two groups of medical graduates: 1) those in psychiatry training at PGY5 (Postgraduate Year 5) and 2) those showing an interest in pursuing psychiatry training at commencement of, or graduation from, medical school. We then invited them to participate in an individual interview conducted via Zoom. Transcripts of the interviews were analysed using Braun & Clarke's thematic analysis framework in six steps.

### Results

Eleven participants (four female and seven male) were interviewed. Nine were in psychiatry training, one switched to General Practice from psychiatry, and one was no longer working in medicine. The thematic analysis revealed five factors that contributed to participants' decision to pursue a career in psychiatry: 1) training and educational experiences, 2) clinical practice of psychiatry, 3) perception of and personal experience with mental health, 4) workplace culture in psychiatric settings, and 5) personal motivations and attributes.

### Discussion

Participants' educational experiences and personal attributes influence their career choice. Strategies to improve the recruitment and retention of the psychiatry workforce include: 1) normalising mental health in clinical settings and at a societal level, and 2) providing more training resources and integration with other specialties.

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### **Explicit and process oriented teaching of clinical reasoning in the early years medical curriculum: a novel online case-based approach.**

**Dr Michael Poulton<sup>1,2,3</sup>, Dr Venkat Reddy<sup>1</sup>**

*<sup>1</sup>Academy for Medical Education, The University of Queensland, Brisbane, Australia, <sup>2</sup>Melbourne Clinical School, University of Notre Dame Australia, Melbourne, Australia, <sup>3</sup>Department of Medical Education, University of Melbourne, Parkville, Australia*

#### **Introduction**

Clinical reasoning is a complex cognitive phenomenon that is considered both difficult to learn and to teach to medical students<sup>1</sup>. As such, it does not feature strongly in most preclinical medical curricula<sup>2</sup>, relying instead on ad hoc learning in the clinical years. This feasibility study aimed to assess the practicality and acceptability of an interactive, online, four-part clinical reasoning development series for second year medical students in their fourth semester at a large tertiary educational institution.

#### **Methods**

An online introductory lecture outlining core clinical reasoning concepts of problem representation, illness scripts and diagnostic schema was presented. These concepts were directly applied to distinct clinical cases over three online sessions. Students were engaged in the reasoning process by a series of online quizzes examining evolving differential diagnoses as further clinical information was sequentially presented. An online questionnaire enabled students' self-assessment of clinical reasoning abilities before and after each session. Students' quantitative and qualitative feedback was sought regarding the quality of the presentations, relevance of the sessions to immediate and future clinical practice, and agreeability with the mode of delivery.

#### **Results**

Sixty-one completed online questionnaires were received. At baseline, 51% of respondents were not confident with their clinical reasoning abilities and 63% were unfamiliar with clinical reasoning strategies. Following the sessions, 96% of respondents reported a significant improvement in their understanding of clinical reasoning concepts and greater confidence in their ability to use them in the diagnostic process. Students expressed a strong preference for these sessions to be delivered online, and were in favour for earlier introduction of explicit clinical reasoning instruction in the medical curriculum.

#### **Discussion**

The results suggest that an online case based clinical reasoning series is logistically feasible, well accepted, and boosts students' confidence with learning a complex clinical skill. Next steps will involve expanding the series into year one of the program, increasing the number of clinical cases, and longitudinally evaluating its efficacy using mixed methods research.

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## Teaching delirium at medical school: challenges and opportunities

**Professor Andrew Teodorczuk**<sup>1,2,3</sup>, Dr Asela Olupeliyawa<sup>2</sup>, **Dr Chloe Yap**<sup>1,2,4</sup>, Dr James Fisher<sup>5,6</sup>, Dr Courtney Anne Blackhall<sup>7</sup>

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### Introduction/Background

Delirium is the most common hospital complication and a syndrome that interns will frequently encounter across all rotations. Though preventable, it continues to be poorly identified and managed, leading to negative patient and carer outcomes as well as increased healthcare costs.

An education gap exists on how to improve training at medical schools. Results of a UK survey<sup>1</sup> show that in more than half of medical schools, students are unlikely to be exposed to patients with delirium and that only a few medical schools address attitudes to patients with delirium.

Despite the development by a Delphi process of an international undergraduate curriculum<sup>2</sup>, delirium continues to be poorly addressed in medical school curricula. Theoretical reasons for this deficiency include patient avoidance due to complexity, lack of curriculum space, being an 'orphan syndrome' without a specific discipline, and arguably because it remains a psychiatric syndrome trapped in a medical setting with interventions primarily led by allied health.

### Discussion

Within this presentation we will explore both a student and educator's perspective about why delirium might be so hard to teach. We will then outline effective approaches that focus on educational purpose. Specifically, we will consider a shift from teaching delirium per se to how learning about delirium can be fostered and assessments planned to drive deeper education approaches. In addition, we will determine how good teaching delirium can be aligned to workforce demands, in terms of managing acutely ill patients, preparation for practice, interprofessional education and managing complexity. There will also be a focus on how attitudes can be reshaped to help promote greater ownership of patients with delirium.

### Questions for exploration

1. How else may we promote good delirium education practice in medical school curricula?
2. What interprofessional opportunities exist to improve delirium education across healthcare professions?
3. What are the wider gains of improving delirium education among health professionals?

### References

- 1) Fisher J, Gordon A, MacLulich A, Tullo E, Davis D, Blundell A, Field R, Teodorczuk A. Towards an understanding of why undergraduate teaching about delirium does not guarantee gold standard practice – results from a UK national survey. *Age and Ageing* 2014 Oct 16.
- 2) Copeland C, Fisher J, Teodorczuk A, International Undergraduate Curriculum for Delirium Using a Modified Delphi Process. *Age and Ageing* 2018 Jan 1;47(1):131-137. doi: 10.1093/ageing/afx133

## Collaborative Online International Learning: a nursing education partnership between Australia and Canada

Dr Louise Shaw<sup>1,2</sup>, Professor Debra Kiegaldie<sup>1,3,4</sup>, Ms Teresa Evans<sup>5</sup>, **Ms Melissa Ciardulli<sup>1</sup>**

<sup>1</sup>Holmesglen Institute, , Australia, <sup>2</sup>La Trobe University, , Australia, <sup>3</sup>Monash University, , Australia, <sup>4</sup>Healthscope Hospitals, , Australia, <sup>5</sup>Grande Prairie Polytechnic, , Canada

### Introduction:

The COVID-19 pandemic has heavily impacted the international healthcare education landscape and created many challenges for the global healthcare workforce. The value of building and sustaining international connections has never been more important. Collaborative online international learning (COIL) offers nurses from other countries the opportunity to develop and sustain international partnerships, without economic, organisational, or geographical barriers<sup>1</sup>.

The aims of the research were to develop, implement and evaluate a COIL program between Australia and Canada. Three educational interventions were designed for students including (i) an online virtual community; (ii) virtual reality immersive simulations with one focused on Indigenous Health, and (iii) a virtual global classroom. A virtual community of practice provided a platform for faculty to engage in research collaboration.

### Methods

A mixed methods design was used. Bennett's stages of intercultural competence provided the underpinning theoretical framework<sup>2</sup>. Quantitative measures included pre and post-test student surveys and a Cultural Capability Measurement Scale. Focus groups were conducted with students, course designers, Indigenous scenario writers/actors, and faculty.

### Results

Over 250 students and 25 faculty participated in the program stating their primary motivation being an interest in international/global health issues. When asked about their expectations of a COIL program, students and faculty cited a growth in cultural awareness and gaining different perspectives on another culture. Students gained confidence in their ability to communicate in a culturally safe way with First Nations people and increased their understanding of how to advocate for improvement in First Nations People health. Students valued collaborative learning and learning about nursing practices in different cultures. Indigenous actors valued the opportunity to challenge misconceptions about indigenous culture. Faculty were engaged in 7 collaborative research outputs.

### Discussion

The COIL program has strengthened our international partnership and has provided an evidence-based template for the design and delivery of future COIL partnerships and other international collaborative research projects.

### References:

- Bragadottir, H., & Potter, T. (2019). Educating nurse leaders to think globally with international collaborative learning. *Nordic Journal of Nursing Research*, 39(4), 186-190.
- Bennett, M. J. (2004). Becoming intercultural competent. In J. Wurzel (Ed.), *Toward multiculturalism: A reader in multicultural education* (2nd ed., pp. 62–77). Newton, MA: Intercultural Resource Corporation.

## From papers to practice: contemporary approaches to professional development and the pedagogical preservation of wellbeing in medical school

**Dr Kelly Valentin**<sup>1,2</sup>

<sup>1</sup>*Curtin University, Bentley, Australia*, <sup>2</sup>*University of Western Australia, Crawley, Australia*

### **Introduction/Background**

Despite increasing attention towards non-cognitive and meta-cognitive competencies in medical education and other health professional literature, the value that many medical students place upon personal and professional developmental curriculum is often lower than more scientific or clinical learning. In addition to this disengagement dilemma, the medical profession is known for high rates of psychological distress, burnout and suicide. (1,2) This has influenced the Australian Medical Council to mandate that medical schools not only promote professional partnerships in patient-centred care, but also contribute towards the preservation of medical student wellbeing.

### **Aim/Objectives**

In this presentation, Dr Kelly Valentin will share the epistemological and educational approaches that have influenced the redesign of Domain 4 curriculum at Curtin Medical School (Discipline of Medicine); an area of learning that includes professionalism, leadership, ethics, law, wellbeing, boundaries, professional values, self-evaluation and lifelong learning

### **Discussion**

The ongoing process of Domain 4 curriculum development and evaluation within the medical course has occurred in consultation with students and staff, and in collaboration with key internal and external academics and researchers. Relevant concepts, philosophical frameworks and educational theories will be explored. Preliminary data from a recent formal program evaluation will be discussed, including insightful feedback of student's experiences within a final year, student-led learning component designed to contribute to professional identity formation and wellbeing.

### **Issues/questions for exploration OR Ideas for discussion**

How might reflexivity contribute to meaningful engagement in personal and professional development (Domain 4) curriculum?

With current cohorts of medical students having immediate access to and awareness of contemporary global and social climates, to what degree should their personal and professional development be led by them? To what extent should we be prescriptive towards the personal and professional attributes and social attitudes of our academics and clinical educators in medicine?

### **References:**

1. Dyrbye LN, Thomas MR, Shanafelt TD. Medical student distress: causes, consequences, and proposed solutions. *Mayo Clin Proc* [Internet]. 2005 [cited 2023 Jan 26];80(12):1613-22. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/16342655>. doi: 10.4065/80.12.1613
1. Kemp S, Hu W, Bishop J, Forrest K, Hudson JN, Wilson I, Teodorczuk A, Rogers GD, Roberts C, Wearn A. Medical student wellbeing - a consensus statement from Australia and New Zealand. *BMC Med Educ* [Internet]. 2019 [cited 2023 Jan 26];19(1):8p. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30832630>

## Does ChatGPT foreshadow an accelerated return to learning (and assessment) through practice across the whole spectrum of health professional education?

**Professor Gary D. Rogers<sup>1</sup>**

<sup>1</sup>*School of Medicine, Deakin University, , Australia*

### **Background**

The release of the chatbot Chat Generative Pre-trained Transformer ('ChatGPT') in November, 2022 has prompted significant concern among educators broadly about the utility of written assessment for verifying student learning into the future. However, as Billett (2014) reminds us, discrete educational activities and formalised assessments are relatively recent developments in the whole history of human learning for occupational practice. For most of time, the assessment of learning for professional competence took place interpersonally in apprenticeship-based models. Although some assessment in health professional education continues to have an interpersonal character, formal written exams and assignments remain prominent in programs of assessment, especially for what have been understood as 'preclinical' knowledges and capabilities.

### **Purpose**

To examine the implications of technologies like ChatGPT – and those that are expected to follow – for learning and assessment and especially whether they will necessitate a radical reformation of health professional education processes and a return to more interpersonal and practice-based approaches throughout health programs.

### **Issues for exploration**

3. What has been participants' experience of the impact of these technologies to date?
  - Does their development necessitate an end to 'business as usual' in assessment practice for the health professions, especially in relation to 'preclinical' knowledges and capabilities?
  - Can an historical perspective and the concept of learning (and assessing) interpersonally through practice inform our future approaches?
  - What will be the barriers to such change in current institutional settings and how may they be overcome?

### **Reference**

Billett, S. (2014). Learning Through Practice Across Human History. In: *Mimetic Learning at Work*. SpringerBriefs in Education. Springer, Cham. [https://doi.org/10.1007/978-3-319-09277-5\\_2](https://doi.org/10.1007/978-3-319-09277-5_2)

***\*Please note, this abstract was submitted under a different presentation type than what was presented, and the information listed may differ from the onsite presentation.***

## 7D - Educational Technology

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### The impact of electronic medical records on interprofessional practice

**Ms Lorraine Walker<sup>1</sup>**, Ms Rebecca Jarden<sup>2,3</sup>, Associate Professor Zerina Lokmic-Tomkins<sup>1,4</sup>

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#### Introduction

The rapid development in the use of technology in Australian healthcare settings requires the healthcare workforce to evolve, adapt and build their digital capability. This change necessitates not only rapid development in digital capability, defined as “the skills and attitudes that individuals and organisations need if they are to thrive in today’s world” (JISC, 2014), but also learning to work differently with respect to interprofessional practice. This study aims to determine what impact the implementation of the electronic medical records in healthcare environments has on interprofessional practice in clinical settings

#### Methods

Interviews were conducted with nurses and doctors who were in clinical practice before and after electronic medical records implementation, with further recruitment of allied health professionals in progress. Interviews (n=17), were transcribed and analysed using emergent thematic analysis.

#### Results

Early data analysis suggests that the implementation of electronic medical records did impact interprofessional practice, with documentation access and clarity being most frequently reported as improved. However, while the communication between the healthcare professionals has progressed in the electronic space, there is also evidence that the opportunities to learn from one another (for example when mobilising the patient) may be fewer.

#### Discussion

This study is revealing new insights on how electronic medical records impact the interactions amongst different healthcare professionals. Many of the insights need to be fed back into curriculum design to help educators develop new interventions to better prepare healthcare students to effectively participate in interprofessional practice in the digital healthcare environments. Such interventions need to empower new graduates to transition more efficiently into their professional roles.

#### Reference

JISC. (2014). What is digital capability? Building digital capability. <https://digitalcapability.jisc.ac.uk/what-is-digital-capability/>

## The use of 3D printed foot models and simulated foot lesions to teach scalpel skills to podiatry students: A multiple method study.

**Dr Helen Banwell**<sup>1</sup>, Dr Ryan Causby<sup>1</sup>, Dr Alyson Crozier<sup>1</sup>, Mr Brendan Nettle<sup>1</sup>, Dr Carolyn Murray<sup>1</sup>

<sup>1</sup>University of South Australia, Adelaide, Australia

### Introduction

Podiatrists regularly use scalpels in the management of foot pathologies, including the debridement of foot ulcers in those at high risk of amputation. However, teaching these skills can be challenging. We present the impact of using 3D-printed foot models and simulated lesions (models) on student confidence and anxiety (as known predictors of skill acquisition [1]) and stakeholder perception of impact.

### Methods

A repeated measure trial identified change in confidence and anxiety in novice users learning to debride callus (n = 24) and final-year students undergoing foot ulcer management training (n = 15). A randomised controlled trial compared model use (n = 12) to standard teaching methods (n = 15) in novice students, and a focus group (n = 5) identified final-year perceptions of fidelity. Stakeholder feedback was via survey.

### Results

Confidence increased in novice (30.5%) and final-year students (37.5%) following model use ( $p \leq 0.05$ ); with anxiety reduced in final-year students alone (14%,  $p > 0.05$ ), all with large effect size change. Model use in novice students was comparable to standard teaching methods for improved confidence (33.5% vs 38.5% respectively) and anxiety (4.2% and 9.8% respectively), ( $p > 0.05$ ). Final-year students identified models as 'authentic', 'lifelike', [2] and stakeholders reported improved clinical skills and 'work-readiness' of graduates.

### Discussion

The use of 3D-printed foot models offers a cost-effective supplement or alternative to the traditional teaching of scalpel skills and foot ulcer management in podiatry students. The low-risk/high-value nature of the models allows for unlimited practice with consequence, and serendipitously, allowed training to continue during pandemic-related restrictions on face-to-face teaching. Importantly, given that 84% of diabetes-related lower limb amputations start with a foot ulcer, model use has also been used successfully to teach foot ulcer debridement and offloading remotely, where training is unavailable (e.g., in developing countries).

### References:

2. Causby, RS, McDonnell, MN, Reed, L, Fryer, CE & Hillier, SL 2017, 'A qualitative evaluation of scalpel skill teaching of podiatry students', *Journal of Foot and Ankle Research*, vol. 10, article no. 21, pp. 1-14.
3. Banwell, HA, Causby, RS, Crozier, AJ, Nettle, B & Murray, C 2021, 'An exploration of the use of 3D printed foot models and simulated foot lesions to supplement scalpel skill training in undergraduate podiatry students: a multiple method study.', *PLoS One*, vol. 16, no. 12, pp. 1-17.

## Is a digital repository an effective means to provide professional development for student supervisors and clinical educators?

**Professor Andrea Bialocerkowski**<sup>2</sup>, Liza-Jane McBride<sup>1</sup>, Megan Harbourne<sup>3</sup>, Dr Belinda Gavaghan<sup>1</sup>, Michaela Smyth<sup>2</sup>

<sup>1</sup>Office of the Chief Allied Health Officer, Queensland Health, Brisbane, Australia, <sup>2</sup>Griffith University, Gold Coast campus, Australia, <sup>3</sup>Townsville Hospital and Health Service, Queensland Health, Townsville, Australia

### **Introduction/Background**

Quality student supervision is essential for the development of a highly skilled health workforce. The growth in student numbers and placements has seen more health professionals undertaking student supervision activities. While there is a large volume of resources to support student supervisor skills in providing quality student supervision, these are variably located and differ in terms of quality. ClinEdAus was launched in 2014, with the aim of providing diverse, evidence-based, high-quality student supervisor resources relevant to the Australian health workforce delivered via an open access 'one stop' repository website.

### **Aim/Objectives**

A 6-year longitudinal partially mixed, equal status action research project is in progress to evaluate the website, the user experience and determine the effectiveness of ClinEdAus. Accumulative data are being collected from website analytics, website functionality assessments and website performance against industry standards. Additionally, website user surveys have been deployed in three waves, 2 years apart, the findings of which will show the evolution of ClinEdAus over time, and provide valuable information on effectiveness and user experience.

### **Discussion**

Providing a consistently high-quality repository that meets student supervisor needs, in a rapidly changing environment, requires investment of time to examine the website's content and usage from multiple perspectives. Preliminary findings suggest the methodology that underpins repository maintenance is feasible and curation of quality supervisory resources in one location is useful, with an average of one in four users reporting to use ClinEdAus as a tool to support students on placements.

### **Issues/Questions for exploration OR Ideas for further discussion**

Does a pragmatic paradigm mixed methods approach allow ClinEdAus to be responsive to the learning needs of its user group?

What priority areas have been identified and how has this been addressed using the digital repository platform?



## The effect of immersive versus traditional forms of simulation on ratings of self-perceived performance in second-year paramedicine students.

**Ms Rachael Vella<sup>1</sup>**, Associate Professor Paul Simpson<sup>1</sup>, Associate Professor Liz Thyer<sup>1</sup>  
<sup>1</sup>*Western Sydney University, Sydney, Australia*

### Introduction

Immersive methods of simulation have recently been introduced to undergraduate paramedicine education as an adjunct to traditional simulation, with the purpose of improving outcomes such as performance. However, there is limited research that directly compares immersive and traditional forms of simulation. This study aimed to determine (1) the feasibility of an intensive simulation program comparing traditional and immersive simulation, (2) if one form of simulation provided better self-perceived outcomes, (3) the level of self-perceived performance in students using traditional and immersive simulation and (4) the sustainability of ratings after a nine-week period.

### Methods

This feasibility study utilised a randomised controlled methodology, allocating second-year paramedicine students (n=20) to either traditional or immersive simulation. Each group participated in a three-day intensive program and completed self-perceived ratings of performance. Ratings were collected after the first simulation of the three-day program (Rating 1), after the final simulation of the three-day program (Rating 2) and after a nine-week washout period (Rating 3), using the Seattle University Simulation Evaluation Tool (Mikasa, Cicero & Adamson, 2014).

### Results

An overall statistically significant difference in ratings was noted between groups ( $p = 0.04$ ). In both groups, there was a non-statistically significant improvement between Rating 1 and 2 ( $p = 0.32$ ), which was sustained at Rating 3 ( $p = 0.24$ ). However, the traditional group reported a mean increase from Rating 2 to Rating 3, in comparison to a mean decrease in the immersive group. Differences between groups at Rating 3 were statistically significant ( $p = 0.02$ ).

### Discussion

This research demonstrated the methodology was feasible to test these hypotheses and indicated that traditional forms of simulation provided greater ratings of self-perceived performance. Further research is needed to explore other measures of performance and best student outcomes, which can inform educational interventions to prepare graduate paramedics, and other health professionals, for entry to practice.

### **The utility of using a capability approach for health professionals' wellbeing during a crisis**

**Dr Kelby Smith-Han<sup>1</sup>**, Judith McHugh<sup>2</sup>, Dr Paul Trotman<sup>2</sup>, Professor Helen Nicholson<sup>2</sup>

<sup>1</sup>*The University Of Western Australia, Perth, Australia*, <sup>2</sup>*The University of Otago, Dunedin, New Zealand*

#### **Introduction**

Since 2020 health-care professionals (HCPs) worldwide have been challenged by the ramifications of COVID-19. This has precipitated a huge crisis for health systems. It also presents opportunities for governments and institutions to re-prioritise health care delivery and to adapt their systems to better support and strengthen their workforce. The aim of this research was to explore the utility of using Capability theory to examine wellbeing among HCP's operating in this time of crisis. Using a capability approach offers an alternative way of thinking about wellbeing that can speak to times of crisis.

#### **Methods**

Fifty-seven HCPs from different specialty areas and countries were interviewed about their experience working through the early phases of the pandemic. Participants were selected using professional networks and snowball sampling for the purpose of making a documentary about the pandemic. Respondents were subsequently invited to take part in the study. Transcripts of audio/video recordings were thematically analysed using capability theory as a framework to identify if and how wellbeing was experienced through this deeply challenging time.

#### **Results**

We identified 3 capability sets of importance to HCPs' wellbeing. These were having opportunity to a) have good relationships and positive social functioning, b) experience a sense of identity, purpose, meaning and value in relation to the work at hand and c) perform work roles to a high standard. The capability, conversion factors, and functionings associated with each capability set will be described in the presentation.

#### **Discussion**

A sense of wellbeing was evident when health-care workers experienced key capabilities that enabled a broad range of functionings. These capabilities were crucially important and underpinned an adaptive and affective healthcare response. Ill-being was experienced in relation to the degree to which these capabilities were compromised.

## The importance of understanding bias: why anti-racist measures are required for Aboriginal and Torres Strait Islander cancer care equity

**Dr Ieta D'Costa<sup>1</sup>**, Dr Ian Hunt<sup>2</sup>, Professor Lynette Russell<sup>3</sup>, Professor Karen Adams<sup>1</sup>  
*<sup>1</sup>Monash University, Faculty Of Medicine, Nursing And Health Sciences, Melbourne, Australia, <sup>2</sup>University of Tasmania, Statistics/ Data Science TIA, Launceston, Australia, <sup>3</sup>Monash University, Indigenous Studies, History, Melbourne, Australia*

**Introduction:** Australian cancer care providers deliver inequitable access and outcomes for Aboriginal peoples. Systemic and personal racism experienced by Aboriginal patients are thought to contribute to these inequities. We examine implicit bias in employees at a hospital in Victoria using an Australian Race (Aboriginal-White) Implicit Association Test (IAT), in an attempt to understand a potential factor for inequitable outcomes of Aboriginal cancer patients.

**Methods:** All employees at a metropolitan hospital in Victoria were invited to take part in a web-based, cross-sectional study using an Australian Race IAT. The results were analysed using R (version 3.5.0) to calculate mean IAT scores for the whole group and sub-groups of gender, age and occupation. A bootstrap resampling process was applied to understand patterns of the lowest and highest threshold scores.

**Results:** 538/2871 participants (19%) completed the IAT between Jan - June 2020. The mean IAT was 0.147 (SD 0.43,  $P < 0.001$ , 95%CI 0.11-0.18). 60% had a preference for white Australians over Aboriginal peoples. There was no significant mean difference in IAT scores between sub-groups of gender, age or clinical/non-clinical employees. 21% of employees, (95%CI 17.65-24.53) had moderate to strong preference for white Australians over Aboriginal peoples, compared to 7.1% with moderate to strong preference for Aboriginal peoples over white Australians (95%CI 5.01-9.09).

**Discussion:** Inequitable cancer survival for Aboriginal patients has been well established and cancer is now the leading cause of mortality. This paper documents the presence of racial bias in employees at one Cancer Centre. We argue that this cannot be understood outside the history of colonialism and its effects on Aboriginal people, healthcare workers and our society. Further research is required to evaluate measures of racism, its impact on health care, and how to eliminate it.

## Innovative and inclusive ways of working to support the wellbeing of early career nurses

**Mrs Caterina Feltrin<sup>1</sup>, Mrs Jenna Georgacopoulos<sup>1</sup>, Mrs Natasha Cuzzocrea<sup>1</sup>**

<sup>1</sup>Central Adelaide Local Health Network, Adelaide, Australia

### **Introduction/Background**

Novice nurses experience significant transition shock when entering the workforce (Duchscher, 2009). Transition shock has a direct impact on novice nurses' wellbeing. Throughout 2022 there was a significant and increased number of novice nurses who required informal and formal performance management, additional support to adapt to the role and responsibilities of being a Registered Nurse, were unable to cope with the pressures of current work environments and were experiencing health and/or wellbeing concerns preventing them from fulfilling their role and/or roster requirements. Innovation created increased capacity in the Early Career Transition Programs (ECTP) to enable clinical and wellbeing support for the influx of novice nurses.

### **Aim/Objectives**

The increased ECTP capacity aimed to provide additional personal and professional support to contribute to the wellbeing of novice nurses and facilitate a safe transition into the workforce.

### **Discussion**

The establishment of the ECTPs created capacity to support an additional 190 novice nurses resulting in provision of targeted, individualised support to 470 novice nurses, including those not enrolled in a formal transition program. The ECTP has had a positive impact on participants professional lives through access to bedside teaching/education, individualised support, and coaching. The necessitated reorganisation in the ways of working to support the novice nurses provided evidence for additional involvement from Clinical Nurse Educators (CNEs) to ensure novice nurses were supported in the workplace, have the tools to enhance their wellbeing and therefore have an increased ability to provide safe, quality patient care. Investing in and supporting our novice workforce at the beginning of their career has reduced transition shock and enabled enhanced job satisfaction, staff retention and loyalty culminating in improving outcomes for our consumers and nursing teams.

### **Issues/Questions for exploration OR Ideas for further discussion**

Can this model of support be adopted at other health organisations?  
Is this our new normal?

### **Reference List**

Duchscher, J. E. B. (2009). Transition shock: the initial stage of role adaptation for newly graduated Registered Nurses. *Journal of Advanced Nursing*, 65(5), 1103-1113. doi:10.1111/j.1365-2648.2008.04898.x

## Providing opportunities and strategies for students to ‘thrive not survive’ in health profession programs and practice.

**Dr Suzanne Gough<sup>1</sup>**, Professor Robin Orr<sup>1</sup>

<sup>1</sup>*Bond University, Robina, Australia*

### Background

Health profession students continually report being stressed by higher educational demands within pre-registration programs. When students perceive that they are unable to cope with the demands of their program, the stressors may manifest negatively impacting on their health and wellbeing to the point of attrition prior to graduation. Similarly, stress and burnout are commonly reported to impact healthcare professionals, occurring well before career establishment or specialisation. This presentation will draw on the findings of several literature reviews and our research studies undertaken with health profession student populations undergoing intensive pre-registration course study and high performing tactical populations. In particular, we will refer to the impacts of stress and burnout experienced by pre-registration health profession students and healthcare workers and educators.

### Aim

To provide examples of opportunities, strategies, and tools to allow students to ‘thrive and not just survive’ in health professional programs and practice.

### Discussion

Stress is a natural product of human environments and can be of value or detriment. Excessive stress bears important implications for healthcare students, educators, and organisations. Thus, a culture change from ‘supporting individuals to survive’ to ‘enabling individuals to thrive’ is needed. The findings of our work highlights the need to support students, clinicians, and educators to explore common stress triggers (e.g., curriculum, placement or rotation, transitional periods, relationships, work-life balance, and financial pressures) and identify positive coping strategies to enhance physical and psychological wellbeing. We will also explore factors like the body’s responses to stress and how stress is dynamic and constantly changing and provide tips, tools, and strategies for use across health professions education and practice.

### Issues/Questions for exploration OR Ideas for further discussion

We welcome questions relating to the practical implications, timing and both internal and external support strategies deployed to allow students and health professionals to thrive.

### References:

Brooke, T., Brown, M., Orr, R. & Gough, S. (2020). Stress and burnout: exploring postgraduate physiotherapy students’ experiences and coping strategies. *BMC Medical Education* 20, 433.

<https://doi.org/10.1186/s12909-020-02360-6>

Stephenson, M. D., Schram, B., Canetti, E. F., & Orr, R. (2022). Effects of Acute Stress on Psychophysiology in Armed Tactical Occupations: A Narrative Review. *International Journal of Environmental Research and Public Health*, 19(3), 1802. <https://doi.org/10.3390/ijerph19031802>

Keywords: Thrive, wellbeing, students, health professionals, strategies.

## Evaluating the restructured Code Black response to violence and aggression in the Emergency Department

**Dr Jennifer Davids**<sup>1</sup>, Dr Margaret Murphy<sup>1</sup>, Martin Brown<sup>2,1</sup>, Nathan Moore<sup>1,2</sup>, Assoc Prof Tim Wand<sup>2,3</sup>

<sup>1</sup>Western Sydney Local Health District, Sydney, Australia, <sup>2</sup>University of Sydney, Sydney, Australia, <sup>3</sup>Sydney Local Health District, Sydney, Australia

### Introduction

Aggression and violence in healthcare is an increasing problem world-wide with a fifth of healthcare professionals experiencing violence from patients or family members every year. Aggression management is critical to maintaining staff and patient safety. In 2019, research in the Western Sydney Local Health District (WSLHD) Emergency Departments (ED) showed a lack of a systematic response to risk assessment, de-escalation, and calling and responding to a Code Black behavioural emergency. [1]

In collaboration with USYD and Frameless Interactive, WSLHD developed and implemented an innovative approach to Code Black incorporating virtual reality training. [2] In 2022, we started the program evaluation.

### Methods

Our evaluation includes in progress post-intervention staff survey (n=53), virtual reality training program evaluations (n=28), and the NSW Ministry of Health 2022 restraint figures for patients attending the ED. Post-intervention interviews (n=20) are commencing February 2023.

### Results

Results so far show staff felt confident in identifying behaviours of concern (BOC), deescalating patients, activating a Code Black and knowing when and how to restrain a patient. They found the virtual reality training engaging with some limitations. The restraint figures in the main hospital were reduced by 50%. Staff were undecided on the usefulness of BOC chart documentation requesting more trained security staff and an overall safer ED environment.

### Discussion

The project outcomes demonstrate how a standardised training and response to behavioural emergencies in ED, can result in improved patient and staff safety. However, managing violence and aggression is one aspect of how staff measure the culture of safety. Other measures such as early provision for mental health patients, less overcrowding, staff access to psychologists and specially trained security can play a significant role in the psychological, emotional and physical safety in the ED.

1. Davids, J., et al., *Exploring staff experiences: A case for redesigning the response to aggression and violence in the emergency department*. Int Emerg Nurs, 2021. **57**: p. 101017.
2. Moore, N., et al., *Designing Virtual Reality-Based Conversational Agents to Train Clinicians in Verbal De-escalation Skills: Exploratory Usability Study*. JMIR Serious Games, 2022. **10**(3): p. e38669.

## **A whole of Health Service approach to Promoting Teamwork and Interprofessional Practice: The P-TIP Project**

**Ms Angela Wood**<sup>1,2,3</sup>, Ms Katherine Delany<sup>1</sup>, Ms Rachel Phillips<sup>1,2</sup>, Ms Bernadette Thompson<sup>2</sup>, Dr Nigel Fellows<sup>2</sup>

<sup>1</sup>*Metro South Hospital and Health Services, Brisbane, Australia*, <sup>2</sup>*Princess Alexandra Hospital, Brisbane, Australia*, <sup>3</sup>*School of Health & Rehabilitation Sciences, University of Queensland, Brisbane, Australia*

### **Introduction**

Interprofessional collaboration (IPC) has been recognised as invaluable in our complex and demanding healthcare environment. However, professions continue to predominantly work and learn in silos, which can result in potential outcomes of interprofessional care unrealised in practice.

### **Aims and objectives**

This project aimed to cultivate a culture of interprofessional education (IPE) and collaborative practice (ICP) across a large metropolitan Health Service, through embedding an integrated approach at individual, team and organisational levels.

The project objectives are:

1. To undertake an environmental scan to identify the current status, enablers and barriers to support and facilitate interprofessional collaboration across a large Health Service,
2. To develop, implement and evaluate a health service plan to address the results of the environmental scan
3. To implement, evaluate and embed a targeted, organisation-wide experiential educational program, that creates the opportunity to develop IPC and systems thinking

### **Discussion**

This presentation will address project objectives 1 & 2. Objective 3 will be discussed in a further presentation.

The Interprofessional Collaborative Organisation Map and Preparedness Assessment (IP-COMPASS) was adopted as a quality framework underpinning all aspects of the P-TIP project. The IP-COMPASS was implemented as a structured process to understand health service values, structures, processes, environment and behaviours that drive or inhibit IPC. The results were integrated into a health service plan, focused on developing and embedding governance, leaders and role models, measures of effectiveness of IPC, and resources, tools and physical space.

Detailed results of the IP-COMPASS and a description of the program of work undertaken across the organisation to address development needs will be outlined in this presentation.

### **Ideas for further discussion**

Re-administration of the IP-COMPASS combined with the results of established staff culture surveys will provide a picture of culture change across the organisation. Sustainability measures are critical in maintaining IPE and ICP.

## Student Leave, the Changing Tide, and Rising Opportunities

**Associate Professor Mark Huthwaite<sup>1</sup>**

<sup>1</sup>*University of Otago, Wellington, New Zealand*

### **Introduction/Background**

Medical school's student leave policies usually require students to attend all scheduled learning opportunities, and clinical attachments, however it is accepted that students will require illness leave or leave to attend to personal or extracurricular matters. The process of applying for and having leave approved, should be easy, and without any unnecessary barriers. How students manage their leave can serve as an indicator of 3 important aspects of professional behaviour: engagement, honesty and self-awareness<sup>1</sup>. It also highlights the challenge of managing their sense of responsibility as a future health care provider with the tension of caring for themselves. A summary of the changing tide of student leave, (data from the author's institution) spanning the last 8-years, will be presented. This covers a period of transition from paper forms to an e-based system and the recent impact of Covid

### **Purpose/Objectives**

The purpose of this session will be to address and explore health professional student leave policies, the management of leave and the changing patterns of leave. The participants will engage in sharing their thoughts, ideas, and experience, identifying the problems and tensions inherent in managing student leave and the opportunities this brings. Generating further discussion about how to improve on the student leave policies and procedures and the opportunities and value this has for improving student experience.

### **Issues/Questions for exploration OR Ideas for discussion**

Why is student leave important?

Describe your institution's student leave policy and what you think the pros and cons are?

Describe how your institution manages student leave?

Describe any problems you have encountered or know of in your respective institution?

What tensions arise from managing student leave?

What opportunities arise from managing student leave?

The participants will summarise the similarities, differences, and opportunities they have shared and will develop 3 take home message from this session.

### **References**

Mak-van der Vossen, M., van Mook, W., van der Burgt, S. *et al.* Descriptors for unprofessional behaviours of medical students: a systematic review and categorisation. *BMC Med Educ* **17**, 164 (2017).

<https://doi.org/10.1186/s12909-017-0997-x>



## **“I'm going to kill myself”. How do we prepare health professionals for managing self-harm and suicidality?**

**Dr Ellen Davies<sup>1</sup>, Professor Anna Chur-Hansen<sup>1</sup>, Associate Professor Adam Montagu<sup>1</sup>**, Associate Professor Scott Clark<sup>1</sup>, Dr Natalie Mills<sup>1</sup>, Dr Jon Jureidini<sup>1</sup>

<sup>1</sup>*The University Of Adelaide, Adelaide, Australia*

### **Introduction/ Background**

Health professionals will encounter people with current or previous histories of self-harm behaviours, thoughts of suicide or who have attempted to end their life by suicide. These topics are challenging and can lead to conversations with patients, relatives and the broader community that are perceived as difficult. Health professionals from almost every discipline may have to deal with peoples' immediate threats or acts of self-harm, or will be involved in the aftermath. These experiences may take a toll on students and more experienced practitioners alike, as well as on the patients and clients, who may experience discrimination, stigma and poor practice from their health professionals.

### **Purpose/objectives**

We have designed, and are trialling, simulation-based educational experiences, which present opportunities for healthcare students and professionals to explore, practice and reflect on their abilities, confidence, attitudes, knowledge and skill gaps. Simulation activities afford participants with these opportunities in relatively safe physical and psychological environments. Findings will inform the future development of programs that support health professions students as they develop skills to communicate and assess people experiencing mental distress.

### **Issues/Questions for exploration OR Ideas for discussion**

We are keen to discuss the challenges of preparing health professionals with skills, knowledge, and abilities to effectively manage patients and clients who self-harm, express suicidal thoughts, and/or act on these.

We are also keen to discuss how to prepare health professionals for coping when suicidal acts are completed – how do we train students and health professionals? Whilst there is emphasis on this in medicine, and particularly psychiatry training, as well as in psychology postgraduate training, how well are we doing? How do we know? What is happening in other disciplines as well as medicine and psychology?

Should we have a national curriculum, or national statement on teaching, training and research evaluations, in this domain?

## Plenary 4

Gillian Mason, University of Newcastle

### **What's love got to do with it? In sickness and in health (professionals).**

Authors: Gillian Mason<sup>1,2</sup>

Affiliation:

<sup>1</sup>Hunter Medical Research Institute, Newcastle, Australia

<sup>2</sup>University of Newcastle, Newcastle, Australia

#### **Introduction**

Latest population data (from 2018) demonstrates nearly half of Australians have at least one chronic illness. One in six lives with disability and one in five experiences multimorbidity (Australian Institute of Health and Welfare 2021 and 2022). One in ten school students have a disability. Disability and chronic illness has been *mainstream* for years! Yet, we have continued to design healthcare, research and health professional education structures and systems that marginalise sick and disabled people.

#### **Purpose**

I am a physiotherapist-researcher and consumer representative who has been disabled and chronically ill for all of the 18 years I have worked in healthcare and medical research. I will share reflections from my own slow and haphazard reframing of internalised ableism into the realisation of the value my deep knowledge of the healthcare system and disability culture.

Lived experience knowledge, often called 'consumer' knowledge in Australia, must be positioned as crucial to the design, conduct and continuous improvement of health technologies, medical research and education. Our work must be relevant and accessible, broadly. This session will examine our language, assumptions and biases around the medical and social models of disability, and of sickness.

My main objective is to impress on you that it's urgent, as well as important, that we acknowledge the responsibility and huge opportunity we have to become radically inclusive in health and education. We will talk about what changes for us, our organisations, and society, when we consider our inclusion policies, strategies and access plans through a disability justice framing.

#### **Questions for exploration**

Why are we not led by those who most know the systems?

What do we really mean when we talk about accessibility, diversity and inclusion in the context of healthcare, medical research and education policies, systems and structures?

What's love got to do with it?

#### **References**

Australian Institute of Health and Welfare. (2022). *People with disability in Australia 2022* catalogue number DIS 72, AIHW, Australian Government.

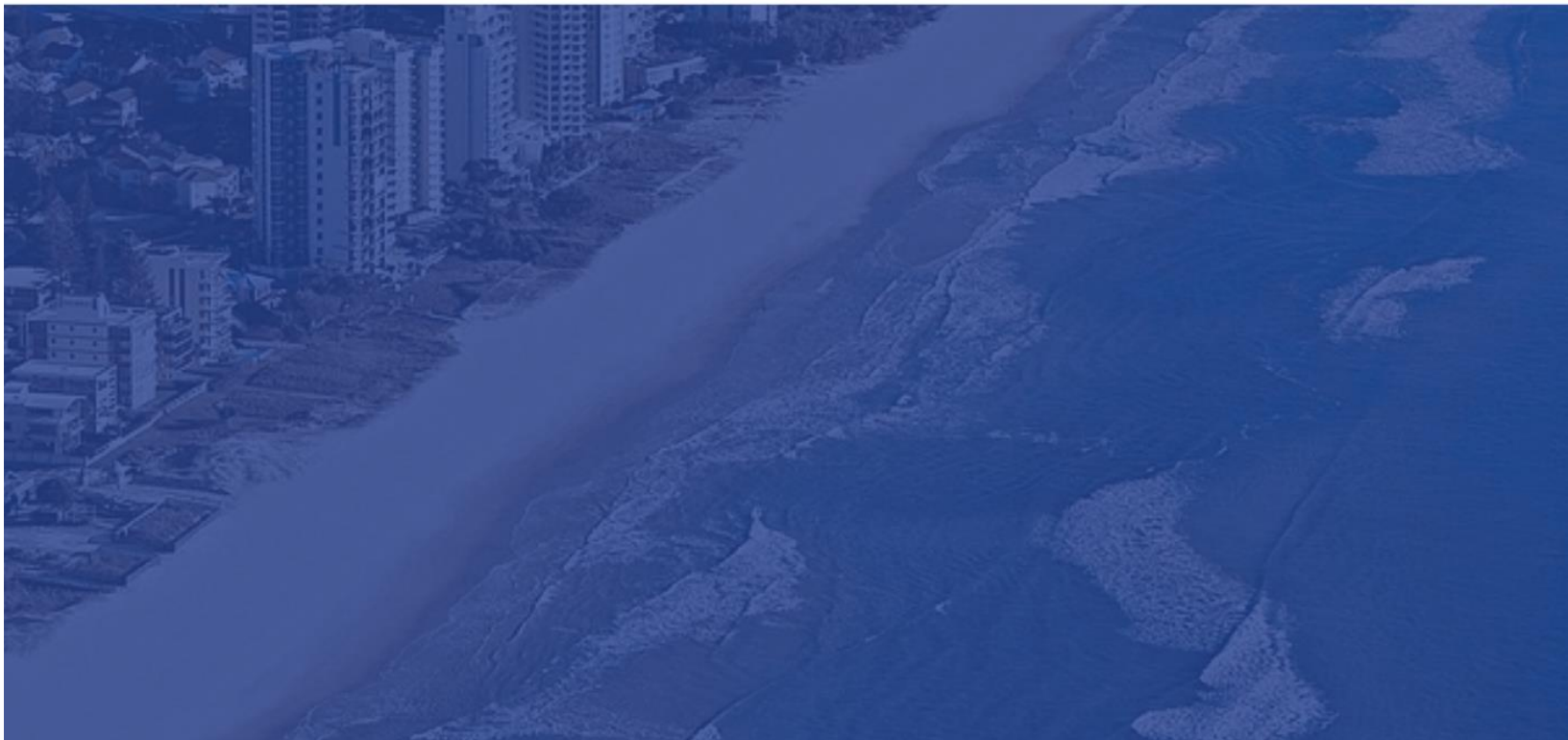
Australian Institute of Health and Welfare. (2021). *Web report: Chronic condition multimorbidity*, Retrieved 14/05/2023 from <https://www.aihw.gov.au/reports/chronic-disease/chronic-condition-multimorbidity/contents/about>



# **ANZAHPE 2023**

TURNING TIDES  
Navigating the Opportunities

## **POSTER PRESENTATIONS**



## Pod 1

### 4

## Learning needs of radiology trainees

### Dr Phua Hwee Tang<sup>1</sup>

<sup>1</sup>*KK Women's And Children's Hospital, Singapore, Singapore*

#### **Introduction**

Department has started taking in medical officers in addition to radiology residents to cope with increasing clinical imaging requirements. This project was carried out to determine learning needs of trainees in paediatric plain radiographs and computer tomography (CT) scans.

#### **Methods**

Quiz of 10 paediatric plain radiographs and 10 paediatric CTs showing a variety of abnormalities encountered in clinical practice was given to trainees (medical officers with little imaging experience and radiology residents with at least 1 year of radiology training) doing posting in Department of Diagnostic and Interventional Imaging, KK Women's and Children's Hospital from 2021 to 2022.

Each trainee was to determine if the image was normal or abnormal and to define the abnormality seen.

#### **Results**

37 radiology residents and 4 medical officers completed the quizzes in years 2021 and 2022.

Overall performance of trainees was 6.2 for plain radiographs and 6.7 for CTs, not significantly different ( $p=0.22$ ).

Radiology residents scored 6.4 for plain radiographs, better than the 3.8 scored by medical officers ( $p<0.01$ ).

Radiology residents scored 7.1 for CTs, better than the 3.0 scored by medical officers ( $p<0.01$ ).

Radiology residents performed better on CTs than on plain radiographs while medical officers did poorly on both plain radiographs and CTs.

Top diagnoses missed on plain radiographs by >50% of residents was pneumomediastinum followed by paediatric skull vault fractures.

Top diagnoses missed on CTs by >50% of residents were mediastinal fluid collection, pulmonary embolism and suprapubic abscess.

#### **Discussion**

Medical officers will benefit from training in paediatric plain radiograph and CT interpretation.

Resident training can have a more targeted approach concentrating on pneumomediastinum and paediatric skull vault fractures for plain radiographs as well as mediastinal fluid collection, pulmonary embolism and suprapubic abscess for CT.

Resident training can have a more targeted approach concentrating on pneumomediastinum and paediatric skull vault fractures for plain radiographs as well as mediastinal fluid collection, pulmonary embolism and suprapubic abscess for CT.

## Cutting Edge Assessment in the Post-COVID Era - Updates from the Ottawa 2022 Conference on Assessment

**Professor Sandra Kemp<sup>2,4</sup>, Professor Jennifer Williams<sup>1,2</sup>, Professor Katharine Boursicot<sup>1,2</sup>, Professor Vishna Devi Nadarajah<sup>3</sup>, Ms Mary Lawson<sup>5</sup>**

<sup>1</sup>University Of New England, Armidale, Australia, <sup>2</sup>Health Professional Assessment Consultancy, , Singapore, <sup>3</sup>International Medical University, , Malaysia, <sup>4</sup>University of Wollongong, Wollongong, Australia, <sup>5</sup>RISR, Sydney, Australia

### Introduction/Background

Assessment in health professional education is vital for ensuring community health and safety via graduation of competent practitioners. Evolutionary changes to assessment over the past several years have been influenced by the competency-based education movement and the pandemic has accelerated the changing conceptualization and operationalization of assessment.

### Purpose/Objectives

This symposium will provide an update on health professional assessment in the post-pandemic era, synthesizing trends, foci and international consensus positions from the Ottawa 2022 conference on assessment.

### List of Presentations

Sandra – Programs of Assessment  
Jen – OSCEs and Workplace-based Assessment  
Vishna – International Perspectives on Assessment  
Mary – Technology-enhanced Assessment

### Discussion

Challenges in implementation of programs of assessment within educational institution governance.  
Workplace-based assessment in strained clinical settings.  
Is the OSCE heading towards extinction?

### References

Boursicot, Katharine; Kemp, Sandra; Norcini, John; Nadarajah, Vishna Devi; Humphrey-Murto, Susan; Archer, Elize; Williams, Jennifer; Pyorala, Eeva; Moller, Riitta; Synthesis and Perspectives From the Ottawa 2022 Conference on the Assessment of Competence – submitted to Medical Teacher January 2023

## Is student collaboration to develop assessments likely to turn the tides?

**Dr Awais Babri<sup>1</sup>**, Ms Karine Cosgrove<sup>1</sup>, Professor Mark Midwinter<sup>1</sup>, Ms Saskia Gilmour<sup>1</sup>, Ms Ruijie Sun<sup>1</sup>, Ms Wanyun Huang<sup>1</sup>, Mr Luke Waldie<sup>1</sup>

<sup>1</sup>The University Of Queensland, Australia

### Introduction

A well-structured assessment, an essential component of a curriculum, is crucial in promoting learning. Developing assessments in collaboration with students is an important means to engage and empower students while promoting student agency. Students' engagement in generating their assessments in science-based courses is lacking. The fear of 'leaked examinations' augments the school-wide reluctance.

To mitigate concerns and lay the foundations for contemporary learning pedagogy, we designed a collaborative project that aligns with UQ strategic goals, gauges opportunities to create better assessments through collaborations, and promotes critical thinking.

### Aims of this study:

The project, funded by an internal grant, aims to provide the much-needed evidence to support a novel assessment approach and redefine processes and practices.

### Methods

Four full-time students (M: F= 1:3) will collaborate with three academics (M: F= 2:1) for 13 weeks. This student-led team will analyse a range of gross anatomy assessment items from previous years (2020-2022).

The partner-generated questions will be included in formative quizzes in subsequent iterations of human gross anatomy courses. This will allow an analysis of learner perceptions and statistically determine achievement trends.

### Results

It is hypothesised that this project will have multiple benefits, including:

1. Increased motivation for future cohorts
2. Enhance critical thinking skills resulting in high-quality assessments,
3. Developed more authentic assessments by empowering students' front-line experience

This project can foster a sense of belonging for future cohorts of students, further strengthening the relationship between students and the university. It is likely to change the tide and allay the school's anxiety regarding the adoption of current curriculum development and delivery practices.

### Discussion

As a result of this partnership, there will be active engagement and ownership of learning. It will also provide insight into the retention of information. Additionally, it will pave a path for academics to explore assessment opportunities and consider future curriculum design and development.

Word count: 306

### References

- Biggs, J.B. 2003. *Teaching for quality learning at university*, Buckingham: Society for Research into Higher Education and Open University Press.
- Stefani, L.A.J. 1998. Assessment in partnership with learners. *Assessment & Evaluation in Higher Education*, 23(4): 339–50.

## Neuroscience can be easy to understand: How the use of innovative assessment design transformed student learning

**Associate Professor Sonia Saluja<sup>1</sup>**, Dr Romeo Batacan<sup>1</sup>

<sup>1</sup>CQUniversity Australia, Rockhampton, Australia

### Introduction/Background

Students often consider Neuroscience as one of the 'difficult' medical sciences (Schon et al, 2002). Neuroscience is content-heavy and requires students to memorise vast amounts of information as well as conceptualise the application of this content to complex neurological disorders. Building a conceptual understanding of neuroscience within contexts of different health professions is essential for students to successfully progress as healthcare providers.

### Aim/Objectives

Through the implementation of a constructivist learning environment (Tam, 2000), the transformation of student learning and satisfaction was achieved to enable students from diverse health professions to apply clinical concepts in neuroscience specific to their future health profession. This presentation will summarise the challenges faced by students, and how the use of innovative assessment strategies contextualised to diverse student disciplines transformed student learning in a service-taught subject across a sustained period of 7 years.

### Discussion

The enrolled students faced multiple challenges. They were from five diverse disciplines, on-campus and online study modes were available, the subject was delivered across seven campuses, and importantly students lacked experience working with patients in the clinical environment. Widespread dissatisfaction with assessment tasks and relevance of neuroscience to the student's chosen health profession was evident. Coherence, an essential aspect of instructional design, was required as part of the constructive alignment to support the development of conceptual understanding. Assessment design was integral for students to link theory with practice and apply key clinical concepts without prior clinical experience.

### Issues/Questions for exploration OR Ideas for further discussion

This presentation will explore the following themes and questions:

What were the reflections from previous student feedback?

What examples of innovative assessment strategies were used to contextualise learning in a service-taught subject?

How can assessments be designed to ensure learning and reflection?

What was the impact on student learning and satisfaction?

### References:

1. Schon, F., Hart, P., & Fernandez, C. (2002). Is Clinical Neurology really so difficult? *J Neural Neurosurg Psychiatry*, 557-559.
2. Tam, M. (2000). Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning. *Educational Technology and Society*, 3(2).

## Building a Portfolio and Portfolio Assessment - views of undergraduate medical students

**Dr Mark Norden**<sup>1</sup>, Dr Gina La Hera Fuentes<sup>1</sup>, Dr Alison Seccull<sup>1</sup>, Mr Reece Pahn<sup>1</sup>,  
Professor Adrienne Torda<sup>1</sup>

<sup>1</sup>UNSW, Sydney, Australia

### Introduction

UNSW medical students maintain a portfolio over their undergraduate course and undertake a portfolio examination in their final year.

UNSW surveyed its final year students to gather their views on portfolio building and assessment. Information obtained will inform adjustments to the assessment of eight graduate capabilities. The same students will be re-surveyed during their intern year to determine whether their views have changed.

### Methods

Final year medical students were invited to participate and received a link to a survey consisting of ten closed statements, utilising a 6-point likert scale, and three open text questions. At the completion of the survey, students choosing to participate in the follow-up survey accessed a new link to leave their contact details.

Responses to the Likert scale questions were analysed using RStudio. Responses to the open questions were coded independently by the first three authors and a list of common themes agreed upon. Only responses to the initial survey are presented.

### Results

77 students out of 254 participated in the initial survey.

Analysis of the closed statements revealed that most students felt maintaining a portfolio and preparing for its assessment adversely impacted on their clinical learning and preparation for clinical exams. However, 63% believed it supported their development in the graduate capabilities and 78% felt a portfolio advisor/mentor would increase its learning potential.

Analysis of the open questions revealed most students wanted more teaching about the portfolio, better feedback, and expanding the portfolio to include extracurricular activities and career planning. Students felt the subjective nature of the portfolio examination made it unfair. Many advocated for what amounted to programmatic assessment.

### Discussion

When it comes to the portfolio, our students are, at best, confused. For the portfolio process to succeed, students need to be well versed in its requirements and receive constructive feedback and close mentoring. A portfolio should form the backbone of programmatic assessment, removing the need for high-stakes summative assessment of competency and reflective practice.



## Multimorbidity webinar series: navigating guidelines, polypharmacy, patient priorities and negative outcomes

**Lisa Sullivan**<sup>1</sup>, Tina Garcia, Monica Kurniawan

<sup>1</sup>*In Vivo Academy, Australia*

### Introduction

Online problem-based learning is a useful tool for continuing medical education. However, its impact on physicians' performance and patients' health outcomes is unclear. With increasing life expectancy, the number of people affected by multimorbidity is becoming a major concern in primary care. Patients with multimorbidity experience many disease- and treatment-related problems that education to reduce burden is needed by primary care providers. We developed a series of webinars that aimed to measure changes in physicians' performance and effect on patient outcomes by: using a patient-centred approach to identify and prioritise areas requiring treatment in patients with multimorbidity; using a multimorbidity care model to structure patient consultations; and formulating and applying strategies that enhance patient–clinician communication.

### Methods

We invited general practitioners and practice nurses in Australia and New Zealand to attend a series of four Zoom<sup>®</sup>, problem-based webinars with different patient profiles and multimorbidities. We assessed the participants' knowledge and competence using interactive polls, Q&A and changes in practice using pre-, post and long-term surveys.

### Results

A total of 258 learners completed the webinars. Majority of the webinars' participants (74%) indicated that these learning objectives and their own learning needs were entirely met, and that the topics were relevant to their practice. Using paired-data analysis, there was an improved confidence in the learning outcomes among the participants as a result of attending the webinars. Almost 81% of the participants committed to make changes in their practice after the webinar. Long-term follow-up revealed that the participants now ensure that they prioritise important issues to patients and work on their goals and expectations.

### Discussion

Online, problem-based learning using different patient profiles and be an effective tool in improving patient performance and health outcomes for patients.

### References:

- Al-Azri H, Ratnapalan S. Problem-based learning in continuing medical education: review of randomized controlled trials. *Can Fam Physician*. 2014 Feb;60(2):157-65.
- 1. Sinnott C, et al. GPs' perspectives on the management of patients with multimorbidity: systematic review and synthesis of qualitative research. *BMJ Open* 2013; 3: e003610.

## Capturing perspectives of junior doctors involved in a remediation program

**A/prof. Christina Johnson**<sup>1,2</sup>, Dr Joanne Hilder<sup>3,4</sup>, Dr Andrea Bramley<sup>1,5</sup>

<sup>1</sup>Monash Doctors Education, Monash Health, Melbourne, Australia, <sup>2</sup>Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia, <sup>3</sup>Gold Coast University Hospital, Southport, Australia, <sup>4</sup>Bond University, Robina, Australia, <sup>5</sup>Discipline of Food, Nutrition and Dietetics, La Trobe University, Melbourne, Australia

### Introduction/Background

Working as a junior doctor in hospital involves a major transition from medical school. Some junior doctors seem to have difficulties performing at the expected standard and are referred to our medical education team. Enabling junior doctors to work successfully offers benefits for the doctor, patient care and healthcare system for the rest of their career. However there are limited data on remediation programs within Australasia, in particular, the experiences of the junior doctors. We have been progressively developing an 'Individual Learning Program' to enable junior doctors to enhance their performance.

### Aims / Method

The aim of this research is to evaluate the impact of our program, particularly to explore the perspectives of the junior doctors involved, in order to inform future improvements.

We want to compare results from 2021-2022 with initial research results across 2018-2019 at the start of the Program using similar methodology. The initial research involved small numbers, with six junior doctors invited to participate, of which two completed a survey and interview.

For this latest project, our objectives included a) analysing the impact of the Program, by recording subsequent 'satisfactory performance' ratings for end-of-attachment assessments and employment offers; and b) understanding the perspectives of junior doctors through an online survey and interview with an independent research assistant (RA). We invited all JMS to participate who were substantially involved with the Program in 2021- 2022.

At this stage, recruitment has commenced and invitations to participate in online survey and interviews circulated. To optimise anonymity, the RA will collate the survey data and de-identify interview transcripts. The research team will code interview transcripts using thematic analysis and develop key themes.

### Issues/Questions for exploration

We hope to understand more about the development of our Program, particularly the experiences of junior doctors from a larger number of participants and compare data with the start of the Program.

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### **Development of an online clinical placement assessment for University of Sydney Medical Imaging Students.**

**Mrs Susan Said**<sup>1</sup>, **Ms Frances Gray**<sup>1</sup>, Mrs Laura Di Michele<sup>1</sup>, Dr Yobelli Jimenez<sup>1</sup>, Ms Amanda Punch<sup>1</sup>

<sup>1</sup>*University of Sydney, Camperdown, Australia*

#### **Introduction/Background**

The Professional Capabilities of Medical Radiation Practice are well established as the standard of practice that all practitioners must meet to be registered the Medical Radiation Practice Board of Australia (MRPBA) as part of Australian Health Practitioner Regulation Agency (AHPRA). This new clinical assessment tool (NCAT) provided an opportunity to consult with clinical supervisors as partners in student education and supported a more robust assessment of students' skills.

#### **Aim/Objectives**

The aim of this presentation is to report on the development and initial evaluation of the NCAT developed for students at the University of Sydney (USYD) based on the MRPBA capabilities.

#### **Discussion**

The NCAT was developed with the intention to align students' clinical performance with the MRPBA capabilities, and to ensure ease of use on a digital platform. A first draft of the NCAT was developed by matching the criteria under each MRPBA domain with each work integrated learning unit of study's learning objectives. This was followed by an iterative process of trialling the tool in four clinical sites and making adjustments to wording and grading scales based on clinical educators' feedback. Following implementation of the final version of the NCAT, an online survey was used to explore clinical educators' perceptions of using the NCAT to evaluate students' skills. The NCAT consists of five sections which align to the MRPBA domains. A manual was developed with observational descriptors on each rating. Data from online survey is currently being analysed and will be presented at the conference.

#### **Issues/Questions for exploration OR Ideas for further discussion**

Would other institutions be interested in utilising this NCAT for assessment and are there other applications for this tool?

## Microsoft Power BI data visualisation to track medical student academic progress and implement early support

**Dr Rose Berdin<sup>1</sup>**, Dr Scott McCoombe<sup>1</sup>, Associate Professor Rashmi Watson, Associate Professor Helen Wilcox<sup>1</sup>

<sup>1</sup>*Medical School, The University of Western Australia, Perth, Australia*

Numerous studies have been conducted to determine predictors of Health Professional student performance, with a view to implementing early support for students at risk. However, selection tools, entry pathways, and demographic data do not universally predict student performance. We sought to determine whether academic and professional performance and progression after commencement of studies facilitates identification of students at risk and permits implementation of support.

Challenges to monitoring student progress are amplified in Health Professional programs such as such as Medicine that have numerous components, geographically dispersed placements and areas of specialisation. Developing an intuitive and cost-effective model widely available to teaching teams is vital to enable timely identification of students at risk.

We designed a Microsoft Power BI dashboard enabling rapid visualisation of student performance across the cohort to identify students who have poor or unexpected academic and professional performance. We collated retrospective data on demographics, selection instruments, academic performance and professional behaviour from four cohorts of medical students at the University of Western Australia in 2022 to determine predictive themes.

The key visual in the dashboard is a 'heat map' which displays students' assessment and unit marks through time using a traffic light system. The 'heat map' provides a clear and efficient way of presenting students' progress in the course relative to the cohort and previous results from the individual student. This can then be used to inform discussions with faculty members and when counselling individual students.

The dashboard can also be used for cohort analysis. Here we show a retrospective case study examining the graduating cohort's performance in their preclinical vis-à-vis clinical years to identify predictive patterns for students with poor progress through the course. We show that patterns of "reds" or "oranges" in three or more assessments prior to the final year was predictive of graduation performance. Recognising this pattern in the younger cohorts will help enact early intervention and provide support to those who are at risk of not progressing in the course.

## Acceptability, feasibility and effectiveness of student-led telehealth-based falls prevention program for rural older Australians

**Mr Steve Woodruffe**<sup>1</sup>, Ms Christine O'Connell<sup>1</sup>, Ms Nicola Cotter<sup>1</sup>, Ms Kate Bell<sup>1</sup>, Ms Kirsten Middleton<sup>1</sup>, Ms Clara Walker<sup>1,2</sup>, Dr Tony Fallon<sup>1,2</sup>

<sup>1</sup>*Southern Queensland Rural Health, University of Queensland, Toowoomba, Australia*, <sup>2</sup>*Centre for Health Research, University of Southern Queensland, Toowoomba, Australia*

### Introduction

Falls prevention in older Australians is an important health priority. Telehealth service delivery represents a valuable strategy to address the shortage of health professionals in remote areas. Several recent studies have investigated the delivery of service-learning models via telehealth<sup>1,2</sup>. However, there is scarce literature available on the acceptability, feasibility and effectiveness of delivering a falls prevention program via telehealth. This study evaluated a student-resourced falls prevention program delivered via telehealth to older Australians residing in a remote Queensland community.

### Methods

Fifteen older (>60 years) adults residing in the Charleville region participated in the program. Students completing clinical placements in Toowoomba delivered the program under the supervision of clinical educators. A mixed-methods approach was used. Physical assessments for participants were undertaken before and after participation, 10-metre walk test and Balance Outcome Measure for Elder Rehabilitation (BOOMER). Student and participant focus groups gathered information on acceptability of the telehealth-based placement experience and student confidence to deliver telehealth interventions.

### Results

Participants demonstrated significant improvements in BOOMER scores and 10-metre walk speed ( $p = 0.01$  and  $p = 0.02$ , respectively) and reported increased confidence in their mobility. Students reported increased confidence in delivering telehealth interventions and a greater likelihood of using telehealth to deliver services in the future. Although elements of the experience were regarded as challenging (technology connectivity, communication barriers), the placement experience was ultimately highly rewarding both for the students' own professional development and the improvement observed in participants.

### Discussion

The student-led falls prevention program delivered via telehealth impacted positively on older people at risk or fearful of falling and student confidence in delivering programs via telehealth. The evidence provided suggests that telehealth provides an acceptable, feasible and effective platform for delivery of exercise-related interventions to rural and remote communities that would otherwise not receive these services.

### References

1. Walker C, Forbes R, Osborn D, Lewis PA, Cottrell N, Peek S, Argus G. The transformation of a student-led health clinic in rural Australia from a face-to-face service to a telehealth model: Evaluation of student and client experiences during a COVID 19 driven transition. *FoHPE* [Internet]. 2022 Jun. 30 [cited 2022 Dec. 14];23(2):79-92. Available from: <https://fohpe.org/FoHPE/article/view/554>
2. Winship JM, Falls K, Gregory M, Peron EP, Donohoe KL, Sargent L, Slattum PW, Chung J, Tyler CM, Diallo A, Battle K, Parsons P. A case study in rapid adaptation of interprofessional education and remote visits during COVID-19. *J Interprof Care*. 2020 Sep-Oct;34(5):702-705. doi: 10.1080/13561820.2020.1807921. Epub 2020 Aug 24. PMID: 32838597.

## Is there a role for eLearning in education and training of Allied Health Professionals? A case study of a Brachial Plexus Birth Palsy eLearning.

**Ms Sarah E Lombard<sup>1</sup>**, Associate Professor Amy Gray<sup>1,2,3</sup>

<sup>1</sup>The Education Hub, The Royal Children's Hospital, Australia, <sup>2</sup>Department of Paediatrics, University of Melbourne, Melbourne, Australia, <sup>3</sup>Murdoch Children's Research Institute, Melbourne, Australia

### Introduction

Electronic learning (eLearning) is increasingly being adopted in health professionals' education. Studies have found eLearning an effective teaching approach for medical and nursing professionals (1,2). There is limited research into eLearning use for allied health professionals' (AHP). An eLearning on Brachial Plexus Birth Palsy was created. Our study aimed to understand an eLearning impact on AHP knowledge alongside understanding the eLearning usability and user experience.

### Methods

AHP completed a pre-eLearning survey containing demographic questions and a knowledge questionnaire. The post-eLearning survey comprised a repeat of the knowledge questionnaire, Systems Usability Scale (SUS), Adjective Rating Scale (ARS) and the User Experience Questionnaire. An optional interview post-eLearning was also undertaken.

### Results

Seventy AHP completed the surveys. The average pre-eLearning knowledge was 67.5% compared to 96.3% post. Sixty-eight participants (97.1%) scored above average on the SUS and 52 (74.3%) ranked it as 'excellent' on the ARS. Comparing the eLearning UEQ scale means against the benchmark, it was excellent on four scales and good on the other two. Three key categories emerged from the 10 interviews - learner control, impact on learner and impact on health service.

### Discussion

An eLearning provides an educational resource for use at any location, any time and with minimal time away from workplace and family. The learner control an eLearning provides allows AHP of varying experience to all learn from the same package. This is beneficial to the scalability of the resource and minimises the delivery cost however it limits the interaction between participants and experts. For health services that infrequently review a certain health condition or with limited experienced support, an eLearning provides a means for AHP to review best practice when it is relevant to their caseload. And an eLearning's multi-media capability enables AHP to have a greater understanding of the conditions presentation, assessment and management.

### References:

- Brunero S, Lamont S. The 'difficult' nurse-patient relationship: development and evaluation of an e-learning package. *Contemp Nurse*. 2010;35(2):136-46.
- 1. Gaupp R, Korner M, Fabry G. Effects of a case-based interactive e-learning course on knowledge and attitudes about patient safety: a quasi-experimental study with third-year medical students. *BMC Med Educ*. 2016;16:172.

## **360° virtual laboratory tour for promoting laboratory learning in clinical microbiology**

**Assistant. Prof. Kanokwan Kittiniyom**<sup>1</sup>, Ms Pansa Noiskul<sup>2</sup>, Ms Siriwan Kheawjantib<sup>1</sup>, Lecturer Mayuree Chanasakulniyom<sup>1</sup>

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### **Introduction/Background**

360°virtual tour is an affordable online tool with easy to access and can generate the real-world experiences. it was designed to be a self-pace learning tool in this Clinical Microbiology class to inspire and demonstrate the lab workflow in the real lab environment that could not setting up the whole system in the onsite lab in the university.

### **Aim/Objectives**

This study aimed to determine the outcomes of 360°virtual laboratory tour for promoting laboratory learning in Clinical Microbiology class. The 360°virtual laboratory tour was embedded with homemade-lab-skill videos and infographic of 7-steps in lab diagnostic process.

### **Discussion**

The pre and post-tests were performed before and after learning with 360°virtual lab tour by 30 undergraduate students. The average of gain showed skill knowledges gained in medium (0.55). The 67% of students claimed this media was usable with SUS score over 68 and recommended to use this media to refresh knowledge and skill and prepare for workplace-based learning and apprenticeship. However, the 360°virtual laboratory may not replace hands on practice but it could shorten the time for learning and led to focus the main and malpractice that need to aware.

### **Issues/Questions for exploration OR Ideas for further discussion**

This media could be further study with more numbers of participants before learning lab practice, assessed lab skills by observe during lab practice, added more concise materials and challenged by awards.

## A novel online learning activity to develop person-centred history taking and clinical reasoning skills in preclinical medical students

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### Introduction

To prepare our Year 2 medical students for a return to hospital wards after the COVID pandemic and Brisbane floods of early 2022 we designed a series of 5 online learning activities to develop skills in person-centred history taking and clinical reasoning. The objectives were to: ease student anxiety in seeing real-life patients; create a safe online learning space; and share theoretical principles and schema to guide clinical practice<sup>1</sup>. We report the rationale, design and delivery of this novel learning activity for a large student cohort, and the impact on students' clinical skills.

### Methods

Students attended 5 case-based online sessions over 5 weeks on various presenting symptoms from different systems. Approximately 75% of the time was devoted to students interviewing the patient. Students were free to 'tap out' to enable more students to participate to the extent of their comfort<sup>1</sup>. An instructor adopted the patient persona in the first 4 sessions; the last session had a community-based patient. Each session was attended by at least 3 clinician-educators whose feedback augmented students' self-reflection and peer review<sup>1</sup>. Each session concluded with a mini lecture on key concepts, schema and theory. Thus, the conventional paradigm of practice following theory was flipped<sup>1</sup>. Students' feedback was sought at the end of the series.

### Results

Students reported satisfaction with the model of 'practice preceding precept'; appreciated the safe space; were grateful for instructors playing the role of patient realistically; and valued the opportunity to practice and develop complex history taking skills. They requested a longer series on more presenting complaints and systems.

### Discussion

An online case-based series develops preclinical students' skills in person-centred history taking and clinical reasoning in a safe online space, is achievable and well received by students. Next steps will involve expanding the series, evaluating efficacy using real-time methods, and longitudinally assessing proficiency in clinical reasoning.

<sup>1</sup> "Instructional Design: Applying Theory to Teaching Practice", Linda Snell, Daisuke Son, and Hirotaka Onishi, in *Understanding Medical Education: Evidence, Theory, and Practice* (3<sup>rd</sup> Edition) - Tim Swanwick, Kirsty Forrest and Bridget C. O'Brien (Editors), John Wiley & Sons Ltd (2019)



## The use of photovoice as a pedagogical tool in health professions education: A systematic review

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### **Introduction**

Although there is growing interest on the use of visual art-based methods in health professions education, limited attention has been given to the use of photovoice. Photovoice was developed as a participatory action research approach involving photographic documentation, narration, and critical dialogue by participants for the purpose of generating social change. The potential of photovoice as a pedagogical tool in health professions education has not been determined. This review aimed to determine how photovoice is used as a pedagogical tool across health professions education.

### **Methods**

A systematic literature review of qualitative studies was conducted following PRISMA guidelines across three electronic databases. Medline, PsychINFO and CINAHL were searched for terms related to medical education and photovoice. Data were integrated using narrative synthesis.

### **Results**

Ten articles were eligible for inclusion. Across the included articles photovoice was used as a pedagogical tool to help engage health professions students with local communities. There was limited evaluation of the impact of using photovoice, however, most articles reported learner engagement as positive. Shared findings across the included articles suggested the use of photovoice enhanced critical reflection, helped identify knowledge gaps, increased community engagement and self-efficacy.

### **Discussion**

The use of photovoice as a pedagogical tool appears to have potential benefits for health professions students and may be useful in enhancing engagement, critical reflection and driving social changes in health. Adequate explanation of the photovoice process and ethical considerations needs to be provided when using photovoice as a pedagogical tool. When used in keeping with the philosophical underpinnings of the original photovoice methodology, photovoice helps to improve learnings related to social determinants of health, examines privilege, and may increase learners' responsiveness to the needs of their local communities.

## **Incorporating teaching about natural disasters and climate change into medical curricula in Australia**

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### **Introduction/Background**

Natural disasters cause personal and financial hardship for individuals and communities world-wide, and result in morbidity and mortality immediately during the disaster, and for a prolonged period afterward.

Australia has always experienced natural disasters, but the frequency, severity and impact (including direct and indirect costs) of these is increasing as climate change worsening<sup>1</sup>. Regardless of event duration, repair of physical infrastructure may take months or years, resulting in on-going psychological impact and longer-term inequality, including in education and health care.

While it might be assumed that people in larger metropolitan centres are somewhat shielded from many natural disasters (such as bushfires or drought), the catastrophic February-March 2022 east coast floods affected the capital cities of Sydney and Brisbane. These regions hold a significant proportion of Australia's population, who were affected, either through loss of life or livelihood, or through disruptions to transport, telecommunications and accommodations

### **Aim/Objectives**

We describe our experiences during the 2022 Floods on teaching in first and second year medicine; We argue that increasingly common natural disasters are the lived reality of staff and students; We suggest One Health is an appropriate approach to including natural disasters and climate change in medical curricula in Australia.

### **Discussion**

Our institution, and surrounding suburbs, where many students and staff live, were flooded. The University 'paused' for a week then resumed teaching. However, disruption lasted much longer. Many staff and students could not access online resources or teaching facilities, with some still awaiting home repairs more than a year later.

With staff, students and institutions repeatedly living the reality of natural disasters, we argue for their formal inclusion into Australian medical curricula.

### **Issues/Questions for exploration OR Ideas for further discussion**

The 'One Health'<sup>2</sup> approach may be taken to teach the reliance of human health on animal and environmental health.

1. [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_departments/Parliamentary\\_Library/pubs/BriefingBook47p/NaturalDisastersClimateRisk](https://www.aph.gov.au/About_Parliament/Parliamentary_departments/Parliamentary_Library/pubs/BriefingBook47p/NaturalDisastersClimateRisk)
2. <https://www.who.int/news-room/questions-and-answers/item/one-health>

## Learning lessons from natural disasters for continuity in biomedical science teaching

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### Introduction/Background

Natural disasters have always occurred in Australia, but frequency, severity and impact increases as climate change intensifies. In February-March 2022, catastrophic flooding affected Brisbane and surrounding regions. Institutional facilities, homes, transport and telecommunications infrastructure were damaged, impacting teaching.

### Aim/Objectives

We reflect on our experiences in ensuring continuity of first and second year biomedical science teaching following the 2022 Brisbane Floods, and identify lessons learnt and strategies that can be applied in future natural disasters.

### Discussion

The University 'paused' all teaching for a week and then returned to the pre-existing timetable. This timescale underrepresents the effects on teaching.

Initially, there was uncertainty about the extent of damage, and plans for operational continuity. A transition to online learning could not occur, as many staff and students did not have internet access, or had devices destroyed. Facilities for in-person learning were damaged, and transportation routes were affected. Some staff and students were displaced due to residential damage.

Even for those not directly affected by flooding, there was uncertainty and anxiety about the well-being of fellow staff and students, and distress over seeing familiar structures damaged. Likewise, in a crowded and time-limited medical curriculum, interruption to teaching and learning resulted in anxiety about how missed sessions could be compensated for.

In our experience, we consider early, clear communication and realistic work and study expectations will mitigate unnecessary anxiety. Planning should occur where teaching activities are critically dependent on facilities or staff.

Flooding during the COVID-19 Pandemic highlights the ongoing importance of compassion. Even with teaching 'paused', informal communication opportunities reassured staff and students.

### Issues/Questions for exploration OR Ideas for further discussion

Resilience is a desirable attribute for medical students, and a mindful and compassionate approach to fellow students and staff during a natural disaster could be used as a teaching opportunity.

## Potential and pitfalls of self directed learning- supporting medical students' learning through independent research projects at UNSW

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### Introduction

Most medical schools now offer students the opportunity to conduct independent research projects in order to learn the principles of evidence-based medicine. Independent learning is the basis of self-directed learning, yet students need to be guided in how to direct their own learning. We aimed to explore the experience of medical students and supervisors with self-directed learning during independent research projects at UNSW.

### Methods

Semi-structured interviews were conducted with a convenient sample of Year 6 students (n=11), recent graduates (n=14) and supervisors (n=25). Participants were asked about their experience with independent research projects, skills learnt, impact on future career and any research outcomes. Interviews were recorded and transcribed. A thematic analysis was conducted using a mixed deductive and inductive approach.

### Results

Most participants agreed that the independent research project enabled students to learn critical research skills and that it developed independent learning skills. However, some students and graduates described feeling lost, isolated and unsupported. Many supervisors commented on the importance of their mentoring role in developing independent learning skills. All participants described the importance of faculty support, supervisor training and student's inclusion in a research team as important supporting factors. Positive outcomes described included publications and presentations, continuing research collaborations and career advancement. However, students who were not well supported described disillusionment and disappointment.

### Discussion

Requiring medical students to conduct independent research projects has the potential to develop skills in self-directed learning, as well as research skills, but students may become disillusioned if not supported in the learning process. Students need to be supported by the faculty, by engaged, well trained supervisors and by being involved in research teams. The development of self-directed learning should be part of the explicit learning outcomes of independent research projects.

## The Australian and New Zealand Research Educators Network 3+1Q competition. A showcase for our medical students' research projects.

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### Introduction

All Australian and New Zealand (ANZ) medical programs teach research skills and deliver student research projects. The Research Educators Network (REN) was convened as a community of practice for academics who design and deliver research education in ANZ medical programs. In 2022 REN hosted the inaugural 3+1Q competition where medical students present their research project in three minutes with one slide and one question to answer. An online scoring system was used by independent judges from six medical schools to provide feedback. Academic staff, friends and family were welcome to attend and support participants at this online event.

### Aims

The 3+1Q event aimed to showcase the wide range of research projects by medical students in our region. The objectives were to 1) offer an inclusive forum and supportive environment for students to practice their research presentation skills and 2) promote research education and foster innovative research project offerings.

### Discussion

Student presenters from 20 ANZ medical schools participated in the competition. Presentations covered topics ranging from basic anatomy, public health, clinical and community research projects. Over 80 people attended the 2-hour online event, which was recorded, and an abstract book published. Student presenters received written feedback and prizes were awarded for the top presentations. The 3+1Q event highlighted the excellent quality and scope of research work performed by medical students under the guidance of research educators from their medical schools. The event provided a forum for medical students to practice their scientific communication skills to a mixed audience.

### Ideas for further discussion

Future directions should include securing greater sponsorship to increase the reach and impact of the event. Criteria for judging prizes and delivering feedback are areas for development. Managing question time and audience participation in an online forum is challenging but important for engagement.

## Evaluating the outcomes of medical student research at Monash University

A/Prof. Megan Wallace<sup>1</sup>, **Mr Harry Taylor<sup>1</sup>**, Dr Mahbub Sarkar<sup>1</sup>, Prof. Basia Diug<sup>1</sup>, A/Prof. Bernadette Ward<sup>1</sup>, Miss Penelope Robinson<sup>1</sup>

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### Introduction/Background

Medical student research programs are thought to assist in facilitating the development of clinician-scientists. However, there is limited evidence about the long-term outcomes of medical school research experiences.

### Aim/Objectives

This study aimed to understand and evaluate the long-term (3-5 year) outcomes of the intercalated BMedSc(Hons) degree at Monash University, specifically; publications, research participation, research skills, and the impact of BMedSc(Hons) on graduates' career pathway.

### Discussion

Of those who graduated with BMedSc(Hons), 90% (from 2017), 68% (from 2018), and 73% (from 2019), had published at least one peer-reviewed journal article (total 658 publications; range 0 – 25 per person) within 3-5 years of graduation. Approximately 90% of the publications authored by BMedSc(Hons) graduates were in Q1 or Q2 ranked journals. It was clear that a large number of BMedSc(Hons) graduates continue to contribute to research studies after they graduate from medicine. A survey of graduates is ongoing. The survey is comparing research skills, publication rates and career trajectory in graduates who did and did not complete BMedSc(Hons).

### Issues/Questions for exploration OR Ideas for further discussion

The initial release of the survey was complicated by a large influx of "robot" responses (>500), likely due to the presence of a financial incentive. As a result, we had to exclude a large number of responses, some of which were likely responses from genuine Monash Medical Graduates. Nevertheless, the pilot survey data suggests that medical graduates who completed BMedSc(Hons) have more highly developed research skills, and may obtain specialty training positions more rapidly than those who did not complete BMedSc(Hons).

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### Early and persistent completion of USA medical licencing exam questions predicts performance in Step 1

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#### **Introduction**

In partnership with the University of Queensland, MD students from the Ochsner Health System (New Orleans, LA) complete their first two years in Australia, before completing two additional years of medical training in the USA. UQ-Ochsner MD students must attempt the first of three National Board of Medical Examiners (NBME) United States Medical Licensing Examination (USMLE) Step exams (Step 1) prior to starting year 3. A dedicated USMLE preparation course was established to support students' preparation for Step 1. A limited number of studies have examined effective study habits required to prepare for the Step 1 exam. These studies mainly focus on time allotted to study, resources used; and number of preparation questions undertaken. The aim of this study was to evaluate student's performance in USMLE Step 1 in relation to timing of completion of USMLE Step 1 style questions.

#### **Methods**

NBME formative and summative Comprehensive Based Science Exams (CBSE) were used to identify readiness to take USMLE Step 1. Completion of USMLE Step 1 style questions were monitored through UWorld over a six-month period in the lead up to sitting USMLE Step 1.

#### **Results**

Formative and summative NBME exams significantly predicted USMLE Step 1 results. The number of Step 1 style practice questions completed prior to USMLE Step 1 significantly correlated with USMLE Step 1 results.

#### **Discussion**

Early and persistent engagement with practice questions is correlated with success, with numbers of questions answered correctly correlating even more strongly with exam performance. Accurate assessment of a student's readiness to sit Step 1 is vital to ensure they pass this crucial exam. Early, consistent, and correct completion of Step 1 style questions are important factors associated with success in medical licensing examinations.

## Keeping the lines taught: assisting MD1 students to navigate their elective options for MD2 through our Course Advice program.

**Dr Kylie Fitzgerald<sup>1</sup>**, Associate Professor Lisa Cheshire<sup>1</sup>, Professor Steve Trumble<sup>1</sup>, Dr Cate Scarff<sup>1</sup>

<sup>1</sup>The University Of Melbourne, Parkville, Australia

### Introduction/Background

“Discovery” is a new concept in the redesigned Melbourne MD, which introduced flexible options for learners from 2022. Discovery enables learners to choose from a range of curriculum options each year. To assist learners in navigating these choices for MD1, we implemented a flipped-classroom, online Course-Advice program in January 2022 offering compulsory meetings prior to the MD1 academic year.

For their second compulsory Course-Advice meeting to choose MD2 options for 2023, learners undertook structured, preparatory learning activities via content review and reflective writing. A Course Advisor then met each learner online and facilitated navigation of their options in the context of reflection on their MD1 experiences and future interests.

### Aim/Objectives

We describe the influence of this second Course-Advice meeting on students navigating their choices for MD2, and their experiences and satisfaction with the process.

### Discussion

Nine purpose-built Discovery topics and 22 subjects (mostly from the Master of Public Health) were available. We held 340 online Course-Advice (CA) meetings of 25 minutes duration using MS Teams from August-October 2022. Five percent of learners did not attend.

We received 132 replies to an end of year survey (38% response rate), with learners reporting their second CA meeting:

- increased knowledge about the electives and pathways (47% agreement)
- increased their confidence about final MD2 Discovery choice (54% agreement)
- was essential in helping them make their final Discovery selection (34%)

Learners rated their overall satisfaction at 64.1% with their second CA meeting, compared to 95% for their first CA meeting. MD2 Discovery topics were selected by 88% (n=274) and 12% chose Public Health subjects. Learner certainty of choice (five-point Likert scale) increased from pre-meeting (mean= 3.37) to post-meeting (mean=3.96,  $p<0.0000$ ). Change in first preference after the meeting was 14%, while change in second (32%) and third preference (32%) increased.

### Questions for exploration

Our Course-Advice program is gathering way, and its sails must be trimmed according to the development stage of the learner. Further needs analysis at each level will support successful future navigation.



## **Tutor perceptions of using a mobile electronic platform for assessment of foundational history and examination skills in first year medical students**

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### **Introduction/Background**

This year saw the introduction of MD Design at The University of Queensland Medical School. Assessment for learning is an integral component of the Program. To facilitate this the Mini-Clinical Evaluation Exercise (mini-CEX) has been introduced to assess first year students' history and examination learning. Mini-CEXs are undertaken using the MyProgress platform in real time during small group learning activities. Tutors access the mini-CEX via students' mobile devices and conduct a dynamic feedback conversation. Assessment is captured through text and voice recording.

Prior to this year, assessment of history and examination has been paper-based, with feedback to students provided in a written format for review at a later time.

### **Aim/Objectives**

We aim to explore tutor perceptions of the strengths and challenges of using a mobile electronic platform for assessment of history and examination.

Tutor confidence in using the mobile electronic platform will be tracked over time. This will inform our future support and training of tutors to optimise the assessment experience.

### **Discussion**

In clinical settings, the use of mobile electronic platforms for workplace assessment is increasing. This technology is now being introduced in pre-clinical assessment to capture the rich feedback conversation for student reflection and learning.

Technological change can be challenging, and necessitates a period of familiarisation and up-skilling. Year 1 Clinical and Professional Learning tutors will be provided with training on the use of the mobile electronic platform via an in-person workshop and online resources prior to the 2023 teaching year. Their initial perceptions will be surveyed. Tutors will then engage in mini-CEX assessments every four weeks using the mobile electronic platform. A survey will be performed after every assessment cycle.

### **Issues/Questions for exploration**

Does improved tutor confidence in the use of a mobile electronic platform impact the feedback conversation? If so, how and why?

## Evaluating the perceived value of delayed, written feedback on OSCE performance - a single-blinded study

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### Introduction/Background

The training of medical students typically involves the inculcation of knowledge, skills and traits that are learned iteratively with progressively increasing complexity and sophistication. Feedback is critical to this process but some feedback is more effective than others (1). Effective feedback is specific, timely and credible and should promote actionable goals (1). For the medical student, this translates, ultimately, to providing better care for patients.

Cognitive congruence theory posits that peer assessors should have a better understanding of candidates learning needs than faculty examiners since the gap in knowledge is smaller. This should lead to more effective feedback (1). Thus, peer assessors are capable of providing feedback as effectively as faculty examiners (2). For students in the first three years of the UQ MD program, the Objective Structured Clinical Examination (OSCE) represents a significant opportunity to obtain meaningful feedback. We propose to pilot the use of senior medical students (peer assessors) as co-assessors alongside the currently used pool of clinician examiners (faculty examiners) for low stakes, assessment for learning OSCEs for junior students.

### Aim/Objectives

The aim of this study is to compare the perceived value of delayed, written feedback provided by faculty and peer assessors to year 2 medical students on their performance in an assessment for learning OSCE. Examinees will be blinded to the source to whether the feedback originates in peer or faculty assessors. The quality of the feedback will be evaluated. We believe this is the first study to have a direct and blinded comparison between peer and faculty written feedback. If our hypothesis is supported, this will translate to co-benefits to faculty (e.g. broadening the pool of assessors), peer assessors (e.g. developing feedback skills, engendering a sense of belonging and altruism), and examinees (e.g. quality of feedback) alike.

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## Plotting an Alternate Course for Readiness-to-practice OSCEs – comparing remote asynchronous marking to onsite, synchronous marking (a pilot study)

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### Introduction

The COVID-19 pandemic sent us into uncharted waters and plotting a course through them has allowed innovative solutions to be trialled. Objective Structured Clinical Examinations (OSCEs) are a robust method of high-stakes assessment; however, they are also expensive, time-consuming, and logistically challenging with clinicians needing leave from practice to participate.

Hybrid formats for readiness-to-practice OSCEs using on-site and online components have been trialled previously in response to physical distancing mandates (Attenborough et al., 2021). Therefore, could using asynchronous remote graders offer a solution that is reliable and successful? We trialled this process and evaluated the reliability of asynchronous-remote grading of video recorded OSCEs compared to synchronous-onsite grading.

### Methods

The 5th-year hybrid-OSCE in the Osteopathy Program at RMIT University has 10 stations assessing readiness to practice. The hybrid-OSCE uses a narrated PowerPoint video hosting visual and sound cues to guide students through the stations. Group 1 examined students onsite using livestreaming, while group 2 graded the video recordings five months after the summative assessment, allowing sufficient time and event separation. This study was approved by RMIT HREC (#24950).

### Results

The process for the onsite and remote hybrid-OSCE marking ran successfully. Participation for students was low ( $n=3$ , 3%) so a single examiner was used for both examiner group 1 (synchronous) and 2 (asynchronous). Mean total scores were highly correlated ( $p=0.906$ ) but with low confidence (95% CI [-0.789, 0.832]). Chi squared analysis suggests there was no significant difference between scoring individual stations synchronously or asynchronously ( $p=0.085-0.386$ ), but the kappa statistic suggests poor intra-rater reliability for scoring of individual stations ( $k=0.014-0.386$ ).

### Discussion

Whilst our data wasn't conclusive due to the small sample size, the process ran successfully. This suggests an alternate course for remote asynchronous OSCE marking can run, which saves time and money. The opt-in recruitment protocol was unsuccessful, an opt-out recruitment protocol is recommended.

## Innovative and authentic method of Multiple-Choice Question development from medical student hospital placement

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### Introduction/Background

High-stakes examinations in medical programs often consist of multiple-choice questions (MCQs) that can be time consuming to develop, especially with complex clinical scenarios. It has been evidenced in literature [1] that the creation of quality MCQs can encourage student higher-order thinking. In addition, MCQs can be aggregated into question banks that students can use to consolidate their learning. Medical students are exposed to various clinical cases during their hospital placements from which they can sometimes prepare clinical notes by Electronic Medical Record (EMR). Even though there are studies describing the benefits of students generating MCQs [2], there appears to be a gap in literature on using hospital learning for MCQ developments.

### Aim/Objectives

The aim of this study is to enhance student learning and educational resources, by developing an ethical and medico-legally acceptable framework to generate MCQs from medical student EMR notes.

### Discussion

A method for students to synthesise MCQs from EMR has several benefits. It provides an objective lens to appreciate unconscious clinician bias. Contributing educational data is aspirational and engaging. Key teaching topics might be elucidated, and students might better anticipate the most likely presentations. Understanding clinical note formatting improves student transition to internship. Medical teams may more readily allow students the opportunity to write encounter notes if a framework for MCQ development existed.

### Issues/Questions for exploration OR Ideas for further discussion

There could be an issue with possibility of patient identification. Therefore, data extraction is guided by standard anonymity principles and multiple records are used to synthesise a statistically representative case. Record access outside treatment is a potential issue, though not a privacy issue as students were part of the treating team.

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## Does changing clinical psychology postgraduate selection processes change student outcomes?

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**Introduction:** Past Australian research has shown that typical selection procedures for clinical psychology postgraduate training, involving GPA, references, experience, and an interview, correspond poorly with clinical skills. Aims of this project were (1) developing recommended changes to recruitment and selection for clinical psychology, (2) evaluating selection for reliability and biases, and (3) comparing updated and previous recruitment and selection procedures.

**Methods:** Three phases of applied research were undertaken. In Phase 1, mixed methods were used to develop recommendations for change. Recommendations were adopted for the 2018 intake. In Phase 2, new selection procedures were investigated for reliability and biases. Phase 3 involved evaluating associations between selection ratings and student performance for both the pre-2018 selection method and the 2018 cohort.

**Results:** Phase 1 results demonstrated that updated recruitment information, revised shortlisting procedures, and changing from a single interview panel to a multiple mini-station interview were recommended. Phase 2 results from 114 applicants interviewed for the 2018 intake showed that applicants with higher shortlisting scores had higher interview scores and lower perceived anxiety during interviews. Whether applicants received an offer was not associated with age, gender, specific program applied for (Master or Doctoral), time of day, or station order. Phase 3 data showed few associations between shortlisting rank or interview rank with program performance for either pre-2018 students or the 2018 cohort. Only 56% of eligible students participated in Phase 3.

**Discussion:** This project demonstrated that job analysis and multiple multi-station interviews successfully updated recruitment and selection into clinical psychology postgraduate study without introducing unintended selection bias. Limited participant numbers and restricted ranges on variables limited conclusions that could be drawn about the extent to which pre-2018 or updated recruitment and selection procedures corresponded with student performance. Further research is required to enable prediction of student success once recruited.

## An Exploration of Medical Students' Approach to Progress Test Preparation

**Sanjeev Krishna**<sup>1</sup>, Michael Chieng<sup>1</sup>, Shomel Gauznabi<sup>1</sup>, George Shand<sup>1</sup>, Nathan Ryckman<sup>1</sup>, Andy Wearn<sup>1</sup>

<sup>1</sup>The University Of Auckland, , New Zealand

### Introduction

Medical students are expected to learn and gain competencies in applied clinical knowledge. Progress testing is intended to assist in knowledge acquisition and promote ongoing recall and review. This study explored student preparation for progress tests (PTs), relationships between approach and performance, and patterns that could assist with targeting support.

### Methods

A cross-sectional survey exploring study approach and student context, comprising multi-choice and open-ended responses, was administered to students in clinical years (n=297). A positivist approach was taken for quantitative data, and a constructivist view for qualitative data.

### Results

129 students responded (43.4%). Most had a stable performance over time, 22 students had improving or deteriorating aggregate grades. Poor early PT performance was associated with having an improvement strategy (X<sup>2</sup> 6.954, p=0.008). Students never falling below satisfactory were less likely to have a strategy (X<sup>2</sup> 10.084, p=0.001). All the poor performing students were using practice question banks, but this was not the case for the students who scored satisfactorily. Pastoral care was associated with poorer performance (X<sup>2</sup> 4.701, p=0.030).

### Discussion

Student approaches to PT preparation are diverse with variable efficacy. Students who performed poorly early in the programme were targeted with supports and gained an improvement strategy, which generated better results over time. Widespread use of practice questions was insufficient to impact results without additional resource use. External impacts to performance were common, and barriers to access of pastoral care were evident. The feedback dashboard was underutilised suggesting a need to improve feedback literacy and ensure that information provided is fit-for-purpose.

## Virtual communities of practice in healthcare: A 10-year scoping review

**Dr Louise Shaw**<sup>1,2</sup>, Dr Dana Jazayeri<sup>2,4</sup>, Professor Debra Kiegaldie<sup>1,3,5</sup>, Mrs Melissa Ciardulli<sup>1</sup>, Professor Meg Morris<sup>1,2,5,6</sup>

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### Introduction/Background

Communities of practice in healthcare foster mutual learning amongst groups of people who share an interest in a particular topic. Advances in technology has led to the development of virtual communities of practice (VCoPs), with healthcare professionals using a common online platform to share knowledge and resources and build a professional support network. It is important to know the best methods for development of Communities of Practice to benefit participants and the host organisation (1). There is limited reporting of the methods used to design VCoPs within healthcare organisations.

### Aim/Objectives

To identify approaches for establishing VCoPs in healthcare. Findings from the review will assist in developing a flexible framework for developing best practice VCoPs for healthcare professionals.

### Discussion

A five stage scoping review process was followed based on Arksey and O'Malley's framework and refined by the Joanna Briggs Institute Methodology. Six online databases identified 24 publications published from January 2010 to October 2020 that detailed methods for establishing a VCoP in healthcare.

Reporting on the establishment and key elements of VCoPs was limited. It was difficult to extract data on methods of development and key elements of VCoPs, such as roles, how they were coordinated, and types of technology. There was little consensus regarding the best way to approach VCoP design and implementation in healthcare settings. VCoPs displayed 'unique personalities' (2) with wide variability in the types of participants, how they were coordinated and facilitated, methods of access, communication approaches and digital support. A standardised framework for the establishment and implementation of VCoPs in healthcare organisations could improve capability and capacity.

### Issues/Questions for exploration OR Ideas for further discussion

How can VCoPs for common health services problems, such as falls, ensure evidence-based practice?  
What framework should be considered when establishing VCoPs to ensure all key elements are included?

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## **Artificial intelligence guidance for healthcare workers using PPE in the COVID-19 pandemic and beyond - simulation teaching at MQ**

**A/Prof Veronica Preda**<sup>1</sup>, Mr Terry Carney<sup>2</sup>, Dr James Jabbour<sup>3</sup>, Professor Michael Wilson<sup>1,2</sup>

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Artificial intelligence guidance for healthcare workers (HCW) using PPE in the COVID-19 pandemic and beyond

Artificial intelligence (AI) is a valuable tool that can be used to improve safety of care, reducing harm, leading to improved patient outcomes and healthcare saving. Nosocomial infections have long existed but during COVID-19 this has had significant consequences to healthcare delivery and teaching within healthcare. To date the buddy system has been the gold standard, however, the buddy system diverts valuable HCW resources from patient care and education. Buddies are not always available, especially during a pandemic, and guidelines alone do not guarantee compliance, with no current standard compliance PPE checks. PPE (including gloves, gown, mask, eyewear, hat) remains an essential part of the individual healthcare worker armamentarium against the evolving COVID-19 strains and the inevitable 'next' virus; however, it must be used effectively. The pandemic has repeatedly shown health services becoming overwhelmed. The influx of COVID-19 patients, additional to regular patient volumes, highlights a critical need to protect HCWs, thereby maintaining adequate staffing levels for patient care and preventing pathogenic spread.



## Understanding student abilities (effectivities) to navigate informal Information-Communication-Technology affordances during formal active learning

**Dr Gillian Kette<sup>1</sup>**, Professor Lambert Schuwirth<sup>1</sup>, Associate Professor Julie Ash<sup>2</sup>

<sup>1</sup>Flinders University, Adelaide, Australia, <sup>2</sup>The University of Adelaide, Adelaide, Australia

### Introduction

Active Learning (AL) pedagogies are common in health-profession-education programs. Educators facilitate students to activate and share prior knowledge/experiences when working through relevant scenarios, to collaboratively-construct new memorable knowledge and develop as self-directed lifelong learners. The impact of student-controlled (informal) smart Information-Communication-Technology (ICT) during formal AL (educator-derived) potentially hampers AL-process. However, disallowing ICT use during AL does not reflect current students' learning/work environment. We aim to understand students' abilities (effectivities) to control informal-ICT-affordances (possible uses) for learning by analysing the alignment of AL-tenets with ICT-affordances for learning.

### Methods

First-year-graduate-entry-medical-doctorate students undertaking Problem-Based-Learning (PBL) tutorials were researched through a cognitive-constructivist, ICT-affordance [1], and AL tenet [2] lens. High ICT/AL interaction events identified were analysed through in-depth video analysis, video-stimulated-retrospective-think-aloud interviews, ICT-history-log to assess student effectivities. Transcripts and data were time-aligned, triangulated, and thematically analysed using the above lens.

### Results

Five student effectivities themes for learning during formal AL tutorials are presented. i) need for Internet connectivity, ii) quick access to just-in-time answers/information, iii) students uncomfortable with uncertainty, iv) need to control learning environment and groups, and v) ICT note organization mistaken for learning.

### Discussion

The lure of ICT-affordances for just-in-time information, fuels students' need to be correct but decreases tolerance of uncertainty and increases frustration. Medicine is fraught with uncertainties and unknowns. We found students navigating their ICT-devices during PBL increased the intrinsic (inherent difficulty) and extraneous-cognitive-load (time constraints/groupwork/task-switching). Resulting in errors in ICT-navigation, decrease in group engagement and reluctance/failure to share findings during PBL. Students trust their own online learning groups over the formal PBL group. Hence, forgo the rigor of face-to-face interactions that characterise the professional workplace: decreasing opportunities to develop group skills. ICT-affordances are a feature of our work/life environment. We present the importance for educators and students alike, of the pitfalls/benefits of student-controlled-ICT-effectivities for learning and discuss strategies to facilitate/develop students' effectivities for learning in this ever-evolving ICT-affordance environment.

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## Telegram Education for Surgical Learning and Application Gamified (TESLA-G): Harnessing the Potential of Messaging App for Medical Education

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### Introduction/Background

Multiple-choice question (MCQ) quizzes and question banks are widely used learning resources preferred by medical students. Commercialized tools such as 'Pastest', 'PassMedicine', and 'OnExamination' provide thousands of questions to prepare students for high-stakes medical exams. Most of these platforms provide an intuitive interface with questions not aimed at a specific context of practice. We aim to address this limitation with the Telegram Education for Surgical Learning and Application Gamified (TESLA-G), an app for medical education that incorporates game elements into conventional MCQ quizzes specific to Singapore medical context.

TESLA-G includes several gamification elements such as a leaderboard, point-based system, and time-based game with incrementally challenging questions based on Bloom's Taxonomy[1]. We designed the app to harness the potential of Telegram to deliver apps directly via its chat functions. This allows users to quickly access the app without the hassle of downloading a brand-new app. We developed the app iteratively based on inputs from both students and doctors[2]. Our goal is to create a platform that can facilitate continuous learning for both medical students and practising doctors in hospitals. The usability and feasibility tests for the app are underway. [188 words]

### Aim/Objectives

Our aims for the presentation are 1) to share our experience working with medical students and doctors in developing innovative learning platforms and 2) to share preliminary findings based on our usability and feasibility tests from February to June 2023. [40 words]

### Discussion

TESLA-G contributes to a larger body of evidence on the use of gamification, test-based learning, and messaging app in medical education. One key strength of TESLA-G is that the questions are designed to scaffold students' learning based on Bloom's taxonomy. We hope to understand the impact of gamification on user engagement with the app by comparing the app with a conventional MCQ platform. [63 words]

### Issues/Questions for exploration OR Ideas for further discussion

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## Supporting self-directed training of basic transthoracic echocardiography knowledge with 3D augmented reality for resident doctors.

**Miss Pansa Noiskul<sup>1,2</sup>**, Doctor Neil Cooke<sup>2</sup>, Professor Peter Gardner<sup>2</sup>

<sup>1</sup>Faculty of Medicine Siriraj Hospital, Mahidol University, , Thailand, <sup>2</sup>School of Electronic, Electrical and Systems Engineering, University of Birmingham, Birmingham, United Kingdom

### Introduction/Background

Transthoracic echocardiography (TTE) is a tool for assessing patients' cardiac conditions. Recent clinical professionals ranging from cardiologists to non-cardiologists have been encouraged to master basic TTE competency. In TTE training, most medical trainees have difficulties to understand spatial relationships between the echocardiography image and the cardiac anatomical structures. Moreover, they often confront some barriers to their learning, for example, deficiency of experts for supervisory support, and training time limitation.

### Aim/Objective

The objective was to investigate and compare the impact of the heightened realism of three-dimensional (3D) visualization presented in augmented reality (AR) application on resident doctors to the traditional computer screen-based learning module.

### Methods

46 resident doctors who were novice in TTE at the Faculty of Medicine Siriraj Hospital, Thailand were voluntarily recruited. Interactive pre- and post-test modules were used to assess TTE knowledge. After pre-test process, participants were randomised into two groups: the marker-based AR application group and the computer screen-based multimedia group, then they were asked to once again complete the MCQ. After the post-test, participants were assigned to look through the other arm of learning tool. Upon the completion, they could provide their subjective feedback towards the two learning medias with three validated usability questionnaires and an open-ended question.

### Results and conclusion

Both intervention groups showed statistically significant knowledge gain on post-test scores compared to pre-test. Furthermore, both group's knowledge gain was similar and no significant differences were found. Similarly, no significant between-group differences were found in the usability questionnaires. The responses to open-ended questions on experience highlighted a preference for the 3D graphical presentation of AR over the computer screen-based media. Finally, they anticipated that future versions of the AR might be a mixed reality application equipped with a mock transducer probe for simulating actual TTE exam on a life-size mannequin.

## **Remote teaching in a pandemic: the utility of Zoom breakout rooms in enhancing interactive case-based learning at The University of Newcastle, Australia.**

**Dr Gordon Donnir**<sup>1</sup>

<sup>1</sup>*The University of Newcastle, Callaghan, Australia,* <sup>2</sup>*The Canberra Hospital, Garran, Australia*

### **Introduction/Background**

The COVID-19 pandemic necessitated a rapid shift to remote and virtual teaching in medical education across Australia; a drastic shift from traditional face-to-face teaching in a designated physical space and in-person case-based learning (CBL) in the clinical setting. The transition to a virtual platform has been challenging for case-based teaching sessions which involve substantial audience participation.

This presentation shares the experience and lessons drawn from the utility of Zoom breakout rooms and tasks allocation sessions as a key component that enhanced active participation of students in case discussions from the reported concerning low participant engagement by colleague academics at discipline-wide meetings evaluating outcomes of virtual CBLs.

### **Aims/Objectives**

A report of the shift in experience of student participation in CBLs from the early pandemic, early-to-mid pandemic, and peak pandemic periods amidst the graded implementation of public health guidelines and protocols, and how this impacted delivery of teaching and learning across these identified periods.

### **Discussion**

The innovative approach to vamping up student participation and discussion through the utility of Zoom breakout rooms and task allocation significantly improved student participation in CBLs and the demonstration of clinically valuable skills in the style and content of case presentation and presenter-led clinical discussions.

### **Issues/Questions for exploration OR ideas for further discussion**

The innovative use of Zoom breakout rooms provided for peer-review feedback on the student-presenter and the open acceptance of critique of clinical acumen coming from student-peers as compared to that coming from the lecturer.

Other outcomes included the opportunity for students to put comments and questions in chat box as well as offered the opportunity for the lecturer to share relevant academic articles, in real time, as per the diagnostic formulation of the case presented to shed more light on the clinical scenario. Students were able to quickly skim through such article(s) and draw parallels or otherwise to the case presented. This facilitated clinical reasoning and offered basis for peer-review of their colleague's work/presentation.

Areas of further exploration include the use of Zoom breakout rooms and task allocation in Student-Directed Sessions (SDSs) and didactic teaching utilising case vignettes.

## Designing an Infographic - Key Elements and Considerations

**Dr Grace Leo**<sup>1,2,3,4</sup>

<sup>1</sup>The Children's Hospital At Westmead, Westmead, Australia, <sup>2</sup>Children's Hospital Westmead Clinical School, The University of Sydney, Camperdown, Australia, <sup>3</sup>Don't Forget The Bubbles, , , <sup>4</sup>School of Women's and Children's Health, UNSW Sydney, , Australia

### Introduction/Background

Infographics provide a visual representation of data and can be used to summarise information more concisely. They can often appeal to visual learners and help with data visualisation. Visual abstracts or graphical abstracts allow for a pictorial summary of the main findings of an article. Using infographics or visual abstracts can help to disseminate key learning points from research papers and talks. This can be used to both popularise the source material as well as being used as a learning tool to summarise and reinforce key take-home messages

### Purpose/Objectives

In this PEARLS workshop, I will talk through the key components and process of an infographic using an online platform such as Canva and showing different draft stages of an infographic being designed. The participants will also look at different infographics to analyse what makes them effective or ineffective and discuss strengths and pitfalls in using infographics as a tool for learning and dissemination of knowledge.

### Issues/Questions for exploration OR Ideas for discussion

What makes a good infographic?

How do you identify components of an infographic?

How do you identify what types of information may be suitable for presenting in an infographic?

What different ways can the same data be simplified or presented in a visual way?

How do you review and revise an infographic and obtain feedback?

## Practice Tips for conducting virtual consultations – a teaching resource

Dr Laura Joyce<sup>1</sup>, Dr Maggie Meeks<sup>1</sup>, **Ms Tika Ormond**

<sup>1</sup>*University Of Otago, New Zealand*

### **Introduction**

A forum of interprofessional health professionals involved in education and research had previously been established with the aim of sharing experiences, mentoring new researchers and collaborating in interprofessional research. A small group of interested practitioners from this forum volunteered as an interprofessional working group to interview colleagues from varying professions and specialities regarding their experience of conducting telehealth, virtual consultations over the covid lock down period.

### **Methods**

Zoom or telephone interviews were conducted, we paired interviewers with participants from the same field but different professions. Our process was pragmatic seeking to distil the learning that that was situated in practice into clusters of practice pointers.

### **Results**

One of the outcomes of this process was to distil 10 tips for practitioners as a tool for teaching and learning about telemedicine consults.

### **Discussion**

This poster displays the infographic and shares the link. Discussion will focus on tips and suggestions and the use of the infographic for teaching and staff development

## Uniting Allied Health students - An interdisciplinary virtual simulation learning experience

**Amanda Jenkins**, Ms Kate Osland<sup>1</sup>

<sup>1</sup>*The Sydney Children's Hospitals Network, Sydney, Australia*

### **Introduction:**

This presentation details a unique model developed to educate Allied Health students in the importance of inter-professional collaboration and family-centred care, via online learning and simulation. Established within a paediatric teaching hospital, this half-day program targets allied health students at any stage of their clinical training.

Historically, this program was a face-to-face full day session offered exclusively at the Children's Hospital at Westmead. Evaluation of the original program was overwhelmingly positive – it was shown to increase student's understanding of interprofessional practice and family-centred principles, and students reported that the session would influence how they work with families in the future.

With the advent of the Sydney Children's Hospital Network and students being located across two geographically distinct sites, and further fuelled by the COVID pandemic, there was impetus to move the program to online delivery. This has required adaptation of resources and facilitation methods.

### **Aims:**

The updated model aims to: increase students' knowledge of interprofessional practice and skill in working from a holistic family-centred framework; provide flexible and inclusive education via online delivery; introduce students to virtual care through simulation; and facilitate networking of students and educators across a geographically separated Network.

### **Discussion:**

Discussion will include considerations in modifying the program to be virtual, as well as the benefits to students. Feedback remains preliminary, however information gathered thus far will be reported. The presenters aim to demonstrate that transitioning an interprofessional student simulation program to an online format is not only possible but can maintain and even enhance learning outcomes.

### **Issues/Questions for exploration**

How can an established learning program be scaled up and transition to an online format?

What benefits can students gain from online simulation activities compared to face-to-face?

Could a program like this be implemented across rural/metro LHDs, or between specialty referral hospitals and local health services?

## Teaching clinical reasoning in preclinical health education: the role of context

**Mr Thomas Merkus<sup>1</sup>, Dr Sarah Hyde<sup>1</sup>, Dr Brendan Cantwell<sup>1</sup>**

*<sup>1</sup>Charles Sturt University, School Of Rural Medicine, Orange, Australia*

### **Introduction/Background**

Clinical reasoning (CR) is a key skill that is necessary for effective clinical practice across a variety of health professions. In medicine, CR has traditionally been taught at the bedside, and through structured collaborative group activities like problem based learning (PBL), team based learning (TBL), and simulation. The preparation for practice of CR in rural and remote clinical settings has not been an overt focus of formal curricula. This can be a challenge for courses focused on preparing students for longitudinal integrated clerkships in rural and remote locations. This study aims to analyse the role of context within preclinical CR education and strategies adopted to adjust teaching methods to suit the rural setting.

### **Purpose/Objectives**

Due to the scant literature on teaching CR in rural environments, we want to stimulate discussion and build an understanding of formal and hidden curricula in relation to this. We are especially interested in hearing debate about contextualised and targeted approaches to teaching CR at the level needed for early rural practice.

### **Ideas For Discussion**

- How much does the neglect of the role of context in CR really matter? How should CR be taught differently and more purposefully in rural areas?
- The incidental nature of teaching CR – what is the impact of this? Should there be stronger theoretical frameworks around the teaching of it?
- Is the pre-clinical/clinical divide a false dichotomy for the purposes of defining a CR curriculum given that the majority of health curricula now integrate clinical learning from the very beginning of their courses.
- Should the teaching of CR use the idea of Entrustable Professional Activities as a framework to shape this in a more systematic way – is this a way to get around the preclinical /clinical divide?



## Reflecting on the success of introducing early clinical interactions (ECIs) into a new undergraduate medical program

**Dr Andrea Dillon**<sup>1</sup>, Dr Matthew Arnold<sup>1</sup>, Dr Christian Mingorance<sup>1</sup>, Prof Chien-Li Holmes-Liew<sup>1,2</sup>, Prof Ben Canny<sup>1</sup>

<sup>1</sup>University of Adelaide, Adelaide, Australia, <sup>2</sup>Royal Adelaide Hospital, Adelaide, Australia

### Introduction/Background

In 2022, we delivered Year 1 of a new undergraduate Bachelor/MD program where students commence clinical placements in Year 3. We introduced ECIs to provide students with an earlier opportunity to interact with patients. These featured a multi-disciplinary team focussed around a patient experiencing a pathology aligned to the week's learning. The patient was invited to speak with students, along with other members of the team. The sessions were patient-centred, facilitated by a clinical member of the team.

### Aim/Objectives

Patients were encouraged to speak openly about living with the disease, including its diagnosis, management and personal impact. Other members of the team were asked to provide context and explain relevant concepts. ECIs were intended to be a relaxed environment where students could observe the impact of disease on the patients' lives.

### Discussion

Students very quickly engaged with the process and felt comfortable to speak with the patient and the rest of team. Student attendance and engagement remained high, and evaluations reflected that the sessions provided a unique opportunity to interact with real patients and transformed their attitudes towards future interactions with patients.

Feedback from patients was positive. They valued: helping educate the next generation of doctors; having a public opportunity to express their gratitude to the team, and reflecting on the positive aspects of their experience. The team enjoyed: the high engagement of the students; observing the learning students had gained across the course, and explaining the role they played in the patient journey. The importance of the multi-disciplinary team was often also emphasised by the patients.

It is believed the sessions helped students consolidate their learning by providing them with clinical contexts for the week's learning. The sessions emphasised the importance of patient-centred care and teams in helping achieve good outcomes.

## A six-year follow-up audit of graduating medical students' opportunities to perform sensitive examinations

**Dr Harsh Bhoopatkar**<sup>1</sup>

<sup>1</sup>*University Of Auckland, New Zealand*

### **Introduction**

'Sensitive examinations' encompass rectal, genital, breast, and pelvic examinations. There are concerns that opportunities to practice have fallen and students may be graduating with little sensitive examination experience. Our aims were to quantify how many sensitive examinations have been performed by medical students at the point of graduation and identify any trends over a six-year period

### **Methods**

A self-completed, online, anonymous questionnaire was developed. Data were collected in the last week of the final year of the medical programme at the University of Auckland in 2013 and 2019.

### **Results**

The response rate was 50% (94/190) and 35% (93/265) in 2013 and 2019, respectively. In 2013, 35% of students had never performed a female rectal examination. Similarly, in 2019, 35% of students had never performed a female rectal examination. In 2013, 46% had performed between 2-5 breast examinations and 49% had performed between 10-49 female vaginal/pelvic exams in a non-obstetric setting. In 2019, 44% had performed between 2-5 breast examinations and 43% had performed between 10-49 female vaginal/pelvic exams in a non-obstetric setting.

### **Discussion**

Rates of performance are variable - low for certain sensitive exams (eg, female rectal exam); higher for other exams (eg, breast examination and female pelvic examination [not in labour]). For both cohorts, we found similarities in terms of the number of examinations performed for each sensitive examination and a similar pattern regarding which of the sensitive examinations had the lowest and highest performance rates.

Questions arising are:

Which of these skills are core?

How many on average are needed?

What should we make of this trend?

What changes need to be made to ensure that students have adequate learning experiences?

## A blended approach for learning pre-clinical skills within Te Kaupeka Pūniho - the Faculty of Dentistry at the University of Otago

**Mrs Hanna Olson<sup>1</sup>**, Mr Samuel Carrington<sup>1</sup>, A/Prof Andrew Tawse-Smith<sup>1</sup>, Dr Lee Adam<sup>1</sup>

<sup>1</sup>*Sir John Walsh Research Institute, Faculty of Dentistry, University of Otago,, Dunedin, New Zealand*

### Introduction

The curricula for the Bachelor of Oral Health (BOH) and Bachelor of Dental Surgery (BDS) programmes within Te Kaupeka Pūniho – the Faculty of Dentistry at the University of Otago, New Zealand were reviewed and scrutinised for simulated education opportunities. Investigations into merging didactic teaching with interactive online simulated pre-clinical training highlighted opportunities to combine and merge teaching activities between the two programmes.

The overarching aim of this project is to introduce a blended-learning approach to the dental and oral health curricula within Te Kaupeka Pūniho. Furthermore, a specific aim is to determine how and to what extent online learning in simulation-based pre-clinical teaching can be implemented and merged across the BOH and BDS Programmes to deliver a blended learning approach prior to students' first patient contact.

### Methods

Areas where digital learning experiences can be implemented within each curriculum were identified. E-learning material was piloted with a sample of students in the BOH and BDS programmes invited to attend focus group discussions (FGDs) to discuss their views on the material. The FGDs were recorded and transcribed verbatim, then analysed using a qualitative inductive approach (Thomas, 2006).

### Results

Students were unanimously positive about the resources, and provided feedback for enhancing the resources. In addition, they stated that it would be useful to their ongoing learning to be able to access the material throughout their training, rather than just as a one-off. Students also raised the need to clarify the roles of each of the two dental professions (Oral Health Therapy and Dental Surgery) early on in their programmes.

### Discussion

Feedback from the students will inform enhancements to the e-learning material along with the potential for implementing interprofessional education early in their BOH and BDS programmes, to learn with, from, and about each other's profession (CAIPE, 2002).

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## Development of a Music Therapy student placement guidance framework for clinical educators in the hospital setting.

**Ms Jaye Thompson**<sup>1,2</sup>, Sharon Glass<sup>2</sup>, Dr. Andrea Bramley<sup>3,4</sup>

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### Introduction/Background

Demand for Music Therapy (MT) services in the public health system continues to grow (O'Brien et al., 2021). Whilst the pandemic has presented many workforce challenges, new learning opportunities for students have emerged. To build a sustainable MT workforce, we must balance the need to provide high quality placements whilst ensuring service needs are met.

### Aim/Objectives

**Aim:** To improve MT student clinical education at a large public health organisation by supporting streamlined, standardised learning experiences for students that meet university assessment requirements and MT service needs.

**Objectives:** To identify learning activities which best support MT students to achieve required competencies on hospital placements while simultaneously meeting MT service demands. To explore and describe differences between first and second year placements and clinical educator (CE) expectations. To create streamlined guidance and an expectations framework to support placement supervisors.

### Discussion

This project involves three phases. Phase one, a mixed methods study consisting of a literature review, interviews, focus group and survey with 11 MT CEs and junior staff, found learning was individual as opposed to time based, supporting the need for flexibility (Thompson et al., 2022).

This presentation will report on phase two, and highlight methodology used to develop the framework including how phase one findings have informed design. We will present preliminary mapping of university assessment competencies against learning experiences available in the clinical setting. An expert working party of MT CEs will be established to pilot the framework and develop consensus.

Phase three: implementation is planned for 2024.

### Issues/Questions for exploration OR Ideas for further discussion

A framework to support learning, facilitate a shared mental model of performance and a suite of standardised learning activities to meet a variety of student and clinical needs across the placement spectrum has not been attempted in MT before. Although limited to a single setting this work is likely to be of interest to CEs in MT as well as other disciplines.

### References

O'Brien, E., Bedggood, J., & Ayling, A. (2021). *Evolving and Thriving: Keeping Music Therapy Alive in a Pandemic World: The Royal Melbourne Hospital Music Therapy response in 2020*. Australian Journal of Music Therapy, 32:1.

Thompson, J., Glass, S. & Bramley, A. (2022, September 30 – October 1). *Music Therapy Student Clinical Education in Public Health: Balancing learning, service and system needs to support workforce sustainability and well-being* [Paper presentation]. Australian Music Therapy Association National Conference, Melbourne, Australia.

## Evidence base for foundational physical examination techniques in a first-year medical student cohort.

**Dr Ashlee Forster**<sup>1</sup>

<sup>1</sup>*The University Of Queensland, Australia*

### **Introduction/Background**

The University of Queensland MD Program launched a new curriculum in 2023 with a focus on teaching and learning foundational aspects of medicine in first year. With respect to physical examination, this involved a shift from demonstrating competency in comprehensive systems-based examinations to demonstrating the ability to appropriately undertake basic physical examination techniques. Consideration of core, basic or foundational skills to include in the first-year curriculum would ideally involve an evaluation of the diagnostic accuracy of the techniques.

### **Aim/Objectives**

This research aims to identify the evidence base of currently taught physical examination techniques in first year of the MD Program. Components of cardiovascular, respiratory, gastrointestinal and musculoskeletal system examinations will be analysed.

### **Discussion**

Medical education research has shown an increasing focus on evidence-based practice to guide optimum approaches to teaching physical examination. Historically, physical examination skills have been taught according to a number of commonly accepted core resources, including textbooks and educator-developed study guides.

Given the importance of deliberate practice of technical skills such as physical examination, and the limited time and resources that are quarantined for supervised small group learning of these skills in a large cohort MD Program, it is desirable to ensure the foundational techniques taught are reliable and accurate.

### **Ideas for further discussion**

Is there a reluctance to omit less reliable elements of physical examination from the curriculum? Why?  
Is the reliability of particular physical examination techniques routinely taught in conjunction with the examination skill in first year? Should it be?

## Supporting final year Diagnostic Radiography students on clinical placement in large teaching hospitals.

**Ms Frances Gray<sup>1,2</sup>, Dr Yobelli Jimenez<sup>1</sup>, Dr Sahand Hooshmand<sup>1</sup>**

<sup>1</sup>University Of Sydney, Camperdown, Australia, <sup>2</sup>San Radiology, Sydney Adventist Hospital, Wahroonga, Australia

### **Introduction/Background**

With the increasing demand for Diagnostic Radiography (DR) clinical placements in the large teaching hospitals of NSW, we have grown the capacity for students in their final year by providing them with on-site tutorials that aim to support the complexity of examinations and various clinical presentations they may encounter.

### **Aim/Objectives**

The aim of this project was to support the final year DR students with tutorials and reflections that they could apply to complex presentations encountered in large hospitals. Additional support for clinical educators was identified and bespoke workshops were developed to assist radiographers in supervising additional students.

### **Discussion**

We have had the unique opportunity to teach final year undergraduate DR students that are on clinical placements in the large teaching hospitals. Each tutorial group is taught in a hyflex environment and comprises 12 students: 6 in person and 6 via zoom. Tutorials were designed and developed to support them on clinical placement, but also to improve their critical thinking skills and prepare them for future employment. The tutorials are based on emergency radiography, clinical scenarios, advanced communication skills, beginning first with a reflection of the past week. Engagement with clinical educators' colleagues ensures that the teaching and learning outcomes are aligned, promoting quality clinical experiences that cultivate exceptional future Radiographers. Students are encouraged to develop an inquiry/evidence-based approach to practice, and this has impacted their placement goals positively as is evident by their feedback. Clinical educators have commented that the students' participation in complex cases is enhanced by the evidence-based practice (EBP) style that they use to critically evaluate requested examinations.

### **Issues/Questions for exploration OR Ideas for further discussion**

Is there a need for an expansion of this project for all students on clinical placements?

## Development of a clinical replacement intervention to replace clinical placement in Medical Imaging Science

**Dr Yobelli Jimenez<sup>1</sup>**, Ms Frances Gray<sup>1</sup>, Mrs Susan Said<sup>1</sup>, Mrs Laura Di Michele<sup>1</sup>

<sup>1</sup>*Discipline of Medical Imaging Science, The University Of Sydney, Camperdown, Australia*

### Introduction/Background

In response to increasing student enrolment and clinical workload pressures, a recent focus on health student preparation programs has been on curricula adaptations and replacement of clinical placement time with alternative education activities.

### Aim/Objectives

The aim of this project was to develop an on-campus clinical replacement activity for one professional placement unit of study in the diagnostic radiography undergraduate program at the University of Sydney.

### Discussion

A literature review was conducted to explore the current evidence relating to education activities in Medical Radiation Sciences (MRS) used to replace clinical placements or part of clinical placements. From the literature, it was identified that planning and development of clinical replacement learning activities in MRS requires support from a wide range of stakeholders, and limited evidence from activities already implemented exists. Reported clinical replacement activities use a blended approach, with simulation-based education as a main teaching platform. Evaluation of clinical replacement activities largely focus on students' achievement of learning objectives relating to practical and communication skills. Emerging evidence based on small student samples shows that clinical and clinical replacement activities provide similar results in terms of learning objectives.

The planned clinical replacement program at the University of Sydney is currently being developed and will be piloted in July 2023. The research team is working on the development of simulation and other learning activities that are grounded in adult learning theory and constructivism and follows quality criteria for the substitution of a complete clinical placement.

### Issues/Questions for exploration

For diagnostic radiography students, theoretical knowledge must be supported by exposure to the clinical environment for optimum learning. Hence, to meet the dynamic challenges of the health care environment and diagnostic radiography profession, a major goal in the future will be to affirm the benefit of clinical replacement activities for diagnostic radiography students.

## Evaluation of virtual one-day hospital visits for first year pharmacy students

**Miss Teagan Van Der Drift<sup>1</sup>**, Miss Laura Kavanagh<sup>1</sup>, Dr Diana Bortoletto<sup>1</sup>

<sup>1</sup>Barwon Health, Geelong, Australia

### Introduction/Objective(s):

In 2020-2021, first-year pharmacy students' one-day hospital visits were converted to virtual placements. To emulate student face-to-face placement experiences in virtual environments, including tour of the hospital and pharmacy, pharmacist roles and careers, and observing a ward pharmacist.

### Methods:

A two-part virtual hospital visit was developed. A pre-placement presentation (PPP) featuring voiced-over pre-recorded videos by pharmacists, photos, and written materials, covered introduction to organisation, pharmacy, pharmacist roles and common documentation.

Two educators then facilitated a virtual session. Pre-recorded videos with live voiceover/explanations and photos covered a tour of the pharmacy, hospital, inpatient ward and clinical pharmacist workflow. Students provided feedback via electronic survey. Feedback from 2020 was used to improve the 2021 virtual placement.

### Results:

Seventy-two students attended the virtual placements, with 54.1% (20/37) evaluations completed in 2020 and 37.1% (13/35) in 2021.

While all sections of PPP rated highly, 'Different Pharmacists' roles' was the most interesting component each year [75% (15/20) and 92.3% (12/13) marked 'very interesting' respectively]. The overall median PPP score on a Likert-scale of 1-5 was 4 [3,5].

All components of the live content were considered very interesting/interesting (57.5%, 19/33), with an overall median score of 4.38 [4,5]. Internet connectivity/streaming of videos were issues in both years. 2020 feedback also suggested the inclusion of career paths in 2021 (rated 'very interesting' 76.9% (10/13) in 2021).

Mix of photos and videos was preferred format for both PPP and live content (87.9%, 29/33). Most indicated that the virtual placement was worthwhile (97%, 32/33). All indicated that placement goals were achieved. However, 87.9% (29/33) still preferred a face-to-face hospital placement.

### Discussion:

Virtual first-year hospital placements, emulating real-life experiences successfully replaced a face-to-face placement.

Virtual placements are useful tools to increase students' experiences when face-to-face attendance is not possible but should not permanently replace actual hospital placements.



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### **Modernising professional development – an opportunity for educational innovations to develop a growth mindset in our clinical educators.**

**Professor Adrienne Torda**<sup>1</sup>, Mr Indra Sadeli<sup>1</sup>

<sup>1</sup>*Unsw Sydney, Australia*

#### **Introduction**

How receptive are your clinical educators to feedback and suggestions about improving their teaching skills? In some health sciences, clinical educators are purposefully employed for that task, but, particularly in medicine, the task generally falls on clinicians who are affiliated with our universities but paid by healthcare departments or facilities to primarily deliver a clinical service. So, allocation of time for professional development (PD) of educational skills may be a secondary concern. Luckily, COVID has revolutionised the formats and approaches to tertiary education. Why not use these learnings in the professional development space?

#### **Methods**

We developed an online, flexible, modular, PD program using a human-centred design framework to 'upskill' our honorary titleholders involved in clinical education. On completion of each module, we asked for feedback via a Qualtrics survey. This survey collected both quantitative and qualitative data on the user experience and self-assessed learning gains (KG).

#### **Results**

From the 363 clinical educators who undertook these modules over a 2-year period, 161 provided feedback. Self-assessed KG were significant for 8 of the 10 learning modules, with an average knowledge difference score of +2.62 across all modules in the program. Lowest delta scores (knowledge difference) were for 'facilitating teamwork' (+1.68) and 'giving effective feedback' (+2.08) modules. Qualitative data also provided significant information about user experience eg. browsers and devices to direct future improvements.

#### **Discussion**

This study found impressive results from the self-assessed KG, vindicating the need for this type of online modular learning tool for clinical educators. The lower KG reported for the two modules mentioned above, suggest that another approach to teaching these skills may be more valuable. Qualitative feedback on design, device functionality and content enable iterative improvement of these modules. This study supports the need for a fairly elaborate and multi-pronged approach to PD of clinical teachers.

## Reframing how we learn in health services: a postmodern perspective

**Mrs Keryn Bolte<sup>1</sup>**

<sup>1</sup>*University of Melbourne, Wangaratta, Australia*

### **Introduction**

Healthcare learning environments foster a diversity that can genuinely contribute to the creation of skilled and knowledgeable practitioners. Hence, challenging how learning environments are developed, understood, and sustained can assist health staff and services in reaching their full potential. We, as healthcare practitioners (and by consequence, educators), can move away from appraising healthcare education as learner versus educator and toward the understanding that we are all learners and teachers. In this paper, a postmodernist lens has been employed in a study of staff learning environments to offer an understanding of flexible, overlapping, and blended approaches to clinical care, on-the-job learning, and best practice. From this view, clinicians are both learner/teacher, clinician/educator, working autonomously and as team members, and hence the approach to care, teaching and learning is fluid.

### **Methods**

The tenets of post-modernism, using Cheek, have been used to reimagine how we learn in health services. This work offers a constructive critique of learning environments which represent the value of staff work-based learning.

### **Results**

This analysis highlights the complexity of health education and a rigidity that seems to be present in staff learning environments, influencing how learning is perceived and undertaken. Staff have a sense of that learning required and how to achieve it in the workplace, but there are mixed understandings around professional development versus informal learning. Such understandings appear to stifle the potential for learning environments.

### **Discussion**

This presentation aims to challenge the modernist mindset of learning in health services, to find joy in complexity and is a call to do things differently in health education that brings attention to how learning is embedded in all areas of practice. Health service staff are worthy of investigation because pragmatic and demonstrable research outcomes are needed but so too are reflective practitioners, to influence and transform practice--“...*the two need not be mutually exclusive.*” (Cheek, 2000. p.11.)

### **References**

Cheek, J. (2000). *Postmodern and Poststructural Approaches to Nursing Research*. SAGE Publications, Inc. <https://doi.org/https://dx.doi.org/10.4135/9781452204895>

## Exploring the value of pedagogical content knowledge in health professions educators' teaching practice

**Dr Mahbub Sarkar**<sup>1</sup>, MS Laura Gutierrez Bucheli<sup>1</sup>, Prof Dragan Ilic<sup>1</sup>, A/Prof Michelle Lazarus<sup>1</sup>, A/Prof Caroline Wright<sup>1</sup>, Prof Amanda Berry<sup>1</sup>

<sup>1</sup>Monash University, Clayton, Australia

### Introduction/background:

Pedagogical content knowledge (PCK) refers to specialised teacher knowledge that combines knowledge of discipline-specific content and knowledge of pedagogical approaches used to teach that content to enhance student learning. PCK has been extensively applied to understand and improve school-based teaching and learning. There is a paucity of research investigating the PCK in health professions education contexts. This study explores how health professions educators perceive and use PCK as a framework for capturing and developing the professional knowledge required for high-quality teaching.

### Methods:

Using a qualitative design, underpinned by social constructionism, the study engaged six educators across six health professions at an Australian university in the process of developing and refining a PCK-infused lesson plan using the Content Representation (CoRe) tool. Participants were interviewed twice—(a) immediately after they taught using the plan, and (b) in 3–4-months post-teaching. Additionally, they submitted two rounds of written reflections on their engagement. Data were analysed using team-based framework analysis.

### Results:

Initial analysis of the data suggests that educators' conceptualisations of PCK vary. While some found the process of developing, refining, and implementing a PCK-infused plan quite challenging, most appreciated how this process influenced them to make explicit pedagogical decisions and recording their reasoning behind decisions using the CoRe. Within these decisions, they recognised the critical role of scaffolding to consolidate students' learning. Educators also viewed that this process promoted their reflective practice, where pedagogical decisions and strategies are re-evaluated and modified.

### Discussion:

The study results attest to the value of making explicit what is usually tacit; specifically, the planning for, reasoning behind, and enactment of educators' pedagogical decision-making in teaching specific health-related content. This explicit decision-making process can support both their professional development and practice and be communicated amongst other health professions educators for collective improvement and advancement of student learning.

## Are junior doctors receiving enough teaching to be competent in managing ophthalmic cases in the emergency department?

**Dr Edward Saxton<sup>1</sup>**, Dr Ruth Primrose<sup>1</sup>

<sup>1</sup>*Eastern Health, Melbourne, Victoria, Melbourne, Australia*

### Introduction/Background

Ophthalmology is taught very quickly at medical school with one week usually allocated throughout the entire degree.[1] Therefore new graduates will have little to no experience of managing ophthalmic cases due to the lack of teaching time allocated to this specialty. A study by Uhr et al.[2] revealed only 50% of emergency medicine trainees felt confident in assessing eye cases. This is quite concerning if patients present with sight-threatening conditions.

### Aim/Objectives

The aim was to enquire about emergency medicine junior doctors' level of confidence in the workup of an eye case including the use of ophthalmic equipment such as the slit lamp. A teaching session was held where doctors were educated about very common and serious ophthalmic presentations. This also involved how to perform a thorough ophthalmic assessment including use of the slit lamp. Feedback was obtained after the session to assess confidence levels about seeing future ophthalmic cases.

### Discussion

Results of the feedback revealed that 87.5% of doctors had low confidence in assessing patients with ophthalmic problems prior to the session. Following this teaching session, all of the doctors had gained some level of confidence in the workup of an ophthalmic case including the use of the slit lamp. 60% of the cohort had never used a slit lamp prior to the session. There is a small gap in knowledge and skill set of junior doctors which is so important to improve in the emergency department when sight-threatening conditions can present.

### Issues/Questions for exploration OR Ideas for further discussion

Our results show that there should be attention focussed on teaching ophthalmology for training doctors due to little exposure during medical school in order to develop well-rounded junior doctors, confident in assessing all cases in the emergency department.

### References

1. Moxon, N.R. *et al.* (2020) "The state of Ophthalmology Medical Student Education in the United States: An update," *Ophthalmology*, 127(11), pp. 1451–1453. Available at: <https://doi.org/10.1016/j.ophtha.2020.05.001>.
2. Uhr, J.H. *et al.* (2020) "Training in and comfort with diagnosis and management of ophthalmic emergencies among emergency medicine physicians in the United States," *Eye*, 34(9), pp. 1504–1511. Available at: <https://doi.org/10.1038/s41433-020-0889-x>.

## From the Keyboard to the Whiteboard: A Back-end Staff's Journey into Clinical Teaching

**Ms Shalimar Ramirez-Dormitorio<sup>1</sup>**

<sup>1</sup>*Tan Tock Seng Hospital, Singapore, Singapore*

### **Introduction**

The Ministry of Health (MOH) launched an integrated medical record system for the Singapore population called NGEMR (Next Generation Electronic Medical Record). NGEMR allows participating Health Care Institutions (HCIs) to record a patient's entire healthcare journey from consultation, admission, diagnosis, and treatment to discharge.

### **Methods**

Tan Tock Seng Hospital's (TTSH) go-live date was 30 July 2022. At that time, TTSH was still at the forefront of the COVID-19 battle. It was challenging for the hospital to allocate dedicated clinical staff to train the in-flight Health Professional (HP) students on using NGEMR. With this constraint, the Pre-Professional Education Office (PPEO) embarked on a job transformation. PPEO sent an administrative staff for six weeks of structured learning to become NGEMR Credentialed Trainers (CT), taking on the role fulfilled previously by clinicians. The six weeks of hands-on learning included learning clinical workflows.

### **Results**

To evaluate the teaching effectiveness, 360 students evaluate the administrative staff. The results showed that 96.39% (n=347/360) agreed that the learning objectives were met, while 95.83% (n=345/360) agreed that the training was conducted well. 96.66% (n=348/360) of the students agreed that the Trainer demonstrated good system knowledge and could address their queries sufficiently. 94.45% (n=340/360) of the students agreed that the Trainer could engage them using effective teaching-learning strategies. 96.11% (n=346/360) of the students agreed that the Trainer has done well and helped them learn about NGEMR.

### **Discussion**

This job redesign benefits the hospital by relieving clinicians from training students on using NGEMR, thus allowing them to concentrate on their clinical work instead. This job transformation also expands the job scope of administrative staff, allowing them to participate in clinical teaching.

## Faculty development for a new team-based learning curriculum in Year 1 of an Australian Doctor of Medicine program

Dr Hannah Hegerty<sup>1</sup>, **Dr Shu Wang<sup>1</sup>**, Dr Mary Kelleher<sup>1</sup>, **A/Prof Margo Lane<sup>1</sup>**

<sup>1</sup>Greater Brisbane Clinical School, Faculty of Medicine, The University of Queensland, St Lucia, Australia

### Introduction/Background:

Team-based learning (TBL), originating in business education in North America, is an emerging pedagogy within medical education internationally. Core features include completion of individual student preparation for learning, readiness assurance testing (usually multiple-choice questions), and completion of application exercises during TBL sessions in small teams within a large group educational setting.<sup>1</sup> The newly redesigned Doctor of Medicine (MD) program at the University of Queensland (UQ) which commences in 2023, replaces case-based learning with TBL in the year-long first-year course. As a result of this significant change, faculty development forms a critical component of TBL implementation.

### Aim/Objectives:

This study aims to explore faculty development experiences of TBL facilitators. As a secondary aim, the experiences of academic staff designing and delivering faculty development will also be investigated.

### Discussion:

TBL faculty development activities for the UQ MD program comprise a range of interactive workshops covering topics such as facilitating large groups, use of eLearning resources and cultural safety; real-time pilot TBL sessions; an ongoing program of weekly facilitator briefings and the creation of a formal Community of Practice. Eight weeks following course commencement, TBL facilitators' experiences of faculty development will be explored through focus groups methodology, while faculty responsible for design and delivery of TBL faculty development will be interviewed. Transcripts of focus groups and interviews will be analysed through thematic analysis and initial results will be presented at the ANZAHPE conference in June 2023.

### Issues/Questions for exploration:

It is anticipated that by exploring diverse perspectives, this study will identify the strengths and challenges of implementing a robust, accessible and timely faculty development program for a new TBL curriculum, and offer insights for future iterations of faculty development both at UQ Medical School and in the wider medical education community.

1. Michaelsen, L.K. and Sweet, M. (2008). The essential elements of team-based learning. *New Directions for Teaching and Learning*, 116: 7-27. <https://doi.org/10.1002/tl.330>

## The Monash Clinical Teaching and Education Pathway (CTEP): helping doctors navigate their role as teachers

Dr Lisa Hall<sup>1</sup>, Ms Sophie Burke<sup>1</sup>, Ms Amy R Allen<sup>1</sup>, Associate Professor Cathy Haigh<sup>1</sup>, Dr Sarah Meiklejohn<sup>1</sup>, Dr Tammy Smith<sup>1</sup>

<sup>1</sup>Monash University, Bendigo, Australia

### Introduction/Background

Part of a doctor's role is to teach medical students and junior doctors. But who teaches doctors how to teach? Monash Rural Health's Clinical Teaching and Education Pathway (CTEP), initiated in 2021, offers a staged, professional development approach to educating doctors to teach. CTEP is delivered across the Monash Rural Health footprint in regional and rural Victoria. The pathway upskills doctors so the next generations of health professionals are taught well and forge robust connections to the rural and regional areas and health services in which they are placed, as their learning is supported appropriately.

### Aim/Objectives

This presentation will outline the origins of the pathway and its subsequent development and expansion into multiple regions of Victoria. It will showcase the anecdotal evidence of impact and describe plans for a formal longitudinal evaluation of the pathway.

### Discussion

CTEP enables regional doctors to undertake education onsite that links to their professional development, and is a stepping stone into post graduate training pathways in clinical education. Evidence of participation in the pathway can support applications for College accredited training. Linking to the university provides opportunities for doctors practising regionally to engage in scholarly activities with Monash Rural Health and potentially develop and sustain an educational culture within their health services.

### Issues/Questions for exploration OR Ideas for further discussion

What is the best way to measure the impact of this program in the coming evaluation?

How does this intervention targeting clinical teaching skills impact on the quality of medical education?

Does teaching about teaching influence clinical practice?

What are the facilitators for participation?

What are the barriers to participation?

How can opportunities to teach be sustainably supported?

## How new educators navigate the gap between the roles of radiographer and educator

**Ms Karen Finlay<sup>1</sup>**, Associate Professor Julie Fleming<sup>1</sup>, Professor Bobby Harreveld<sup>1</sup>,  
Doctor Cynthia Cowling<sup>2</sup>

<sup>1</sup>Central Queensland University, Rockhampton, Australia, <sup>2</sup>Monash University, Melbourne, Australia

### Introduction/Background

Radiography educators are appointed to their roles based on their expertise and experience in clinical radiography. Once employed, radiographers begin a transition from their clinical role to become radiography educators. Research suggests that this transition can be problematic, with a requirement to learn the culture, role and skills needed to fit into the higher education landscape.

### Aim/Objectives

The aims of this research were to explore the transition from radiographer to radiography educator, discover what factors affect the transition and how those undertaking transition were supported in navigating the space between the clinical and educator roles.

### Discussion

Radiographers entering the higher education workforce discovered a significant difference between the structured, protocol-led clinical role and the larger, amorphous educator role. This dissonance created wellbeing challenges as they strove to understand the role, develop pedagogical skills and their educator identity.

Formal support and transition management was uncommon, and individuals came to rely on social support from peers. Educational training helped with learning pedagogical theories and practices, improving self-confidence and self-perceived competence. Social tactics of peer support and simply 'chatting' with colleagues helped further develop the required knowledge and skills.

Identity developed as individuals navigated the space between the clinical and educator roles, completing higher degree qualifications and becoming engaged in research.

Higher education institutions should review their induction and professional development policies to ensure that there is strong transition management, that the needs of early career radiography educators are met in terms of support, development of learning and teaching skills and that workloads are structured to allow time for this transition to occur.



## Reflection-on-action of a mid-career transition from clinician to teaching focused academic in clinical and health psychology

**Dr John Baranoff<sup>1</sup>**

<sup>1</sup>*The University Of Adelaide, Australia*

### **Introduction/Background**

Transitioning from clinician to teaching academic in mid-career can be rewarding but is not without challenges. Although research investigating transitions among allied health professionals identifies a broad range of issues in the transition from clinician to teaching academic, the literature primarily focuses on transitions in nursing and physiotherapy. [1]. By contrast, substantially less has been written about the transition from clinician to teaching academic in the areas of clinical and health psychology.

### **Aim/Objectives**

The primary aim of this oral presentation is to outline a reflection of one person's experience of the first year as teaching academic within clinical and health psychology following 20 years as a clinician. Secondary aims were to consider whether themes identified in the reflection were also present in the current literature and to identify areas for future research.

### **Discussion**

A reflection in the form of a reflection-on-action [2] was written after reviewing work notes, development plans, emails and contemporaneous notes about impressions of the role written across the course of 12 months. Preliminary themes identified in the reflection include a gradual shift in professional identity from clinician to educator, changed relationship with peers and students, as well as knowledge/skills gaps and plans for knowledge/skills development.

### **Issues/Questions for exploration**

To what extent are themes in the current reflection consistent with the findings of Murray's et al.'s [1] meta-synthesis of transitions in nursing, physiotherapy and social care?

To what extent are issues noted in the current transition similar to issues associated with the transition to practice experienced at earlier career stages?

What supports could be put in place at various stages of transition to assist the process?

## **Integrated Allied Healthcare For Healthy Ageing: Interprofessional Collaborative Practice, Education And Research**

**Dr Marianne Coleman<sup>1</sup>, Dr Kwang Meng Cham<sup>1</sup>, Dr Sandra Iuliano<sup>1</sup>, Dr Naoya Hasegawa<sup>2</sup>, Dr Daisuke Sawamura<sup>2</sup>**

*<sup>1</sup>University Of Melbourne, Australia, <sup>2</sup>Hokkaido University, Japan*

### **Introduction**

Multimorbidity and frailty among older adults are associated with complex healthcare needs, requiring input from multiple allied health disciplines to manage. For example, someone living with dementia and vision impairment may require support from vision care professionals (optometrists, orthoptists) and rehabilitation specialists (occupational therapists, physiotherapists) to live independently at home. The need for integrated, multidisciplinary approaches to support 'ageing in place' has been acknowledged in research and policy. However, barriers exist to successful implementation, leading to calls for innovative knowledge translation strategies to facilitate widespread improvements to care for older adults. We present findings from an interprofessional workshop programme conducted in Victoria, Australia, and Hokkaido, Japan.

### **Methods**

We held a Zoom-based online case study afternoon and a hybrid online/in-person interprofessional education workshop in Sapporo, Japan. Attendees were primarily allied health professionals, students, clinical educators and researchers. The case study afternoon highlighted perspectives from allied health and medical professionals in Japan and Australia, regarding integrated care for older adults. Attendees completed a feedback survey to share their learning experiences. The interprofessional education workshop comprised research presentations and discussion groups to further explore barriers and facilitators to integrated interdisciplinary allied healthcare and research in community, acute and aged care settings.

### **Results**

Over 70 people attended the case study afternoon and 20 completed the feedback survey. Attending disciplines included optometry, nutrition, social work, physiotherapy, occupational therapy, nursing and medicine. Perceived facilitators for interdisciplinary integrated allied health care/research/education included funding, time, ease of sharing information, effectiveness and representation of specialties, a positive environment for interdisciplinary practice and a sense of purpose. Respondents felt there could be more involvement of certain allied health professions, and 18 respondents agreed that interdisciplinary case studies would be beneficial to incorporate within future teaching programs. The interprofessional education workshop will be held in February 2023.

### **Discussion**

Australia and Japan experience shared opportunities and challenges regarding integrated allied healthcare for older adults, with a united focus on preventive care. The workshop program was well received and resulted in opportunities to include information about vision impairment in dementia and after stroke within the Japanese allied health curriculum in Hokkaido.

## Interprofessional health education to implement the Safe Recovery Programme in hospitals

**Dr Louise Shaw<sup>1,2</sup>**, Professor Debra Kiegaldie<sup>1,3,4</sup>, Dr Hazel Heng<sup>2</sup>, Professor Meg Morris<sup>3,4,5</sup>

<sup>1</sup>Holmesglen Institute, Moorabbin, Australia, <sup>2</sup>La Trobe University, Bundoora, Australia, <sup>3</sup>Monash University, Clayton, Australia, <sup>4</sup>Healthscope Hospitals, , Australia, <sup>5</sup>James Cook University, Douglas, Australia

### Introduction/Background

Despite a wide range of interventions for preventing falls in hospitals, they remain a serious problem worldwide and are associated with injury, disability, mortality, increased length of stay and re-admissions. Tailored patient education on falls prevention has been strongly recommended for all hospitalised patients (1). The Safe Recovery Program (SRP) is an individualised patient education programme based on the principles of health behaviour change. An interprofessional education (IPE) approach to health professional education on the delivery of the SRP, has the opportunity to optimise falls prevention education to patients.

### Aim/Objectives

To design, deliver and evaluate an interprofessional education programme for health professionals on how to implement the modified SRP, to prevent falls in hospitalised patients.

### Discussion

Health professionals received a 1-hour IPE programme either face to face or via Zoom, on evidence-based patient education for falls prevention and how to implement the modified SRP.

The 1-hour time allocated for the education was the only time available for busy clinicians. However, it was found to be insufficient to change participants' views on interprofessional collaboration. Clinicians highlighted important considerations for successful implementation of an IPE programme, including regular and effective communication throughout implementation, and the provision of refresher sessions and consistent discussion on the topic. With more time available for training, teaching strategies such as problem-based learning, use of simulated patients, group discussions and critical thinking through case-based learning could be employed.

### Issues/Questions for exploration OR Ideas for further discussion

How do we ensure all elements of the teaching context, student approaches to learning and the outcomes of learning are considered when developing interprofessional learning?

How do we ensure management support in the development and delivery of health professional education?

1. Montero-Odasso M, van der Velde N, Martin FC, Petrovic M, Tan MP, Ryg J, et al. World guidelines for falls prevention and management for older adults: a global initiative. *Age and ageing*. 2022;51(9):afac205.

## Enhancing Employability of Medical Laboratory Science Graduates

**Dr Bec King<sup>1</sup>**, Dr Avinash Kundur<sup>1</sup>, Professor Indu Singh<sup>1</sup>, Dr Jo Lewohl<sup>1</sup>, Dr Ian Cassady<sup>1</sup>, Dr Allan Hicks<sup>1</sup>

<sup>1</sup>Griffith University, , Australia

### Introduction/Background

Medical Laboratory Science (MLS) is a dynamic field that is constantly evolving, with an ever-increasing presence of automation within industry laboratories to meet community demand. The current industry demands for universally adaptive multi-skilled work ready graduates, has driven the need to provide flexible tertiary education learning environments (Ferns et al., 2015) and highlighted the importance of integrating innovative curriculum within the Griffith University MLS program to continue producing high quality work ready graduates. Advancements in technology have opened the door for development and innovation in tertiary learning and teaching environments with incorporation of virtual learning tools as an alternative resource to training MLS students. Using blended E-learning tools such as 3-Dimensional Virtual Reality (3DVR) can improve transition of students into industry workplaces by promoting learning and ultimately enhance student knowledge (Dalgarno & Lee, 2010). At Griffith University, the Program of Medical Laboratory Science in collaboration with industry partners, have taken a forward-thinking approach to prepare graduates for a career in industry by developing a comprehensive and engaging curriculum that facilitates integration of theory with work-based competencies and employability to ensure translation of skills to laboratory operations and industry requirements in the real world. A pedagogical approach incorporating horizontal scaffolding of case studies across five MLS disciplines promotes critical thinking for students to apply cross disciplinary knowledge and adopt a holistic approach for laboratory diagnosis.

### Aim/Objectives

The overall aim is to further enhance employability of Griffith University MLS graduates and to foster interprofessional communication. Subsequently our program developed a one-week intensive micro-credentialled simulation for students to complete prior to commencement of work integrated learning clinical placement. This simulation was designed to provide exposure to discipline specific industry practices using face-to-face and virtual delivery formats; through 3DVR videos and integrating communication between NATA personnel during lab accreditation and online laboratory communication through LIMS.

### Discussion

This study gives insight into the effectiveness of specialist industry simulations as an engaging student and interprofessional learning experience, with translation to the industry environment, student performance and enhancing employability of Griffith University Medical Laboratory Science graduates.

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## **Developing opportunities within Griffith Health Clinics for interprofessional, student-led fortnightly Multi-Disciplinary Team (MDT) case conferences using online modules.**

**Mrs Mary-Anne Wallwork<sup>1</sup>, Mr Mitch Hunter<sup>1</sup>, Mr Nick Steel<sup>1</sup>, Ms Claire Perkins<sup>1</sup>**

*<sup>1</sup>Griffith University, Gold Coast, Australia*

This presentation will provide an overview of how this activity provides Griffith students from Social Work, Physiotherapy, Speech Pathology, Exercise Physiology, Counselling and Psychology programs access to interprofessional practice learning through the Griffith Health Clinics (GHC) setting. The preliminary findings will also be discussed.

The collaboration with the different disciplines in creating an integrated Multi-Disciplinary Team (MDT) delivery and case management approach was the key objective. The team strive to ensure every student on placement within GHC has the opportunity to participate and gain value in understanding how other professionals integrate in health care delivery and client focused care. Through this interprofessional learning initiative of participation in fortnightly MDT case conferences, students can consolidate their core practice skills and develop new knowledge on case conferencing, including the facilitation process, roles within meetings, and the managing of challenging conversations. The students also have the scope to present in-services on their own discipline and specialty topics. Additionally, students can discuss cross referrals and how to support complex clients. Most importantly, students are given the space to interact, share insights, learn from each other, problem solve and collaborate as a multi-disciplinary team.

The team also created three online modules to support students learning around this initiative. Students are first asked to complete a pre-evaluation form and then are presented with the online modules to be completed consecutively before each of the MDT case conferences. The content begins with a welcome video that details the purpose of the MDT case conferencing, confidentiality considerations and the roles of all participants. This video also details the general format of the in-person case conferences. Module one is dedicated to introducing students to the other disciplines and their roles within the clinic. The second module details the importance of communication between professionals within teams. The final module is devoted to understanding and addressing clinical practice challenges. Following the third MDT case conference students are asked to complete a post-evaluation form and to provide short answer responses to questions asking for more detail around what elements of the project that they found most useful.

## How can we support students to become collaborative decision-makers from the 'outside-in'?

**Miss Louise Beckingsale<sup>1</sup>**, Dr Megan Anakin<sup>2</sup>, Professor Tim Wilkinson<sup>1</sup>

<sup>1</sup>University of Otago, Christchurch, New Zealand, <sup>2</sup>University of Otago, Dunedin, New Zealand

### Introduction/Background

Collaborative decision-making describes how two or more individuals contribute their knowledge and expertise to solve a problem related to patient care. Collaborative decision-making involves a two-directional exchange of information and negotiation, often referred to as 'deliberations' or 'cooperative interactions', that result in informed and shared actions related to patient care. Collaborative decision-making is a cornerstone of interprofessional practice in healthcare and is one of several core competencies featured in interprofessional education competency frameworks used by pre-registration health professional programmes in Australasia. However, our understanding of how students learn to make collaborative decisions requires further development. The evidence-base for current education is predominantly derived from views of decision-making made by individuals as an autonomous cognitive (thinking) process. There is room to expand the evidence-base to examine decision-making from an 'outside-in' perspective. This perspective emphasises the social (interactive), cultural (habits and expectations), and environmental influences that shape collaborative behaviours in healthcare workplaces and educational settings.

### Purpose

This interactive session aims to encourage discussion about how educators facilitate and how health professional students learn collaborative decision-making from an 'outside-in' perspective.

### Ideas for discussion:

A scenario will be used to focus discussion about the following questions:

- What social, cultural, and environmental factors might influence collaborative decision-making? How might these be visible in workplaces and/or classrooms?
- How might educators account for social, cultural, and environmental factors in the design and when facilitating learning so students become collaborative decision-makers?
- How might disciplinary/ profession specific habits influence the way that students interact?

## Online Dasein and the ontology of oncology: students' perceptions and experiences of interprofessional education in the Master of Cancer Sciences

**Mr David Seignior**<sup>1</sup>

<sup>1</sup>*University Of Melbourne, Australia*

### **Introduction**

This study aimed to determine the extent to which the Master of Cancer Sciences (MCS) provided an interprofessional education (IPE) experience for students from a range of health professions. The wholly online MCS, developed by the Victorian Comprehensive Cancer Centre (VCCC) Alliance and the University of Melbourne, is described as multidisciplinary, e.g. different professions learning in parallel. It does not explicitly purport to be interprofessional, e.g., different professions learning with from and about each other. However, this research determined that all 11 research participants, did perceive experiences of interprofessional online education.

### **Methods**

A phenomenological approach, with a purposive sample (n=11) of graduates, from 9 health professions. Two, one-hour semi-structured interviews with each participant. Verbatim transcripts four-stage NVIVO coded and analysed.

### **Results**

Three key themes: being, becoming and being-towards-death. Under these, all participants:

- experienced interprofessional learning in the MCS, (formal, informal and ad hoc).  
experienced interprofessional learning interactions through innovative online pedagogy and technology  
perceived the MCS as increasing their interprofessional perceptions, attitudes, skills, and knowledge, e.g., Kirkpatrick's Typology levels 1 and 2.

Furthermore, most participants:

- ascribed applying interprofessional learning in their clinical practices (Kirkpatrick Level 3) to the MCS. Some ascribed influence on their organisational care delivery (Kirkpatrick Level 4a).  
perceived the Supportive Care and Palliative Care subject as particularly impactful for their interprofessional learning.

### **Discussion**

This research provides rich insights into the experiences of a small cohort of a specific online course. This can inform better online IPE, in oncology, and IPE theory and practice more broadly.

## The Allied Health Early Graduate Program: Supporting the Next Generation of Allied Health Professionals

**Ms Melissa Bartlett**<sup>1</sup>, Ms Lucy Whelan<sup>1</sup>, Dr Abby Foster<sup>1,2,3</sup>

<sup>1</sup>Monash Health, Melbourne, Australia, <sup>2</sup>La Trobe University, Melbourne, Australia, <sup>3</sup>Monash University, Melbourne, Australia

### Introduction

The Allied Health Early Graduate Program is designed to support new graduates as they transition from student to professional. The program was previously conducted face-to-face but transitioned online in 2020 in response to COVID-19 restrictions. Engagement limitations were observed in the online format were subsequently identified. A trial of single face-to-face 1:1 session between graduates and the Program Coordinator in addition to the online graduate program was incorporated to try to enhance program engagement.

### Methods

Each graduate had a single, face-to-face meeting with the Program Coordinator in addition to the online content. This was held in a non-clinical “safe” space such as a café. Graduates were given the opportunity to reflect on their role and raise any concerns or issues that they may be encountering. Rapport building and identification of additional support needs were also key goals. Graduates were sent a 10-items survey, including Likert scales and open-ended question, following the 1:1 visit and were asked to anonymously provide feedback.

### Results

The evaluation provided important feedback from our graduates about the support that they required and showed clearly that the addition of the 1:1 visits was valued by our graduates. Our graduates told us that such visits left them “feeling supported by the organisation, feeling that my development as a clinician matters, it humanised the experience of working for such a large organisation”

### Discussion

The future of our allied health workforce is dependent on our graduates, It is crucial that we adapt our graduate support programs to meet the changing needs of the workforce, particularly in these post pandemic times. For Monash Health graduates, evaluation has identified the benefits to graduates of embedding face-to-face 1:1 support into the already established support systems for our graduates.



## The intra- and interprofessional learning experiences of undergraduate nursing students during their first work-integrated learning experience

**Ms. Creina Mitchell<sup>1</sup>, Ms. Beth Pierce<sup>1</sup>**

<sup>1</sup>*Griffith University, Southeast Queensland, Australia*

### **Introduction**

Griffith University has an interprofessional learning framework to guide development of collaborative interprofessional practice for health students. This framework incorporates learning with, from and about other health professions to improve collaboration and healthcare quality. The Bachelor of Nursing (BN) program reaccreditation was an opportunity to plan for and scaffold the collection of learning artifacts to contribute to a professional portfolio assessment in final year. This included integration of a Log of Learning Activities (LoLA) assessment in each work-integrated learning (WIL) experience. As part of the LoLA, students collect artifacts related to knowledge development, clinical skill development, professional development and intra/interprofessional (IP) collaboration in the form of an IP experience (IPE) record. The first LoLA was implemented in 2022. This evaluation project aimed to examine the IP collaboration experiences of undergraduate nursing students during their first WIL experience.

### **Methods**

All BN students enrolled in a trimester 2 course submitted a LoLA. The LoLA was implemented in PebblePad and had a structured format. All LoLA submissions were downloaded from the course site and information from IPE records was entered and analysed using quantitative statistics.

### **Results**

Most students undertook WIL in a residential aged care setting. These students were more likely to report observational and/or participatory interactions with nursing staff, including registered and enrolled nurses.

Due to the nature of their WIL, some students had limited exposure to non-nursing health professionals. Most of these interprofessional experiences were observational learning experiences, such as being present at a client assessment. The interprofessional experiences included those with physiotherapists, occupational therapists, dietitians, and general practitioners.

### **Discussion**

Whilst undertaking WIL, nursing students had opportunities to learn how health professionals collaborate for improved healthcare outcomes. Emphasising interactions with other health professionals may improve student nurse capabilities to engage in collegial and productive relationships in their future practice.

## Designing a spiral curriculum - navigating inter-professional prescribing education

**Mrs Avril Lee<sup>1,2,3</sup>**, Dr Ta-Chen Kuo<sup>1</sup>, Dr Lucy Gray<sup>1,2</sup>, Kayla Turner<sup>3</sup>, Hiyori Nakano<sup>3</sup>

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### Introduction/Background

Waitematā Health has developed an inter-professional workplace education program that supports safe prescribing through inter-professional scholarship, programme development and collaboration between medicine, pharmacy and nursing. Starting slowly, evidence-based education strategies are implemented and evaluated, developing a base for a strong collaborative workplace education programme. This has helped us design a 'fit for purpose' spiral curriculum with experience specific objectives.

The programme pipeline is contextualised to the level of experience of the learner across five years of training: from first year clinical students learning about medication histories, to second year junior doctors learning about subspecialised medication safety.

### Objectives

The aim of the programme is to improve and accelerate prescribing performance of clinical students and junior doctors, whilst fostering a positive and safe learning environment and role-modelling inter-professional collaboration. A near-peer teaching model is used, focusing on fostering prescribing confidence and preparedness for practice.

### Discussion

Both teachers and learners give us positive feedback on our approach. However, it is challenging to measure any meaningful impact on confidence or on actual prescribing practice. We do not have a consistent cohort as learners move across hospital sites and districts during this 5-year period. One attempt we have made was undertaking a retrospective analysis of first year junior doctors in 2022, regarding the programme's impacts on readiness for practice, prescribing confidence, and perception of pharmacists, after they attended the prescribing programme as final year clinical students in 2021.

The workshops intend to ease the challenging transition from student to clinician. Near-peer teaching, role-modelling collaborative practice and the pipeline of educational strategies should play a role in sequentially improving prescribing practice.

### Ideas for further discussion

We would like to create an evidence base and drive ideas for how other workplace educational sites can implement this educational continuum.

## Comparison of beliefs and culture regarding Interprofessional Collaborative Practice across Professional Groups in a large public health service.

**Ms Katherine Delany**<sup>1</sup>, Mrs Angela Wood<sup>1</sup>, Ms Rachel Phillips<sup>1</sup>, Dr Nigel Fellows<sup>2</sup>, Ms Bernadette Thomson<sup>3</sup>, Dr Susan Stoikov<sup>4</sup>, Dr Hannah Mayr<sup>4</sup>

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**Introduction:** Interprofessional collaborative practice (IPCP) is essential when providing safe, efficient, and high-quality patient care.

**Aim:** To understand and compare attitudes and culture regarding IPCP across professional streams, within a large metropolitan health service to target future interventions and education to drive culture change.

**Methods:** Medical, nursing and allied health professionals across the continuum of patient care, including health prevention and promotion, acute, outpatient, community services and executive leadership, completed baseline measures prior to interprofessional education sessions. Data collected included demographic information, Systems Thinking Scale (STS), Attitudes Towards Interprofessional Health Care Teams (ATIHCT) and Adapted Interprofessional Collaboration Scale (ICS). One-way ANOVA or Kruskal-Wallis tests were used to compare scales between professional streams.

**Results:** Of 211 staff who participated in interprofessional education sessions between August 2022 and January 2023, 159 surveys from eligible medical (n=13), nursing (n=65) and allied health (n=81) staff were collected. Preliminary findings indicated there was no difference between professional streams in systems thinking (STS). On the ATIHCT, 6 of 13 subscales showed a statistically significant difference in the attitudes between professional streams. For example, significant differences were found between professions in attitudes towards the perceived value of time spent in IPCP activities. Within the ICS there were statistically significant differences in 5 out of 13 of the subscales (two communication subscales and three accommodation subscales). Areas with statistical significance focused on not understanding each professions' shared responsibilities, not discussing patient care adequately and cooperation and the sharing of similar ideas. Data collection is ongoing.

**Discussion:** Understanding the current culture, attitudes and perceptions of IPCP among three different professional streams is imperative to support future targeted implementation strategies to facilitate culture change.

## Educational board game for training dental and dental hygiene students in patient safety issues

**Chen-Yi Lee**<sup>1</sup>, Chia-Hua Lin<sup>2</sup>, Pei-Hung Su<sup>2</sup>, Hsiu-Fang Huang<sup>2</sup>, Ju-Hui Wu<sup>1,2</sup>

<sup>1</sup>*Kaohsiung Medical University, Kaohsiung City, Taiwan*, <sup>2</sup>*Kaohsiung Medical University Hospital, Kaohsiung City, Taiwan*

### Introduction

Game-based learning is becoming increasingly popular in medical education. This study used an originally designed board game to train dental and dental hygiene students in patient safety and investigated the educational value of game-based learning to this end.

### Methods

Pretest-posttest design was adopted and the students received a self-designed board game intervention for patient safety issues. Before and after the intervention, the students took a test which evaluated their knowledge improvement. They also filled in a questionnaire which assessed their impressions and attitudes toward the board game's educational values post intervention.

### Results

The participants were 27 fifth-year dental students (54.0%) and 23 fourth-year dental hygiene students (46.0%), including 27 men (54.0%) and 23 women (46.0%), with an average age of  $22.44 \pm 1.864$  years. Independent t-tests revealed no significant differences in baseline scores for basic, advanced, situational, and overall knowledge between dental and dental hygiene students. Paired t-tests were used to compare pre- and post-test knowledge scores. The results indicated statistically significant improvements in basic, advanced, situational, and overall knowledge scores among dental ( $P < 0.001$ ,  $P = 0.004$ ,  $P = 0.003$ , and  $P < 0.001$ , respectively) and dental hygiene ( $P = 0.003$ ,  $P = 0.012$ ,  $P < 0.001$ , and  $P < 0.001$ , respectively) students. The students reported that the most improved ability was in "patient safety culture and incidents management" (94.0%), followed by "preventing falls and injuries" (86.0%), and "implementing infection control" (68.0%). Most students agreed that this board game was "effective in education" (88.0%). They agreed that "before becoming a qualified medical practitioner, we should first learn about patient safety issues" (98.0%) and "learning about patient safety issues is prioritized and important in the training of healthcare practitioners" (100.0%).

### Discussion

The board game effectively improved dental and dental hygiene students' knowledge and awareness of patient safety.

## Navigating the opportunities of service-learning placements: An exploration of benefits to host organisations of allied-health service-learning placements

**Ms Jacqui Broadbridge<sup>1</sup>**, Ms Laura Irvine-Brown<sup>1</sup>, Dr Shawna Campbell<sup>1</sup>, Dr Keith Robinson<sup>1</sup>, Dr Emmah Baque<sup>1</sup>, Dr Kelly Clanchy<sup>1</sup>, Dr Jonathon Headrick<sup>1</sup>

<sup>1</sup>Griffith University, Southport, Australia

### Introduction

Service-learning placements are growing in allied health education programs. Within these placements students bring their unique disciplinary perspective to work with a community organisation on an identified project or need; as such, there should be equal weighting between student learning and service outcomes (Seifer, 1998). Ensuring such reciprocity is essential to sustainable placement partnerships, and is also an obligation of universities, considering their function of contributing to their communities (Connell, 2019). Yet there is limited research exploring organisational benefits of allied-health placements generally, or service-learning allied-health placements specifically. Therefore, the aim of this study, was to explore the organisational benefits of hosting university students on allied-health service-learning placements, and how these could be enhanced to maximise future benefits.

### Methods

Over 50 students from three different allied health disciplines (occupational therapy, exercise science, and physiotherapy) attended a discipline-specific allied-health service-learning placement at a school or childcare centre. In total, sixteen organisations hosted students between 2018 and 2021. Staff (n = 7) from seven of these organisations engaged in semi-structured interviews about their experiences hosting students. Interviews were audio-recorded, transcribed, and thematically analysed.

### Results

Findings were grouped into themes: benefits; resources; student-placement 'fit'; placement organisation; and meeting community needs. Six (85%) participants found the placements beneficial, and the benefits appeared closely tied to resources students produced. Benefits for organisations may be increased through greater attention to student-placement fit, placement management, and ensuring the placement model meets host organisation need.

The findings support the limited literature on the potential organisational benefits of service-learning student placements, but also highlight that achieving such benefits cannot be assumed based on good intentions. Instead, to navigate the opportunities of service-learning placements, and realise their potential of meeting host organisation need, they should involve purposeful partnering, extensive preparation, and clear communication between host organisations and universities.

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## The Thriving and On Track student model of community-based early intervention for less advantaged families

**Ms Amanda Love<sup>1</sup>**, Ms Kate O'Leary<sup>1</sup>, Associate Professor Petrea Cornwell<sup>1</sup>, Ms Simone Howells<sup>1</sup>, Ms Fran Bugden

<sup>1</sup>Griffith University, Gold Coast, Australia

### Introduction

It is well recognised that children who are not meeting developmental milestones benefit from early identification and early intervention. Gaining access to relevant supports can be challenging for less advantaged families due to difficulties navigating services, complex referral pathways, significant waitlists due to workforce capacity, and financial limitations. A student-led, place-based speech pathology clinic was developed with key stakeholders to provide essential services to less advantaged families within their early childhood education centres (ECECs). We report on the outcomes from this student model.

### Methods

A peer learning model was implemented across two university semesters to provide speech pathology services to children and families across eleven ECECs. Services included individual assessment and treatment as well as addressing community needs through provision of staff training at all ECECs in identifying developmental concerns and supporting pre-school communication development. The social validity of the placement was captured using staff and student evaluation.

### Results

76 children (2;01 – 5;0years) were seen for at least one session, with 40 families (52%) referred to community-based allied health or medical services for ongoing management. ECEC staff rated the experience as being very good (30%) to excellent (70%) highlighting educator guidance, supporting family referrals, validating parental concerns, and improving child communication ability as the most beneficial aspects of the placement. Students rated their experience as being good (50%) to excellent (16%) and indicated increased confidence in interacting with less advantaged children.

### Discussion

Student-led speech pathology services within a place-based model may offer a sustainable solution to early intervention for less advantaged families within the community. Opportunities exist to expand the current speech pathology student model to include students from other health professions.

## Training Musculoskeletal physiotherapists in Patient-centred care informed by Acceptance and Commitment Therapy (MuPACT): an exploratory study

**Mrs Marie March<sup>1</sup>, Dr Belinda Judd<sup>2</sup>, A/Prof Alison Harmer<sup>2</sup>, Dr Jillian Eyles<sup>3</sup>, Prof Sarah Dennis<sup>1,4,5</sup>**

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### Introduction

Patient-centred care is important for high quality musculoskeletal care. However, clinicians report barriers to implementing patient-centred care including skills, beliefs about capabilities and social/professional role & identity.

The aim of this study was to develop and evaluate a simulation-based educational strategy to improve physiotherapist knowledge, confidence and implementation of patient-centred musculoskeletal care.

### Methods

Acceptance and Commitment Therapy informed the content of patient-centred care education. Education strategies were informed by the Theoretical Domains Framework, including a simulated patient and role play. This repeated-measures single-group interventional cohort study adopted self-reported survey data at three timepoints, exploring knowledge and confidence in patient-centred care, which were analysed using repeated measures ANOVA. Behavioural intention and implementation outcomes are shown with descriptive statistics.

### Results

Participants (n=17) were relatively young (71% < 35 years old), female (67%), early career (mean experience 3.25 years), and ethnically diverse (67% other than Australian).

Participants had high baseline knowledge of patient-centred care at all time points. Participant confidence in patient-centred care significantly improved at all timepoints ( $p < 0.05$  for all five outcomes).

Participants had very high behavioural intention (mean 6.5, 7=strongly agree). Implementation into clinical practice was measured using the four constructs of the Normalisation Measure Development questionnaire. Most participants reported high agreement with three implementation constructs: intervention coherence (59-88%), cognitive participation (75-88%) and reflexive monitoring (52-85%), with lower agreement in collective action (30-78%).

### Discussion

A simulation-based educational strategy improved physiotherapist confidence and implementation of patient-centred musculoskeletal care, leading to sustained application which is likely to benefit patients, carers and physiotherapists.

## Turning to ‘the human story’ as the longitudinal integrator of learning

**Dr Maxine Moore<sup>1</sup>, Dr Nicola Parkin<sup>1</sup>**

*<sup>1</sup>Flinders University, Adelaide, Australia*

### **Introduction/Background**

Clinical learning in the longitudinal integrated curriculum (LIC) is distributed across multiple settings, supervisors and healthcare contexts. In the original program model, the GP-based primary supervisor worked and taught across hospital, community and general practice - effectively, embodying a human integrative mechanism for learning within the LIC. In the new model, which splits the clinical placement across the government and private sectors, this integrative mechanism is missing. As such, a suitable new integrator of learning is called for.

On closer inspection, we can see that this integrative mechanism is already in place, in the form of the patient’s personal experience of health and illness, which necessarily cuts across systems and through time, with all its richness and unpredictably intact. All we need to do is grant human experience the authority to teach us wherever we find it, and to follow wherever it leads.

We contend that the time is ripe to take this humanistic, narrative orientation seriously, because for all its ills, the pandemic revealed in our educational practices a fundamental shared concern with the quality of the human experience.

### **Aim/Objectives**

This presentation aims to open to thought the promise and implications of placing the human story at the continuous centre of the clinical learning curriculum.

### **Discussion/Questions for exploration**

Is it reasonable to turn to the human story as the integrator of learning in the LIC? Can it support learning concerned with continuity of care, understanding health systems, and social contexts for health? What might this look like in practice? What kinds of learning outcomes does it scaffold; and what supports might be needed for students, educators, and patients? We invite others to think with us on these questions as we turn towards this powerful human moment.



## Turning disaster into opportunity; a rapid move to support a service though work integrated learning

**Mr Stuart Wall<sup>1</sup>**, Dr Samantha Sevenhuysen<sup>1,2</sup>

<sup>1</sup>Peninsula Health, Frankston, Australia, <sup>2</sup>Monash University, Frankston, Australia

The way Victorian mental health services provide education needs to change (State of Victoria, 2021) by stepping away from traditional in-service training to a culture of learning that is integrated into everyday practice. Although this idea is echoed in research literature (Bluestone et al., 2013; King et al., 2021), there is still work to be done to develop a framework that embeds deliverables such as training calendars and in-service programs.

In November 2023, a piling rig fell on the building which housed several of our care delivery and support teams, inpatient units and training area. Surprisingly, there were not physical injuries from the incident, however within days of the incident it was recognised that the building would be closed for many months.

This disaster required a number of services to be moved to unfamiliar facilities within the region. Using a range of strategies our team of educators embedded themselves within clinical services to provide on the ground, in person coaching and support to clinical teams as they moved into these new clinical landscapes. Learning needed to be instantly workplace relevant and rapidly translated into practice.

The process helped to build trust with staff, and better support translation of learning into practice. The work also provided operational leaders and managers with firsthand insight into work integrated learning and the benefit a team of health professional educators can provide in situations such as this.

This oral presentation will discuss how our team of educators rapidly refocused learning delivery and supports needed to assist a mental health service after a critical incident and their adaptation to alien environments. It will also investigate learning from this experience and how this has strengthened the Learning Hub connection to the workforce and how this event positively impacted the way we design and deliver learning moving forward.

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## Medical student contributions to rural general practice: learning by doing

**Mr Edmund Proper**<sup>1,4</sup>, Ms Olivia Slifirski<sup>1,2</sup>, Mr Matthew Morton<sup>1,3</sup>, Dr Paul Brougham<sup>1</sup>, Dr Tom Walsh<sup>1,2</sup>, Dr Sale Useni<sup>1,4</sup>, Dr Janie Maxwell<sup>1,3,5</sup>

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### Background

There is a chronic and growing shortage of doctors in rural Australia. General practitioners are the most utilised health professional in Australia and must be accessible. The aim of this study was to report the contribution of medical students completing clinical placements at rural general practice clinics (RGPCs) to health service delivery.

### Methods

Prospective observational study of three fourth-year medical students undertaking rural placements at separate RGPCs in Gippsland, Victoria (Orbost, Lakes Entrance, Sale) in semester 1 2022 (18 weeks January-May). Students recorded their contributions according to their involvement in consultations, and the completion of clinical and administrative tasks. Activities were supervised by GPs or nurses, directly or indirectly, or undertaken independently where appropriate.

### Results

Students were involved in 651 consultations, 203 (31%) involving observation, 52 (8%) undertaken with direct supervision, and 396 (61%) independently through parallel consulting. In total, 244 clinical tasks were completed, 134 (55%) with indirect supervision (WIS). Clinical tasks comprised administering vaccinations (99 total, 88 (89%) WIS) minor procedures (80 total, 13 (16%) WIS) ECGs (32 total, 17 (53%) WIS), administering injectable medicines (23 total, 6 (26%) WIS), and urinalysis (10 total, 10 (100%) WIS)). Minor procedures included wound care, suturing, cryotherapy, ear syringing, cannulation, and minor dermatologic procedures (e.g., excisional biopsies). In total 153 administrative tasks were completed, 147 (96%) without direct supervision. Administrative tasks comprised reviewing outstanding results and discharge summaries (79 total, 79 (100%) independently), writing referral letters (26 total, 23 (88%) independently), pathology requests (40 total, 38 (95%) independently) and medical certificates (8 total, 7 (88%) independently). Students also demonstrated utility in routine consultations with patients with chronic diseases, and encounters involving preventative health interventions, and screening.

## The health literacy of first year allied health students and their perceived role in supporting their clients' health literacy.

**Dr Romany Martin**<sup>1</sup>, A/Prof Jade Cartwright<sup>1</sup>, Dr Marie-Louise Bird<sup>1,2</sup>

<sup>1</sup>*School of Health Sciences, College of Health and Medicine, The University Of Tasmania, , Australia,*

<sup>2</sup>*Tasmanian Collaboration for Health Improvement, College of Health and Medicine, The University Of Tasmania, , Australia*

### **Introduction:**

Allied health professionals are well positioned to assess and support their client's health literacy (HL), however report being deficient in HL knowledge and skills. Understanding the HL of allied health students at the commencement of their university study may inform the content and pedagogical design of HL based teaching and learning. Therefore, this study aimed to explore allied health students' HL, and their perceptions of their roles in supporting clients' HL.

### **Methods:**

A mixed methods cross-sectional study was undertaken in August 2022 amongst allied health students enrolled in graduate entry masters' programs at the University of Tasmania. Data collected included the Health Literacy Questionnaire (HLQ) and qualitative telephone interviews. Hard copy surveys were distributed and collected (n=30) in person with interviews conducted via telephone (n=6).

### **Results:**

Allied health students' confidence in the knowledge domain of the HLQ was rated as 28.57 from a maximum possible score of 50. Similarly, the students' confidence in the skills domain of the HLQ was rated as 14.87 from a maximum possible score of 25. Four themes were generated from the qualitative interviews.

Research Implications: Allied health students in this study demonstrated similar HL to physiotherapists working in private practice when measured using the HLQ. Allied health students voiced that they considered supporting their clients' health literacy to be an innate part of their future roles.

### **Practical implications:**

University educators are encouraged to acknowledge the established HL of health professional students prior to the commencement of post-graduate studies to ensure that HL curricula is designed at the appropriate level.

### **Conclusion:**

The study provides a preliminary insight into the HL of allied health students and highlights the strong perception held by allied health students that supporting clients' HL is a large component of their future roles.

## Health literacy profiles of medical students in an Australian Doctor of Medicine program: A cross-sectional study using the Health Literacy Questionnaire.

**Associate Professor Margo Lane**<sup>1,2</sup>, Associate Professor Robyn Dixon<sup>3</sup>, Professor Ken Donald<sup>1</sup>, Professor Robert Ware<sup>1</sup>

<sup>1</sup>Griffith University, Southport, Australia, <sup>2</sup>The University of Queensland, St Lucia, Australia, <sup>3</sup>University of Auckland, Auckland, New Zealand

### Introduction

Low health literacy is associated with poor health outcomes for individuals and communities and contributes to an increasing economic burden globally. It is evident that “health-literate” clinical environments and healthcare systems (including medical professionals) are part of the solution. It is therefore important to understand the health literacy strengths and weaknesses of the medical workforce, including medical students. The aim of this study is to identify health literacy strengths and weaknesses of medical students enrolled in an Australian Doctor of Medicine program.

### Methods

Students from an Australian Doctor of Medicine program were invited to participate in an anonymous online survey in January 2021. Health literacy profiles were identified using the multi-dimensional nine domain 44-item Health Literacy Questionnaire (HLQ). Participants' demographic characteristics were also collected. The association between participant characteristics and HLQ responses was investigated.

### Results

Eighty-five participants completed the survey. The majority of participants identified as female (56%), were graduate-entry domestic students (60%), spoke English at home (88%), had tertiary educated fathers (61%) and lived in highly advantaged locations during adolescence (61%). Moderately high HLQ scores were reported across all nine domains. Male medical students scored significantly higher in three domains which explored health information access and appraisal and engagement with healthcare providers. Medical students' scores were significantly lower than the Australian general population in Domain 6 (*Ability to find good health information*) and Domain 7 (*Navigating the healthcare system*).

### Discussion

Health literacy profiles of medical students in this Australian MD program indicate general health literacy strengths. Further exploration of the influence of gender on specific areas of health literacy is important for curriculum designers across the medical training continuum. Methods of increasing students' confidence in navigating the healthcare system must be considered by medical education providers.

## **Breaking New Ground: A Scoping Review Investigating the Determinants of the First-Generation Undergraduate Healthcare Student University Experience**

**Mr Paul Kemel<sup>1</sup>**, Mr Christopher Snell<sup>1</sup>

<sup>1</sup>*Federation University, Churchill, Australia*

### **Introduction**

In the last decade, there has been an increase in first-generation students (FGS) enrolments in tertiary health professional courses. The value of FGS in health professional programs can be seen at individual, cohort, program and institutional levels, while also providing benefits to the health sector and health outcomes. Representation of FGS in tertiary education is also seen as an important driver for improving cross-generation economic and social mobility, while improving standards of equity and social justice. However, FGS face unique challenges when compared to their non-FGS peers, with lower grades and graduation rates. These performance outcomes can impact career development and trajectory, and may discourage FGS from enrolling in health professional programs. It is important to understand the determinants of FGS success and to design the learning context to optimise their learning experience and academic success.

### **Aim/Objectives**

The aim of this study was to use the Joanna Briggs framework to conduct a scoping review to explore the determinants of success for FGS studying healthcare in a tertiary education setting. The outcomes of this review will inform institutional and educator strategies to facilitate first-generation healthcare students' academic and career success.

### **Discussion**

Despite limited research, emerging studies are detailing the impact that first-generation status has on learning outcomes, and barriers to progression. While several studies highlight the strengths that FGS bring to the learning environment such cultural competency, resourcefulness, and innovation, these students are more likely to be impacted by outcomes relating to their personal well-being, which in turn can impact grade point average and self-perceived academic success. Several external mediating factors have been identified that can influence these outcomes, such as support from peers, family, and faculty. Therefore, institutions and educators need to remove barriers and integrate facilitatory strategies to promote the ongoing success of FGS in health professional programs.

## **Exploring the connections between mindfulness and university student wellbeing and learning experience.**

**Ms Michelle Fair**<sup>1</sup>, Professor Linda Crane<sup>1</sup>, Associate Professor Beth Mozolic-Staunton<sup>1</sup>,  
Dr Amy Bannatyne<sup>1</sup>

<sup>1</sup>*Bond University, Gold Coast, Australia*

### **Introduction / Background:**

University students are exposed to stresses across areas such as academic, finance, relationships, balancing life demands, and health. Many university students, including those in health professional degree programs, report high levels of psychological distress which can occur in a chronic fashion throughout their studies. Occupational therapists, physiotherapists, nurses, and other health professionals also experience stress and burnout associated with their profession and high workload demand.

### **Aim/Objectives:**

This study aims to identify effective ways to support our future health workforce by providing pre-professional university students with the necessary skills to not only improve their wellbeing and their learning experience, but also to reduce the risk of burnout as future health professionals.

### **Discussion:**

Rizer, Fagan, Kilmon and Rath (2016) describe the breadth of evidence that supports the effective use of mindfulness in improving coping strategies and moderating stress for university students. What was noted, however, was there is a gap in the research related to the embedding of mindfulness interventions in class. Much of the research focuses on external programs that students can participate in, requiring them to have motivation to participate, and commit their personal time for these interventions.

### **Issues/Questions for exploration:**

This research has led to the question, can we influence student wellbeing and learning outcomes by embedding mindfulness in class time. And if so, what does this look like?

## Promoting Medical Student Health and Wellbeing: A Proactive Approach

**Dr Hannah Sloan<sup>1</sup>, Ms Danielle Clayman<sup>1</sup>, Mrs Lisa Power<sup>1</sup>**, Mr Jacob Kuek<sup>1</sup>

<sup>1</sup>*The University Of Melbourne, Parkville, Australia*

### **Introduction/Background**

Medical students have long been thought of as 'successful' students with high academic attainments and abilities, however recent research suggests medical students experience higher rates of mental health distress and suicidal ideation compared to the broader student population (Rotenstein et al., 2016).

### **Aim/Objectives**

In recognition of the challenges faced by medical students, the Melbourne Medical School developed a new proactive approach to student support through the appointment of cohort specific, designated mental health clinicians (Health and Wellbeing Practitioners). Since the program's inception in 2016, the Health and Wellbeing Practitioner model has sought to embed wellbeing within the curriculum, enhance strategic practices to be wellbeing orientated and deliver a program of individual and group based wellbeing initiatives. Engagement from students has dramatically increased over the course of the past seven years of operation. Trends of engagement reveal students' high need for responsive mental health support and early interventions to address emerging mental health difficulties.

### **Discussion**

The innovative approach to medical student health and wellbeing demonstrates a school-wide, preventative-based approach to promoting student mental health. Initiatives have been designed in close consultation with medical students, and seek to broaden the scope of what constitutes a successful medical student to include mental wellbeing. The authors detail the design, delivery and ongoing evaluation of this model of student wellbeing and welcome discussion around further program development.

### **Issues/Questions for exploration**

*How does this proactive model of wellbeing translate to other health care settings?*

*Could this model translate to other health profession courses and would the issues and challenges be the same?*

*In offering such targeted and intensive support within the medical education setting, will students face disappointment in their transition to the medical workplace or have unrealistic expectations of mental health support in their work environment?*

## Preparation Resources for Undergraduate Students Applying for the Psychology Honours Year: A Retention and Completion Strategy

**Dr Karen Murphy<sup>1</sup>**, Dr Amanda Duffy<sup>1</sup>, Dr Sharon Scrafton<sup>1</sup>

<sup>1</sup>*School of Applied Psychology, Griffith University, Gold Coast, Australia*

### Introduction

Due to professional registration requirements, Psychology has a large Honours cohort. However, the last 5 years has seen an increase in the student drop-out rate during Honours, adversely affecting retention and completions. Discussions with students revealed that while they managed outside commitments (e.g., working, family) or health issues earlier in their degree, this became more difficult during honours given the increased workload intensity and requirement to complete more independent work. Academic staff regularly advise students of the Honours workload, but this message is not well understood by students. This could be attributed to the information coming from academics. Student-led learning is educationally effective, particularly if the learning materials are co-designed by students (e.g., Love & Crough, 2019). Hence, such co-designed material may be a more effective way to communicate information about the Honours year workload to undergraduate students so they can better prepare for this critical year of study.

### Aim/Objectives

This project aimed to develop a suite of resources to educate students on how to better prepare for the workload during Honours. A modified students-as-partners and co-designers approach (Healy et al., 2014) was used to develop the content and format of the Psychology Honours year information resources.

### Discussion

Current honours students were surveyed about areas of educational need during Honours, areas they were academically well prepared for during Honours, and the most useful format to convey Honours success tips to other students. After this initial phase, recent Psychology Honours Graduates provided content for student-focused infographic Honours success tip-sheets and the Honours Program Director developed a book of tips and information for succeeding during Honours. This information was integrated into a website for student use.

### Issues/Questions for exploration OR Ideas for further discussion

An overview of these resources will be presented and feedback on these resources is welcomed.

### References

- Healey, M., Flint, A. & Harrington, K. (2014). Engagement through partnership: students as partners in learning and teaching in higher education. *Higher Education Academy* <https://www.advance-he.ac.uk/knowledge-hub/engagement-through-partnership-students-partners-learning-and-teaching-higher>
- Love, C., & Crough, J. (2019). Beyond engagement: Learning from Students as Partners in curriculum and assessment. In *Proceedings of the 3rd EuroSoTL Conference* (pp. 296-303).



## Creating courageous clinicians: Outcomes and opportunities

**Dr Kiah Evans<sup>1</sup>**, Julie Loveny<sup>1</sup>, Professor Rhonda Clifford<sup>1</sup>, Dr Bríd Phillips<sup>1</sup>, Dr Liza Seubert<sup>1</sup>

<sup>1</sup>University of Western Australia, Crawley, Australia

### Introduction/Background

It is well established that there are high levels of psychological distress amongst university students studying to become a health professional. In addition, transitions into, throughout and out of university are challenging. Health professional students and graduates do not currently have the competencies required to flourish during their education, careers and in life. Employers are increasingly seeking graduates who demonstrate strong teamwork, empathy, compassion, resilience and leadership potential. The *'Building Courage, Connection and Resilience'* curriculum was subsequently developed based on Dr Brené Brown's Dare to Lead™ framework.

### Aim/Objectives

Using focus groups based on a realist evaluation framework, this research study aimed to explore the experience of graduate entry pharmacy students who participated in embedded curriculum on *'Building Courage, Connection and Resilience'*. Specific objectives were to:

- Describe the context of this curriculum.
- Describe the mechanisms utilised to deliver this curriculum.
- Describe the outcomes of this curriculum, including evaluated the extent to which the target outcomes of the curriculum (courage, connection and resilience) were achieved.
- Explore how aspects of the context and mechanisms helped and hindered the development of courage, connection, resilience and other key outcomes identified.
- Identify suggested improvements to the context, mechanisms and/or target of the curriculum.

### Discussion

Four focussed groups were conducted with first and second year pharmacy students completing the two year graduate entry course at the University of Western Australia (spanning three cohorts). Template analysis of the qualitative data is currently underway, and these findings will be the subject of the presentation.

### Issues/Questions for exploration OR Ideas for further discussion

We are interested in discussion regarding other opportunities to embed curriculum on *'Building Courage, Connection and Resilience'* into undergraduate and postgraduate medical, nursing and allied health programs.

## Exploring Well-Being Through the Lens of Coping Self-Efficacy and Calling in Medical Students

**Dhaval Patel**<sup>1</sup>, Michael Mullen<sup>1</sup>, Dr. Di Eley<sup>2</sup>

<sup>1</sup>University of Queensland-Ochsner Clinical School, Brisbane, Australia, <sup>2</sup>University of Queensland Faculty of Medicine, Brisbane, Australia

### Background

The pathway to becoming a physician begins with years of pressure and stress. Successful coping skills and a strong desire to pursue medicine may be beneficial for students to deal with these pressures. To explore how these ideas may be related to overall well-being, we measured coping self-efficacy (CSE) and “calling to medicine” (CTM) in a diverse medical student cohort. We looked at three different groups of students: domestic Australian, mixed international, and a solely American international cohort. We were interested in whether the international cohorts, who face additional pressures and responsibilities throughout their education, were different in these measures compared to their domestic counterparts.

### Methods

A questionnaire was used to collect data from a first-year student cohort. Questionnaire collected demographic information and measures of well-being (WHO-5 scale), CSE, and CTM. Analysis was performed using SPSS. Statistical significance was set at  $p < 0.05$ .

### Results

425 students completed the questionnaire, (260 domestic, 54 mixed international, and 111 American international). No significant difference was found in well-being between the cohorts ( $p = 0.297$ ). The domestic cohort had the lowest levels of CSE, compared to the international cohorts with the American internationals highest in CSE ( $p = 0.032$ ) and highest CTM ( $p = 0.000$ ).

### Discussion

This study explored well-being among a diverse cohort of medical students through the lens of CSE and CTM. Studying medicine is a challenging process requiring an ability to face added pressures and psychological distress over prolonged periods. An ability to cope with these stressors is important to long term mental health. Additionally, a strong CTM may be a protective factor against stress by accepting and justifying the hardships. Due to the added pressures international medical graduates face, it is surprising no differences were found in levels of well-being. This may be explained by the increased levels of CSE and CTM among international students.

## **StudyWell to study well: evaluating the student experience and impact of an innovative guidance service offered to early year students at an Australian undergraduate medical school**

**Dr Kelly Valentin**<sup>1</sup>, Dr Sophie Brennan-Jones<sup>1</sup>, Ms Felicity Roux<sup>1</sup>, Dr Denise Demmer<sup>1</sup>, Dr Uliya Gankande<sup>1</sup>, Professor Sandra Kemp<sup>2</sup>

<sup>1</sup>*Curtin University, Bentley, Australia*, <sup>1</sup>*University of Wollongong, , Australia*

### **Introduction/Background**

Medical students and doctors have been shown to experience higher rates of psychological distress than the general population. To address this issue, and in response to an observed need for effective systems of learning-focused support at Curtin Medical School (CMS), an innovative student guidance service ("StudyWell") was developed and piloted within a cohort of early-years medical students in 2021. The StudyWell service offered these students individualised, course-specific learning and wellbeing guidance sessions with a CMS facilitator.

### **Discussion**

Following a strongly positive student response to the 2021 pilot, StudyWell was expanded in 2022. Access was provided to both Year 1 and Year 2 students, and a formal evaluation of the service was undertaken examining the student experience and impact of the service on their learning and wellbeing. This exploratory research implemented a mixed-methods approach to evaluation and included three data collection points: 1) an online pre- and post-session 10-item Perceived Stress Scale (PSS10), 2) an online post-service valuation survey and 3) focus groups of both users and non-users of the StudyWell service.

In addition to preliminary research results, the unique nature and underlying conceptual approaches of the StudyWell service will be presented. Future directions of research will also be described towards the development of a service framework with the aim of transferability across allied health professional courses and other medical institutions.

### **Issues/Questions for exploration OR Ideas for further discussion**

To what extent should self-criticism and stigma be considered within academic guidance services in medical school?

What is most important when evaluating the impact of a student-centred guidance service- subjective perception or objective proof?

## Pod 11

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### **Title: An exploration of digital affective reflective journals during clinical placement to build emotional resilience to foster well-being**

Mrs Alison White<sup>1</sup>, **Mrs Linda Humphreys**

<sup>1</sup>Griffith University, Nathan, Australia

#### **Introduction**

Students participating in clinical placements describe how they often find their placement experiences stressful, anxiety-provoking and emotionally challenging due to the fast-paced, rapidly changing environment in which they are exposed to traumatic experiences (Sanderson and Brewer, 2017). Students enrolled in the Graduate Diploma of Clinical Physiology undertake clinical placements in hospitals and encounter chronically and terminally patients on a daily basis.

#### **Discussion**

Acknowledging the pivotal role of guidance and support for meaningful engagement with reflection (Mann et al 2009), led us to create a digital learning and teaching tool that supports students to develop their capacity for reflection in the affective domain. Students were required to complete a weekly digital journal, utilising open responses to describe their experiences and their responses to emotionally challenging situations they encountered. Feedback was provided in a manner which encourages students to consider new ways to analyse their challenges, reframing the challenges in the context of their values and encouraging growth through developing strategies for future clinical practice.

The results of this curriculum innovation were analysed from student feedback from assessment items and evaluation surveys. Students reported several benefits of the digital reflective journals, including that writing in the journals was helpful to identifying and understanding challenges that triggered negative emotions and behaviours; growth in emotional clarity; identification of strategies that fostered an increase in emotional resilience and a decrease in burnout; and an increase in cognitive performance in the workplace.

#### **References**

- Mann, K., Gordon, J. and MacLeod, A., 2009. Reflection and reflective practice in health professions education: a systematic review. *Advances in health sciences education*, 14(4), pp.595-621.
- Sanderson, B. and Brewer, M., 2017. What do we know about student resilience in health professional education? A scoping review of the literature. *Nurse education today*, 58, pp.65-71.

## Evaluating perceived technology proficiency and telehealth acceptance in optometry students

Dr Jia Jia Lek<sup>1</sup>, Dr Kwang Meng Cham<sup>1</sup>, Dr Mark Merolli<sup>2,3</sup>

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### Introduction

The inclusion of technology and telehealth literacy within curricula to keep up with digital technology changes requires careful consideration. To gain insights on optometry students' digital literacy and acceptance of telehealth, we evaluated their technology proficiency and telehealth acceptance.

### Methods

Final year optometry students at the University of Melbourne were invited to participate in an online telehealth course. A 23-item online survey adapted from the Technology Proficiency Self-Assessment for 21st Century Learning was used to evaluate technology proficiency pre- and post-learning. Telehealth acceptance was evaluated using a 34-item survey according to the Unified Theory of Acceptance and Use of Technology. A 1 to 5 Likert scale was used for each item, resulting in two total scores. Respondent demographics, frequency of usage and number of devices were recorded. Descriptive statistics, ANOVA and Pearson correlation were used to analyse demographic variables and relationship between technology proficiency and acceptance.

### Results

58 (68%) and 49 (58%) students participated in the pre- and post-learning surveys. Majority were females in the 20-29 age group. Average course completion time and score was 7 hours and 92%. Students typically used between two to four devices for regular online activities, with 62% being online at least hourly. Technology proficiency scores (average $\pm$ SD) pre- and post-learning were 80% $\pm$ 8 and 84% $\pm$ 7. Students attaining 80-100% increased from 57% to 73% post-learning. Telehealth acceptance scores pre- and post-learning were 66% $\pm$ 9 and 74% $\pm$ 10. 25% of students scored 50-64%, with 33% of students scoring 80-100% post-learning. There was no association with gender, number of devices and frequency of online use for all scores. Correlation between technology proficiency and telehealth acceptance was insignificant pre-learning ( $p=0.3$ ) but was significant post-learning ( $p=0.04$ ).

### Discussion

Optometry students demonstrated a high level of technology proficiency but scored poorer in telehealth acceptance. Training resulted in improved telehealth acceptance.

## **Virtual vs in-person learning in paediatric nursing outreach education; striking a balance between reach and impact**

**Ms Claire Bauer<sup>1</sup>**

*<sup>1</sup>The Royal Children's Hospital Melbourne, Australia*

### **Introduction**

The Royal Children's Hospital Outreach Program (OP) was created in 2017 with the aim of delivering in-person paediatric nursing and allied health professional development activities to regional clinicians who would otherwise have limited access to these opportunities. OP now utilises various methods including synchronous and asynchronous virtual delivery.

### **Aim**

To reflect on the affordances of different modes of learning and teaching in the delivery of an outreach education program through program data and experiences.

### **Discussion**

Although the shift to virtual delivery was necessary in response to the COVID-19 pandemic it has had advantages. Notably, the significant impact on reach. In 2018/2019 with an in-person model OP delivered 19 sessions reaching 405 participants across 13 health sites. Compared to 2021/2022 when 63 sessions reached 2428 participants across 188 sites. However, OP experience is that engagement has waned and evaluation response rates for virtual courses have declined limiting ability to gauge impact. Furthermore, 2022 saw a steady increase in requests for in-person programs and that trend has continued into 2023 with a return to, if not superseding, pre-pandemic in-person activity. Learner engagement is high and evaluation data indicates meaningful learning outcomes and strong intentions for practice change compared to virtual delivery. Learners also report they value opportunities to connect and grow professional networks.

### **Questions for exploration**

There are clear affordances to virtual learning but a resurgence in requests for in-person education indicates strong appetite for it in some contexts. The stronger evaluation data from in-person courses may reflect greater impact, or greater obligation to provide feedback on a more personal training experience. Resources remain finite, choices must be made to optimise the achievement of OP goals. How do we measure success; reach or impact? If virtual offerings are here to stay, are there better ways to evaluate their utility?

## Utilising artificial intelligence to deliver a student-led rural clinical curriculum: A novel approach to undergraduate online medical education

**Dr Brendan Cantwell<sup>1</sup>**, Dr James Gribble<sup>1</sup>

<sup>1</sup>*Charles Sturt University, Orange, Australia*

### Introduction/Background

Online learning has been demonstrated to be as effective as conventional teaching methods. The utilisation of novel online platforms to augment medical student learning in under-resourced rural health settings offers an opportunity to deliver a flexible curriculum which maximises clinical experience. This study outlines the first example of an artificial intelligence (AI) guided online curriculum for clinical medical students.

### Aim/Objectives

The introduction of the project was aimed to (1) deliver a standardised presentation-based curriculum aligned with learners' clinical experiences, (2) promote flexible, relevant and student-led learning, (3) maximise the utilisation of rural health system locations for meaningful clinical placement, (4) deliver regular formative assessment with immediate learner feedback and (5) utilise AI to guide student-led review and progression through the modular curriculum.

### Discussion

The platform identified knowledge acquisition through module review questionnaires and directed students towards review, progression or regression in the course dependent on demonstrated proficiency. Students were able to identify areas of knowledge strength and weakness through visualisation of their progression, and review topics as they were relevant to their clinical experiences. Faculty could review analytics as to student progress, attempts and areas of difficulty. This allowed for early intervention regarding student participation, proficiency or placement viability.

### Ideas for further discussion

The platform provides the opportunity to broaden the utilisation of smaller hospital placements for obtaining clinical experience without regular specialist placements. As a student-led platform, it presents an exciting opportunity to develop flexibility in summative assessment, including as a viable platform for delivery of programmatic assessment in the future.

## **Continuing Education of Human Resource for Health Personnel in Health Policy and Systems Research Through Online Learning : A Pre- and Post-Test Design**

**Professor Doctor Erlyn Sana**<sup>1</sup>, Professor Doctor Melflor Atienza<sup>1</sup>, Professor Doctor Arlene Samaniego<sup>2</sup>, Dr. Michael Sy<sup>1</sup>, Dr. Emerito Jose Faraon<sup>3</sup>, Dr. Emely Dicolon<sup>1</sup>, Mrs. Claire Pastor<sup>1</sup>, Ms. Nina Yanilla<sup>1</sup>, Dr. Gloria Nenita Velasco<sup>4</sup>

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The Philippine Universal Health Care Law mandates the Department of Health (DOH) to develop a cadre of health policy and system researchers (HPSR). Especially at the height of the COVID19 pandemic, these personnel need to be guided by objective and robust evidence before making any immediate health policy. Overall objective of this study was to compare the levels of proficiency of selected human resource for health in online learning and HPSR before and after their training conducted during the pandemic. This is a pre- and post-test study. A needs assessment on the demographics and perceived levels of proficiency in online learning and HPSR was conducted to 277 personnel recommended by DOH. Of 277 personnel, 145 completed the online needs assessment. More than 60% were female, married, at the reproductive age, and frontliners; 31 passed and met the minimum passing level (MPL). They were highly proficient in using online skills but only at the awareness level in HPSR. Results were analyzed and superimposed with outcome-based education design. Participants' needs assessment scores served as pre-test scores and compared to completion scores as post-test. Descriptive statistics, means and standard deviations, MPL, and t-tests for unmatched pairs were used with 95% confidence level. Six online HPSR modules were developed and validated namely (1) Basic Research Methods, (2) Health Policy and Systems Research, (3) Operations Research, (4) Implementation Research, (5) Evaluation Research, and (6) Evidence Synthesis Research. After four months, seventy-four participants completed the online course with the mean scores in all the six modules much higher than the MPLs. Their pre- and post-test scores significantly differed based on their t-tests for unmatched pairs. We conclude that online training is a useful and effective venue for the continuing education of human resource for health in HPSR.



## Online case based learning (CBL) in medical education

**Dr Rebecca Donkin<sup>1</sup>**, Dr Heather Yule<sup>2</sup>, Dr Trina Fyfe<sup>3</sup>

<sup>1</sup>Griffith University, Sunshine Coast, Australia, <sup>2</sup>University of British Columbia, Vancouver, Canada,

<sup>3</sup>University of British Columbia, Prince George, Canada

### Introduction

Case-Based Learning (CBL) in medical education is a teaching approach that engages students as learners through active learning in small, collaborative groups to solve contextualized cases from clinical patients. While academics adapted to online delivery of CBL during the COVID-19 pandemic, there was little information available on how to apply appropriate pedagogical frameworks. There was also a paucity of literature detailing best practices and the learning theories of how best to design and deliver online CBL. The aim of this study was to extend understanding in this area using a scoping review.

### Methods

A scoping review explored the evidence based literature that describes the use of online CBL application in medical education and how this literature describes outcomes, perceptions and learning theories. After peer-review using the PRESS guidelines, the CASP appraisal tool was used to assess the rigor of each study design.

### Results

The scoping review identified literature on online CBL in the field of medical education describing student outcomes, that showed equivalent or improved outcomes compared to the control, and student/facilitator perceptions. Positive perceptions included a flexible work-life balance, connection with learners, and improved accessibility. Negative experiences included poor internet access, a distracting learning environment, and loss of communication.

### Discussion

This scoping review identified literature to describe the academic outcomes, and student and facilitator perceptions of online CBL in medical education. However, the CASP tool indicated a poor use of rigor and frameworks for uncovered deficiencies in study descriptions and design leading to poor quality evidence in this area. Recommendations are provided for frameworks and learning theories that are lacking in the current literature for online CBL.

## Using an online educational interactive tool for delivery of integrated clinical cases

**Dr Iulia Oancea<sup>1</sup>**, Mr Kenneth Lopez Loo<sup>1</sup>, Dr Suja Pillai<sup>2</sup>, Dr R. Claire Aland<sup>2</sup>, Prof Mark Midwinter<sup>2</sup>, Dr Sharee Stedman<sup>1</sup>, Dr Nicole Shepherd<sup>1</sup>, Dr Charlotte Young<sup>2</sup>, Mrs Kym Ward<sup>1</sup>

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### Introduction

Medical programs aim to produce graduates ready to use their acquired knowledge, skills, and attributes in the workforce. Integrated curricula, increasingly common within medical education<sup>1</sup>, aim to break down traditional pedagogical boundaries between different disciplines. The Doctor of Medicine program at The University of Queensland is implementing a new curriculum and program starting in 2023. A key change is the delivery of an integrated curriculum and, to align with this path, we aimed to develop integrated interdisciplinary asynchronous clinical cases. We propose to achieve this aim by using online educational interactive tools to enhance learning activities focused on authentic clinical situations. This approach will bring together concepts, curated resources, and tools from foundational sciences, ethics, professional practice, public health, research, and clinical practice into one construct.

### Methods

Two clinical interactive integrated cases have been created using the online platform Edge/EdX. The approach will be evaluated through mixed-methods using a group of students enrolled in years 3 or 4 of the Medical Program. They will engage with the cases (use clinical reasoning, do drag and drop, watch short videos etc), provide feedback through an online survey and participate in focus group interviews. Platform analytics will also be included in the evaluation.

### Results

The results of the evaluation of the approach will be analysed and presented at ANZAHPE 2023 conference.

### Discussion

The advantages of using an integrated approach are the practice of integrated thinking, delivery of appropriate feedback embedded in EdX, and increased flexibility with student engagement independent of location and time. Disadvantages might be related to the skills required for and time invested in the development of such cases, but this can be managed by pre-defining the scope and elearning support. The student experience and level of engagement are also critical in defining success.

### References

Quintero GA, Vergel J, Arredondo M, Ariza MC, Gomez P, Pinzon-Barrios AM. Integrated Medical Curriculum: Advantages and Disadvantages. *J Med Educ Curric Dev.* 2016;3.

## A digital health curriculum for dentistry - where to start?

**Dr Michelle Mun**<sup>1,2</sup>, Dr Samantha Byrne<sup>1</sup>, Dr Sathana Dushyanthen<sup>2</sup>, Meg Perrier<sup>2</sup>, Dr Kayley Lyons<sup>2</sup>, Professor Kathleen Gray<sup>2</sup>

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### Introduction/Background:

Evolving health systems, digitisation and increasing consumer participation in healthcare have made it imperative for today's dental professionals to work proficiently and think critically about digital health. Currently, a lack of coordinated digital health education is limiting dentistry's ability to keep pace. Digital health competency frameworks abound in the literature, reflecting diverse communities of practice. However, a discipline-specific approach is needed to address desired workforce capabilities and professional accreditation standards in a postgraduate entry-to-practice dental degree.

### Aim/Objectives:

This project aimed to produce a scalable, sustainable digital health curriculum that will ready students for future practice as dental professionals, meet recommended standards for digital health knowledge and skills, and contribute to ongoing research in digital health education. A key focus of the project was to ensure coordination between graduate-level learning outcomes, learning activities and assessment design.

### Discussion:

High-level curriculum design was guided by the National Digital Health Workforce and Education Roadmap, and the Australian Dental Council Professional Competencies of the Newly Qualified Dental Practitioner. Two State-government-endorsed, peer-reviewed digital health capability frameworks<sup>1, 2</sup> were chosen for analysis and adaptation. Five themes in two domains were refined. To facilitate effective learning, a constructive alignment approach was used to define early-, mid- and late-program intended learning objectives, learning activities and assessment tasks for each theme.

### Issues for Exploration:

Using a systematic process to leverage existing capability frameworks has been efficient to reach this point. Challenges ahead are to make space for incorporation, introduce new learning technologies, and evaluate curricular impacts on the workforce in one dentistry degree, followed by others.

### References:

<sup>1</sup> Brunner, M., McGregor, D., Keep, M., Janssen, A., Spallek, H., Quinn, D., . . . Shaw, T. (2018). An eHealth Capabilities Framework for Graduates and Health Professionals: Mixed-Methods Study. *J Med Internet Res*, 20(5), e10229. doi:10.2196/10229

<sup>2</sup> Littlewood, N., Downie, S., Sawyer, A., Feely, K., Govil, D. & Gordon B. (2022) Development of a Digital Health Capability Framework for Allied Health Practitioners: An Australian First. *Internet Journal of Allied Health Sciences and Practice*, 20(3):22.

## **ZOMBIES, SPACE STATIONS AND A MYSTERIOUS VIRUS!! – Evaluation of an online game for teaching outbreak management to medical students**

**Nikolas Scovell<sup>1</sup>, Ranil Appuhamy<sup>1,2</sup>, Kathy Heathcote<sup>1</sup>, Lennert Veerman<sup>1</sup>**

<sup>1</sup>Griffith University, Southport, Australia, <sup>2</sup>Public Health Academy, , Australia

### **Introduction**

Gamification, the use of game design principles in non-game contexts, is increasingly being used as an educational tool to make learning enjoyable, memorable, and effective. An online educational game was created to teach outbreak management to first-year medical students. We evaluated the game to understand the student's learning experience, and identify areas for improvement.

### **Methods**

The goal of the virtual game was to investigate and control an outbreak due to an unknown virus that turned workers in a space station into zombies. The game was hosted on a free online tool - "Google forms" and consisted of 5 levels. Each level focussed on a key element of outbreak management with relevant information needed to answer the questions presented as text or videos. Players were required to solve a series of puzzles before advancing to the next level.

The game was made available to a cohort of first year medical students (n=220) with voluntary participation and an 8-week completion period. An optional post-game survey was administered to gather information about the players' experiences, including process, contribution to learning, and satisfaction using Yes/No questions, a Likert scale, and open-response formats

### **Results**

40 survey responses were received (18% response rate), with 95% of respondents agreeing that the game aided in understanding outbreak investigation, 92% found the game enjoyable, 92% would recommend it to others and 95% wanted games similar to this format for future teaching. Qualitative feedback showed that students found the game enjoyable, exciting, and engaging but also expressed challenges with platform usability and content presented.

### **Discussion**

The online educational game on outbreak management was well received by first year medical students with promising results for future teaching using gamification. Future studies are needed to investigate the impact of gamification on specific learning outcomes.

### **Redesigning a pathophysiology unit to promote active learning in a blended learning environment**

**Dr. Romeo Jr Batacan**<sup>1</sup>, Dr Sonia Saluja<sup>1</sup>

<sup>1</sup>Central Queensland University, Rockhampton, Australia

#### **Introduction/Background**

A solid knowledge of human pathophysiology is essential for providing high-quality care by healthcare professionals; however, engaging students in learning some of the complex pathophysiology content can be challenging. Pathophysiology can be a daunting course for undergraduate students because it integrates content from several areas, including anatomy, physiology, biology, and chemistry and uses this knowledge to gain a thorough understanding of disease processes (Van Horn et al., 2014). Active learning defined as introducing activities into the traditional lecture has been widely studied and shown to improve learning (Kennedy, 2019).

#### **Aim/Objectives**

The redesigning of the unit attempts to help students achieve academic success in a blended learning environment. This presentation will outline the revisions in the unit and the rationale behind the learning strategies implemented to maximise student learning.

#### **Discussion**

Pre-recorded lectures were divided into main lectures and mini-lectures. The main lectures provide the general disease processes and then the mini-lectures are the application of these processes to specific conditions or clinical models. Main lectures were delivered by the unit coordinator. Mini-lectures were delivered by several members of the team with expertise in the disease condition. Two live tutorials (Q&A and case studies) were conducted each week. Online weekly revision quizzes and H5P activities were provided to enhance learning and measure understanding of unit content. Weekly recap emails were provided to students to keep them on track with their studies. After the overhaul in the delivery of this unit, the student satisfaction score immediately improved and continuously improved thereafter. Student performance has also been consistent with an 80-90% success rate and the majority of students achieved distinction and high distinction marks.

#### **Issues/Questions for exploration OR Ideas for further discussion**

This presentation will explore the following themes and questions:

What were the reflections from previous student feedback?

What strategies were used to promote active learning in a blended learning environment?

What was the impact on student learning and satisfaction?

Kennedy, D.R. (2019). Redesigning a Pharmacology Course to Promote Active Learning. *American Journal of Pharmaceutical Education*, 83(5), 6782.

Van Horn, E.R., Hyde, Y.M., Tesh, A.S., & Kautz, D.D. (2014). Teaching pathophysiology: Strategies to enliven the traditional lecture. *Nurse Educator*, 39(1), 34-37.

## HPEd 20: Turning the tide through transformative education

**Maria Lourdes Dorothy Salvacion**<sup>1</sup>, Melflor Atienza<sup>1</sup>, Maria Elizabeth Grageda<sup>1</sup>, Erlyn Sana<sup>1</sup>, Claire Pastor<sup>1</sup>, Nina Yanilla<sup>1</sup>

<sup>1</sup>*National Teacher Training Center For The Health Professions, University Of The Philippines, Manila, Manila, Philippines*

**Introduction:** 'HPEd 20: Learning for Teaching' is an elective course offered by the National Teacher Training Center for the Health Professions (NTTCHP), a college unit of the University of the Philippines, Manila campus for undergraduates of health professions programs. This paper described how the design and implementation of HPEd 20 make it an effective venue for transformative learning.

**Method:** This is a collective case study aimed to describe the experience of HPEd 20 students from 2018 – 2020. Data were accessed through the course learning management system: actual course packs used by the faculty - which include the syllabi, instructional resources and assessment plan- and submitted student outputs. These were collected and analyzed deductively in terms of consistency with OBE and transformative learning outcomes. Overall themes that led to and manifested transformative learning were documented by NVIVO 12.

**Results:** Document Analysis showed that HPEd 20 design and implementation were consistent with the principles of OBE and various instructional events paved the way for transformative learning. Students' outputs showed how specific course contents (educational philosophies, learning styles, motivation, and cheating), instructional activities (reflection papers, group discussions) and delivery and assessment strategies (unlimited formative feedback, two-way feedback, peer evaluation) manifested transformative learning (TL) in its different stages.

**Discussion:** HPEd 20 manifested transformative learning by providing students expanded opportunities for self-discovery as learners. Their reflections manifest a growing consciousness, and confidence in their identity as scholars of the national university. They felt better prepared to face the challenges of their academic careers, and even of life itself. Thus HPEd 20 empowered them to steer themselves through the stressful waters of health professions education, and hopefully stemmed the tides of academic stress and burn out.

## Scenario-based learning (SBL) – evolving inquiry-based learning strategies for a new MD program

**Dr Matthew Arnold<sup>1</sup>**, Dr Andrea Dillon<sup>1</sup>, Dr Christian Mingorance<sup>1</sup>, A/Prof Elizabeth Beckett<sup>1</sup>, Prof Ben Canny<sup>1</sup>

<sup>1</sup>*The University of Adelaide, Adelaide, Australia*

### Introduction/Background

In 2022 the University of Adelaide launched the new Bachelor of Medical Studies/Doctor of Medicine (BMedSt/MD) degree, providing an opportunity to review curriculum delivery principles. In our previous curriculum, Case-Based Learning (CBL) defined the Learning Outcomes (LOs), with the ambition that students use enquiry-based approaches to discover these and become autonomous learners. Ironically, a hidden peer-network communicated the LOs, impairing this discovery process. The new curriculum was subsequently developed according to the principles of constructive alignment (Biggs 1996), with Scenario-Based Learning (SBL) introduced to amplify and integrate explicitly defined course LOs, whilst retaining elements of enquiry-based learning.

### Methods/Objectives

SBLs were developed based on weekly LOs, thematically aligned with Science & Scholarship and Clinical Practice domains, with Health & Society and Professionalism & Leadership domains contributing during development. Facilitators adopted a Socratic style, promoting application of learnings obtained across the four domains within the integrated context of SBL, with students generating 'learning issues' for areas of uncertainty, in accordance with enquiry-based principles.

### Discussion

Students enjoyed the program, frequently mentioning SBL in eSELT evaluations as one of the most positive aspects of the course. Facilitators reported high student engagement, and that students' ability to apply their knowledge in authentic scenario contexts increased throughout the course. Noting the anecdotal nature of this feedback, on reflection, SBL has achieved the intended goals of LO amplification, the promotion of students' application of knowledge and the development of adult learning skills and teamwork. It is unclear to what extent the goal of authentic integration of learning across the four domains of the curriculum were achieved. Encouragingly, a limited number of students praised integration in eSELT evaluations, though capacity remains for greater representation of some domains, and increased signposting to students.

### Questions for exploration

How to best balance ensuring core LOs are addressed, whilst also facilitating inclusion of authentic clinical complexities/uncertainties in scenarios?

### References

Biggs, J 1996, 'Enhancing Teaching through Constructive Alignment', *Higher Education*, vol. 32, no. 3, pp. 347–364.

## Mapping the Macquarie MD program for graduate capabilities in research

Ms Caroline Proctor<sup>1</sup>, Professor Catherine Dean<sup>1</sup>, **A/Prof Veronica Preda<sup>1</sup>**

<sup>1</sup>Macquarie University Faculty of Medicine Health and Human Sciences, Macquarie University, Australia

The Macquarie MD Research Program is to develop future medical doctors who understand the role and importance of research in guiding Evidenced-based medicine (EBM) practice. It integrates the experience of clinicians, the values of patients, and the best scientific information to guide clinical decision-making.

The Macquarie MD Research Program is built around the overarching Macquarie MD, building on the capacity for graduates to become scholars, research-informed practitioners and applied medical scientists. Students have the opportunity to undertake research projects which align with the broad spectrum of research strengths and areas within MQ Health and the Australian Institute of Health Innovation, which promote MQ Health's strategic goal to undertake research that improves the delivery of healthcare and the quality of patient and broader community lives.

### *Navigating the Opportunities:*

Securing stimulating research projects to cover an ever-increasing student intake is a challenge that needs to be overcome each year. At Macquarie University, the MD Research Team have adapted a flexible approach enabling navigation of a variety opportunities and approaches.

This has resulted in diverse array of research project topics covering health care related to (but not limited to) Aboriginal and Torres Strait Islander Australians as well as culturally and linguistically diverse (CALD) backgrounds. These research projects focus on making a scholarly contribution to learning health systems and may include projects related to: health systems development and delivery; infrastructure and resource use in healthcare; patient safety and quality; patient and clinician experience of service delivery; patient and professional reported determinants of health and wellbeing; medical education.

The stimulating research environment offered to students enrolled in the MD ensures that they will develop research skills, plan and implement a research project, and communicate their research findings and recommendations for healthcare and/or future research.



## Designing a rurally focussed pathway for intensive care medicine training in WA – benefits and barriers.

**Laura Humphry**<sup>1</sup>, Dr Caroline Murphy<sup>1</sup>, Dr Mary Pinder<sup>1</sup>, Dr Bruce Lister<sup>2</sup>, Sumithra Abeygunasekera<sup>2</sup>, Nicole Barbarich<sup>1</sup>

<sup>1</sup>WA Country Health Service, Perth, Australia, <sup>2</sup>College of Intensive Care Medicine, Melbourne, Australia

### Introduction/Background

In WA, ICU training positions have previously been managed at a hospital level with trainees individually responsible for applying for each position needed to complete the training requirements. This process is onerous, and trainees may experience a disjointed training experience. Access to the 6-mth mandatory rural training term is difficult with only one rural ICU currently in WA and geographical spread of hospitals over 2.6 million km<sup>2</sup>. Short-term funding to establish a WA intensive care training pathway (WAICTP), similar to the Queensland model, has been secured through the Commonwealth FATES grant scheme.

### Aim/Objectives

The aim of the project is to develop a model for a centralised selection, recruitment and allocation process including streamlined access to training rotations, with education and support for trainees, and a specific focus to expand and promote rural training opportunities. The project aims to benefit ICU trainees, reduce the administrative burden of repeated job applications and, importantly, to support rural health in WA. The Pathway aims to be piloted in 2024.

### Discussion

The challenges for the project have included identifying a governance structure for oversight; securing on-going funding beyond initial grant funding; identifying pathway positions; engaging with stakeholders across WA Health at Executive, Head of Department and Supervisor level to support the Pathway; and networking with trainees to promote the pathway, identify and address concerns. CICM has partnered with WACHS for project oversight with broad support for the pathway across all health jurisdictions and key stakeholders. Training positions have been identified across the state. An educational program is in development. Potential WAICTP trainees have expressed interest. Barriers relate to relocation from Perth, accessing child-care, family commitments and isolation.

## **Development of a Postgraduate Certificate in Patch testing: Insights in providing accessible learning experiences in subspecialty dermatology**

**Dr Kajal Patel**, Ms Amanda Palmer, Associate Professor Rosemary Nixon

<sup>1</sup>*Skin Health Institute, Australia*

### **Introduction/background:**

Patch testing is specialised process to detect allergic contact dermatitis and usually performed by dermatologists in tertiary referral centres, but in recent years has become more accessible through the Contact Allergen Bank Australia run by the Skin Health Institute (SHI). The SHI is a leader in patch testing services in Australia, and plays a role in upskilling healthcare professionals through providing education and advice. Education is usually conducted during face-to-face training days and practical workshops which transitioned to online learning during the pandemic.

### **Aim/objectives:**

We have utilised a modified delphi process to develop a consensus agreement on a novel competency – based curriculum for the Patch Test Certificate. Given that there is currently no formal education programs for patch testing, the aim of this curriculum is to provide a standardised education experience to assist healthcare professionals perform patch testing, as well as clinical pearls from experienced patch testing doctors and nurses.

### **Discussion:**

This presentation will discuss the process of developing Patch Test Certificate curriculum, its educational content and assessment, leading to a shared understanding of providing comprehensive specialist education in an online remote format, that is engaging and meaningful to the learner.

### **Issues/Questions for exploration OR Ideas for further discussion:**

This proposed curriculum will be of interest to educators involved with speciality or subspecialty training particularly for those keen to expand their learning platforms.

## **Navigating the perfect storm of the new Bachelor of Nutrition and Dietetics (Honours) curriculum during a global pandemic**

**Ms Carolyn Keogh**<sup>1</sup>, Dr Helen Vidgen<sup>1</sup>, Dr Helen MacLaughlin<sup>1</sup>, Dr Lynda Ross<sup>1</sup>, Dr Mary Hannan-Jones<sup>1</sup>

<sup>1</sup>*Queensland University Of Technology, Brisbane, Australia*

### **Introduction/Background**

In 2018 the Australian Dietetics Council accredited a revised curriculum at QUT for Bachelor of Nutrition and Dietetics (Honours). Implementation was staggered across 4-year levels beginning in 2019. Due to the global COVID-19 pandemic a more dynamic and responsive curriculum model was required.

### **Aim/Objectives**

To describe dietetics curriculum implementation during a global pandemic.

### **Discussion**

Process, impact and outcome evaluation data were collected from students, teaching staff and industry partners using qualitative and quantitative methods. Data were analysed against the Consolidated Framework to Implementation Research. All students completed placements between 2019-2022. COVID-19 restrictions heavily influenced the digital transformation to 100% online delivery. International hospitals supported students in their home countries. Research placements adopted a peer model and research methods modified. Project-based placements were converted to remote-based learning and embraced telehealth models. Kitchen practicums were modified to teaching intensives during lifted restrictions. Students were satisfied with and many preferred online delivery. Successful achievement of Work Integrated Learning competencies and 85% course completion rates within 4-years were consistent with pre-pandemic rates. Graduate student employment remained highest of competing courses in Queensland. Results were significant as Outer Setting Factors, specifically COVID-19, led to international/domestic travel restrictions and changes to public policy. When Covid restrictions lifted, placement sites and students seized opportunities for vocational dietetic learning.

### **Conclusion**

Innovative and contemporary pedagogical practices were employed to develop creative, agile, resilient, and competent graduates. The honours curriculum for 2023 and beyond is embracing exciting new ways of delivery for a rapidly evolving digital world.

### **Issues/Questions for exploration OR Ideas for further discussion**

How has Covid-19 impacted best practices in pedagogy?

Now that Covid-19 restrictions have been lifted, will the current teaching and learning modalities be permanently adopted within the University sector?

## Navigating accreditation and university policies to embrace curriculum innovations in the wake of COVID-19

**Dr Sarah Meiklejohn<sup>1</sup>**

<sup>1</sup>*Monash University, Australia*

### **Introduction**

Delivery of accredited health professions programs has undergone significant unpredictable and in many cases ongoing disruption since 2020, which in some instances has facilitated curriculum innovations. This study aimed to identify curriculum disruptions and innovations employed at Monash University from 2020-2022 and the influences of university and accreditation requirements on their ongoing integration.

### **Methods**

This qualitative longitudinal study comprised two semi-structured interview phases (April 2021 and November 2022) with academics in leadership roles and those with experience with accreditation across 12 health professions programs. Phase One interviews (n = 12) explored academics experiences and perspectives of key curriculum innovations during the height of the pandemic in 2020 and the role of university and accreditation policies in influencing these innovations. Phase Two interviews (n = 9) focused on ongoing curriculum innovations and factors contributing to successful integration throughout 2021 and 2022. Data were analysed using framework analysis.

### **Results**

Academics described core disruptions associated with pivoting quickly to online assessments, clinical skills development and placement in 2020. Whilst university policies were generally seen as accommodating to the unprecedented circumstances, academics described varying levels of flexibility by accreditation bodies to accommodate the need for changes to curriculum and assessment procedures. Through embracing online learning platforms and tools, academics were able to refine and facilitate innovative approaches to curriculum delivery including incorporation of expert guest lecturers throughout 2021 and 2022 to ensure development of safe and competent health professionals. Emerging leadership, cultural changes and revised university and accreditation policies were identified as key contributing factors for ongoing integration of curriculum innovations.

### **Discussion**

These findings offer insights into how flexibility in policy implementation from universities and accreditors was fundamental to enable successful delivery of health professions programs in the presence of strict government policies at the height of the COVID-19 pandemic.

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### How to pep your students for learning? A peer education placement for medical students.

**Wonie U<sup>1</sup>**, Dr Kate Reid

<sup>1</sup>University of Melbourne, Melbourne, Australia

#### Introduction/Background

Medical schools' graduate students with highly developed communication, diagnostic and management skills to ensure high-quality patient care. However, junior doctors are also expected to enact educator roles. Despite the significant teaching role doctors fulfill from internship, medical students are rarely provided any specific training in teaching. Without formal training in clinical teaching, many doctors find the challenge of managing the teaching expectation in a busy clinical environment overwhelming. Addressing this gap in the training of junior doctors is critical to ensure the optimization of teaching and learning for future students, in the clinical setting.

#### Aim/Objectives

To develop a peer education placement (PEP) rotation for final-year medical students to provide

them with the knowledge and skills for effective clinical teaching.

#### Discussion

Four students completed each 4- week rotation of PEP over the last 2 years, in a major metropolitan children's hospital. Roles of peer educator students comprised one-on-one bedside teaching, tutorials and paediatric basic life support skills and scenarios. Most teaching sessions, apart from those at the bedside, were observed or supervised by an experienced clinical educator. Interviews with students participating in the PEP rotation revealed several key lessons. First, students who volunteered for PEP were enthusiastic, motivated teachers and learners with great interest in assisting peers. Students discovered that developing their teaching skills also solidified their own medical knowledge. When given specific time to learn about teaching without the tension of patient care, students believed they gained skills to enhance their teaching once working in a clinical setting.

#### Issues/Questions for exploration OR Ideas for further discussion

Ideas for extending the PEP program to a larger number of students and developing an interprofessional PEP program.

1. Meyer, H. S., Larsen, K., Samuel, A., Berkley, H., Harvey, M., Norton, C., & Maggio, L. A. (2021). Teaching Medical Students How to Teach: A Scoping Review. *Teaching and Learning in Medicine*, 1-13

## **‘Peering’ into mentoring. A review of student’s wellbeing – the role of near-peer & peer mentoring.**

**Dr Jaclyn Szkwara<sup>1</sup>, Dr Jo Bishop<sup>1</sup>**, Narmatha Mahesanashley, Ashley Sara Mathew, Gowtham Jeyabalaratnam

<sup>1</sup>*Bond University, Robina, Australia*

### **Introduction**

Mentoring is often described as a positive, supportive relationship encouraging the mentee to develop to their fullest potential. A near-peer is a senior student who has experience in the current journey the peer is traversing and can give first-hand insight and advice. This can be a personalised guidance on the transition to university, alleviating concerns with the empathy that can be provided by someone who “been there”.

Considered benefits may be around increased access and communication that may not have occurred organically, recency and similar experience, approachability, increased self-esteem, and motivation, learning more around extra-curricular opportunities, emotional support, broad expertise and increased foresight.

### **Methods**

As part of their MD project three senior medical students conducted a review of the literature on peer and near-peer mentoring in medical training.

### **Results**

Outcomes from their review will inform the initiation of a long-term, evidence-based strategy and set of actions/recommendations that can be implemented within the Medical Program, Faculty, and Bond University.

### **Discussion**

Our overarching, long-term goal is to create a psychologically and physically safe environment for our students as they transition into university for their study.

We will highlight key themes derived from the review; perceived benefits for mentees including improved mental health and wellbeing along with improved academic performance and increased confidence. Perceived benefits for mentors included positive effect on their personal and professional development and increased sense of patience, endurance, and self-awareness.

We will discuss the types of programs that are available, whether mentors are volunteers or paid, how recruitment and training take place, the value of welcome events and how mentor-mentee matching take place. Finally, we will share where mentoring takes place and what are the common topics?

We will outline our students’ recommendations, improvements, and research required in this area.

## Implementation and evaluation of the 2022 Bond University Learning Coach Program for medical students

**Dr Belinda Craig<sup>1</sup>**, Dr Tracy Nielson<sup>1</sup>, Prof. Matthew Links<sup>1</sup>, A/Prof Joanna Bishop<sup>1</sup>

<sup>1</sup>*Bond University, Gold Coast, Australia*

### Introduction

The Bond University Learning Coach Program for medical students was created in 2020 to support final year students with meeting graduation requirements through the COVID-19 pandemic. This program was reimaged in 2021 to focus on supporting students through the transition from pre-clinical (Year 3) to clinical learning (Year 4).

### Method

At the end of 2021, around six Year 3 students were assigned to each learning coach. Coaches were junior doctors already working in hospital/community settings. Coaches held three group coaching sessions with the first meeting at the end of Year 3 and the last occurring around 3 months into Year 4. Initial coaching sessions were focussed on problem solving common challenges that students face when entering the clinical learning environment and reinforced the importance of goal setting and planning for learning. After the group coaching phase, students could 'opt in' to the one-on-one phase, meeting their coach approximately once a month until the end of Year 4. Students and coaches were invited to complete a feedback survey at the end of the program.

### Results

On average, students perceived coaching as *useful* ( $M=3.90/5$ ). Students also endorsed the idea that *learning coaching helped me to transition to clinical learning* ( $M=3.25/5$ ), though students who participated in the one-on-one phase of the program were significantly more likely to agree with this statement ( $M = 3.89/5$ ) than those who did not ( $M=2.60/5$ ). Students who participated in one-on-one coaching ranked academic support and career advice as the most helpful parts of their coaching experience. Coach feedback indicated that coaches felt *well prepared* ( $M=4.40/5$ ) and would *recommend being a learning coach to a friend* ( $M=4.00/5$ ).

### Discussion

This program provides students with structure and support as they begin work-based learning and provides junior doctors with training and practice in facilitating others' learning and development.

## How do peer to peer, low-fidelity simulation activities influence students' self-efficacy in communication and confidence in clinical skills in neurological physiotherapy?

**Mrs Emma Warner<sup>1</sup>**, Ms Jayde Collier<sup>2</sup>, Assoc Prof Ben Weeks<sup>2</sup>

<sup>1</sup>Griffith University, Nathan, Australia, <sup>2</sup>Griffith University, Gold Coast, Australia

### Introduction

Low-fidelity simulation-based education (SBE) is an effective educational method in health care, and specifically in Physiotherapy curricula. However, when financial constraints influence the provision of simulation activities, it is important to know if the provision of an intra-cohort peer to peer model of simulation is effective in developing students' self-efficacy in communication and confidence in clinical skills in Neurological Physiotherapy.

### Methods

Students participated in eight simulation sessions as part of their practical classes in the neurological physiotherapy course. A quasi-experimental design survey was conducted to evaluate the perceived benefits of low-fidelity SBE in physiotherapy students. Anonymous and voluntary pre-simulation and post-simulation surveys were undertaken by 59% of the Bachelor of Physiotherapy students enrolled in a third-year neurological physiotherapy course. A 5-point Likert scale was used to quantify levels of confidence in various aspects of neurological physiotherapy clinical skills and their understanding of the impact of neurological conditions on patients' lives.

### Results

Wilcoxon Signed Rank test analysis of pre-post student survey results (n = 55) showed significant positive change in student confidence across multiple domains ( $p < 0.05$ ), including: conducting a patient interview (76%), performing a physical assessment (80%), developing a treatment plan (87%), and performing a treatment (85%).

### Discussion

In preparation for final year clinical placements, the use of intra-cohort peer to peer SBE activities in neurological physiotherapy facilitated students' self-efficacy and confidence in communication and practical skills in a safe learning environment and was a cost-effective, sustainable alternative to separate block simulation with paid actors.



## The influence of near-peer teaching on undergraduate nursing students' self-efficacy in clinical teaching.

**Ms. Beth Pierce**<sup>1</sup>, Professor Thea van de Mortel<sup>1</sup>, Associate Professor Jeanne Allen<sup>2</sup>

<sup>1</sup>*School of Nursing and Midwifery, Griffith University, Australia*, <sup>2</sup>*School of Education and Professional Studies, Griffith University, , Australia*

### Background

Worldwide, nurses are recognised as educators, qualified to teach individuals and groups across healthcare contexts. Despite this, graduating nurses describe their capabilities in teaching students, other nurses and health professionals as underdeveloped and feel unprepared to teach. Recently, a strategy termed near-peer teaching (NPT) has gained traction as a way of fostering undergraduate health students' clinical teaching capabilities. NPT involves senior students (e.g. final-year students) supporting junior students (e.g. first-year students) in learning. Research suggests NPT supports health students' clinical teaching development, however little is known about its influence on their self-efficacy in clinical teaching, an important predictor of future behaviour.

### Aim

This in-progress project aims to investigate the influence of undergraduate nursing students' participation in NPT during clinical placement on their self-efficacy in clinical teaching.

### Discussion

In 2022, final-year nursing students at a Southeast Queensland university engaged in NPT, supporting first-year nursing students in learning during an acute care work-integrated learning (WIL) experience. A pre-test post-test survey design, using McArthur's (2016) Self-Efficacy in Clinical Teaching (SECT) instrument, was used to assess NPT's influence on final-year nursing students' self-efficacy in clinical teaching across three domains: *customising teaching to learner needs*, *teaching prowess* and *impact on learner's development*. Thirty-two final-year nursing students completed the pre- and post-test surveys.

### Ideas for further discussion

Analysis of results (using t-tests/correlation statistics) will be undertaken prior to the conference. Results will provide insights into the ways that novel NPT opportunities (integrated and supported within undergraduate curricula) may support final-year health professional students, including nursing students, to develop self-efficacy in clinical teaching. With an understanding of the domains of clinical teaching most/least influenced by NPT, this research may also assist health professional educators to tailor curricula/WIL in ways that will have more meaningful impact on student's self-efficacy beliefs and their professional practice.

### References

McArthur, L. A. (2016). *Developing clinical teacher's self-efficacy in Australian general practice*. [Doctoral dissertation, The University of Adelaide]. DSpace. <https://digital.library.adelaide.edu.au/dspace/handle/2440/119792>

## **Distributed research mentorship incorporating international collaboration: opportunities in physiotherapy student scholarship**

**Dr Melanie Farlie<sup>1</sup>**, Dr Gregory Brusola<sup>2</sup>, Dr Marissa Lyon<sup>3</sup>

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### **Introduction**

Evidence-based practice and applied research methods are core requirements of the Commission on Accreditation in Physical Therapy Education (CAPTE) for physical therapy curricula and align with the Australian and New Zealand Physiotherapy Practice Thresholds. In the USA common pedagogies include research courses and workshops. Less common is applied student learning by collaborating on faculty projects. This report describes a teaching innovation, where students from two US universities participated in a faculty-led international scholarship project in collaboration with an Australian academic who leads a student-faculty project program.

### **Methods**

Two US faculty members (GB,ML) identified a research question in collaboration with the Australian faculty member (MF). Five UNE and 4 UTMB students participated in project tasks including literature review, protocol and data collection tool creation, pilot testing, IRB applications, site and participant recruitment, and data collection and analysis. Students participated in virtual bi-institutional meetings, and a skills training session with the international faculty member. Faculty members from UNE, UTMB, and MU meet monthly to discuss progress and potential changes to support student skill development.

### **Results**

Students participating in this scholarship opportunity reported learning enhanced by the “behind-the-scenes” and “hands-on” activities of the real-world research process that “pushed me deeper into the content I was learning at the time in school”. Being given ownership of research tasks allowed students to feel “like I am doing my part to contribute” and learn “a lot about how research is designed and performed.” Additionally, the collaboration aspect “taught me the strength of intradisciplinary collaboration” and “opened my eyes to different perspectives”.

### **Discussion**

Collaboration between geographically distant institutions presents potential challenges but affords opportunities to share new perspectives and explore commonalities in global physical therapy practice and research. With this model, faculty were able to maintain research productivity while optimising student learning.

## **Special effects makeup in education?! A systematic review of moulage in health professions education**

**Dr Jessica Stokes-Parish**<sup>1</sup>, Grace Zadow, Stacia DCosta, Ale Ingabire, Carly Hudson, A/Prof Greg Cox, A/Prof Dianne Riedlinger

<sup>1</sup>*Bond University, , Australia*

### **Introduction**

The use of moulage, the use of special effects makeup to add realism, in medical education dates to 17<sup>th</sup> century Europe. Despite its long history in medical education, moulage has been underappreciated in modern teaching. There has been very little research to inform the theoretical and practical application of moulage. This abstract describes a systematic review that explored the effects of moulage interventions in simulation-based education and training, for learner experience. A secondary aim was to understand which pedagogical frameworks were embedded in moulage interventions.

### **Methods**

Four databases (PubMed, CINAHL, EmBase, Proquest Central) were systematically searched to December 2022 for studies utilising moulage in simulation-based education experiences. There were no date exclusions, however manuscripts other than English language were excluded. Outcomes we sought to explore focused on learner satisfaction, confidence, immersion, engagement, performance or knowledge.

### **Results**

Results: A total of 20 studies (n=11,471) were included in the study. The studies were mostly in the fields of medicine and nursing and less frequently across other health disciplines. The findings demonstrated greater learner satisfaction, confidence, and immersion when moulage was used against a comparator group. Minimal improvements in knowledge and performance were identified. Only one study underpinned the intervention with a pedagogical theory.

### **Discussion**

Moulage contributes to perceived learner experience in simulation training, but not knowledge or clinical performance. Gaps in the literature remain in areas outside of medicine and in using theory to inform practice.

### **References:**

Stokes-Parish, J., Duvivier, R., Jolly, B. (2017) Does appearance matter? Current issues and formulation of a research agenda for moulage in simulation. *Simulation in Healthcare* 12(1), 1-10.

## **Practitioner self-care in palliative care simulations – a live demonstration of the contribution of simulated participants to student learning**

**Dr Marie-claire O'shea<sup>1</sup>, Ms Monique Dumaine<sup>1</sup>, Mr Nathan Reeves<sup>1</sup>, Ms Fiona Miller<sup>1</sup>, Mr Mark Lynch<sup>1</sup>, Mr James Townshend<sup>1</sup>**

<sup>1</sup>Griffith University, Australia

### **Introduction/Background**

Palliative care aims to improve people's quality of life and is best provided by a multi-disciplinary team underpinned by collaborative, interprofessional practice. There is increasing evidence regarding the positive impact of employing interprofessional education and simulation activities to improve team communication, collaboration, confidence and understanding of disciplinary roles in students. These are core elements of a collaborative practice ready workforce.

An interprofessional simulation activity was developed to realise a set of carefully considered palliative care learning outcomes. Commencing with a patient's initial disease diagnosis, the simulation included consultations at three time-points and the final simulated consultation required students to model a multi-disciplinary team supporting the client goals as they move into a palliative phase. This simulation enabled students to demonstrate discipline specific knowledge and skills, whilst developing behaviours such as empathy, teamwork and person-centred care.

Over a two-year period, over 200 students participated in the simulation evaluation reporting that the feedback and support provided during the simulation as the most important aspect to their learning. Despite this, students reported palliative care as a *'touchy subject for myself at the moment and would appreciate support when necessary'* and *'support and help is very important as some terminal illnesses remind me of very close family members'*. Without careful consideration to self-care, this simulation may have had detrimental effects to students' wellbeing and limit the self-care tools they can develop as they move to becoming practitioners.

### **Aim/Objectives**

To describe how the emotive nature of palliative care simulations can be enhanced with simulated participants.

### **Discussion**

This presentation will be 'acted' by simulated participants to showcase the simulation and demonstrate their vital contribution to student learning.

### **Issues/Questions for exploration OR Ideas for further discussion**

This presentation is likely to raise questions about cost-effective strategies for including simulated participants, access, quality control and contribution to student feedback and debriefing.

## **Immersive Mental Health Simulations: Unleashing the Power of Character Based Improvisation**

**Dr Matthew Dunbar<sup>1</sup>**, Jon Jureidini<sup>1</sup>

<sup>1</sup>*University of Adelaide, Adelaide, Australia*

### **Introduction/Background**

The Paediatric Mental Health Training Unit (PMHTU) at the University of Adelaide has accumulated a wealth of experience over the span of a decade by delivering intensive simulation-based teaching to senior medical students. The primary focus of this program is to address the social and emotional well-being of young people and families, while also assisting trainee doctors in adopting a therapeutic approach to clinical interviewing.

An acting methodology known as Character Based Improvisation (CBI) is employed to create simulated characters that possess an authentic feel and intricate layers of relational detail for students to explore.

### **Discussion**

*This poster offers an overview of the simulation workshop processes, provide examples of specific learning objectives, and offer a synopsis of the entire process, starting from vignette writing all the way through actor training and vignette calibration.*

## Welcome to the Night Shift...

**Dr Pip Wills<sup>1,2</sup>**, Associate Professor Leonie Griffiths<sup>1,2</sup>

<sup>1</sup>University of Melbourne, Melbourne, Australia, <sup>2</sup>Northern Hospital, Epping, Australia

### Introduction/Background

Junior doctors must be able to prioritise and manage multiple competing tasks in order to deliver safe patient care. However, they rarely practise this as a student. To prepare medical students for this transition in responsibilities, we developed a novel single facilitator, multiple station simulation for final year medical students to assist preparation for practice and asked for their feedback via a quality improvement survey.

Postgraduate medical students were required to prioritise and complete a list of 6 tasks which included clinical deterioration scenarios and time urgent ward tasks. During the simulation the facilitator disrupted the scenario with 'ward calls' which required students to reprioritise their tasks, then complete all tasks to a satisfactory outcome. An immediate debriefing occurred at the conclusion of the simulation, and students completed a quality improvement feedback survey.

### Aim/Objectives

To assess if final year medical students find multiple task, single facilitator simulation is acceptable, and if it would improve their preparation for practice as interns.

### Discussion

In the initial quality improvement feedback survey, students found having to prioritise management decisions in a multitasking situation most useful. They stated that teamwork and practising how to escalate for help, assisted them in this. Students also found it beneficial to practise procedural and prescribing skills, and they gained confidence in answering phone calls from the nurses. Overall, they described the simulation as fun, realistic and useful for transition to internship. Some stated that the simulation would be improved with a more detailed briefing or debriefing, and many students wanted more of these simulations.

For the facilitator, issues occasionally arose with safety concerns and observing desired actions of all students. This was addressed by using a PEARLS debriefing model (Eppich) focussing on learner self-assessment in the analysis phase.

### Issues/Questions for exploration

While students believed the simulation would assist in transition to practice, a formal research project will explore this further.

### References

Eppich, W., & Cheng, A. (2015). Promoting Excellence and Reflective Learning in Simulation (PEARLS): development and rationale for a blended approach to health care simulation debriefing. *Simulation in Healthcare*, 10(2), 106-115.

## Low fidelity models using household items for simulation training in obstetrics and gynaecology

**Dr Emily Ebenezer<sup>1</sup>**, Dr Beena Kingsbury, Dr Lilly Varghese, Dr Reeta Vijayaselvi

<sup>1</sup>*Christian Medical College And Hospital, Vellore, India, Vellore, India*

### Introduction/Background

Skill training in obstetrics and gynaecology is becoming more and more simulation based as compared to a decade ago. Gone are the days when one does an endometrial biopsy for the first time on the patient directly. The shift has happened and rightly so, given the amazing advances in simulation technology and medical education. However, every new system comes with its share of challenges. In a middle income country like India, the main challenge for us is that of cost. Although this simulation technology is now available to us, costs are often prohibitive and the sheer numbers we would need to cater to our students makes it impossible. So, we started looking for cheaper alternatives.

### Aim/Objectives

To find low cost alternatives to simulation devices to teach minor gynaecological procedures

### Discussion

We came up with the idea of using papaya and capsicum as alternatives to a uterus. One end of the fruit is cut open to create a space through which a uterine sound or manipulator can be inserted. The pulp of the papaya is scraped out to create a cavity. We found that this was perfect to simulate the feeling of sounding the uterus and checking the size and also doing a biopsy.

We also started using cardboard boxes with holes in them instead of the laparoscopy pelvitrainers.

The final cost worked out to 1/5<sup>th</sup> of the previous cost.

### Issues/Questions for exploration OR Ideas for further discussion

It may be worthwhile doing a comparative study on the learning that happens with low versus high fidelity devices, however we think it may be similar.

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## From University student to physiotherapist: Quantifying work readiness and the influence of personal and educational factors during the transition phase.

**Mrs Vidya Lawton**<sup>1</sup>, Associate Professor Verity Pacey<sup>1</sup>, Associate Professor Taryn Jones<sup>1</sup>, Professor Catherine Dean<sup>1</sup>

<sup>1</sup>Macquarie University, , Australia

### Introduction

Work ready physiotherapy graduates are those able to transition into a complex, rapidly changing and dynamic modern healthcare system. Graduating from university and meeting the physiotherapy practice thresholds may not equate to work readiness. The aims of this study were to quantify the perceived work readiness of individuals transitioning into physiotherapy practice, and to identify the personal and education factors that may influence perceptions of work readiness.

### Methods

National online surveys were distributed to collect perceptions of work readiness, personal and educational data from final year physiotherapy students and recent graduates. Personal data included age, gender and psychological health status measured using the Patient Health Questionnaire for Anxiety and Depression (PHQ4)<sup>1</sup>. Educational data included stage of development and type of degree. Work readiness was measured using the Work Readiness Scale for Allied Health professionals (WRS-AH)<sup>2</sup>. Overall work readiness score and scores for the 4 domains (interpersonal capabilities, practical wisdom, personal attributes, and organisational acumen) were analysed descriptively and independent t -tests were used to examine the influence of personal and educational factors.

### Results

176 participants reported an overall WRS-AH score of 80% (SD 8), with the *Personal Attributes* (65%, SD 14) domain scoring the lowest. 35% of participants reported symptoms of psychological distress. Those who reported symptoms scored 7% (95%CI 4 to 9) less on the overall WRS-AH score, and less across all domains. Graduates scored higher than final year students in total WRS-AH scores and in the *Personal Attributes* domain. Participants completing a DPT degree scored 4% (95% CI 1 to 7) higher in the *Organisational Acumen* domain.

### Discussion

Overall, while physiotherapy students and graduates perceive themselves to be work ready, further development of personal attributes such as stress management, resilience, flexibility and adaptability may enhance work readiness. Additional strategies are needed for those reporting psychological distress.

### References

1. Löwe B, Wahl I, Rose M, Spitzer C, Glaesmer H, Wingenfeld K, et al. A 4-item measure of depression and anxiety: Validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of affective disorders*. 2009;122(1):86-95.
2. Lawton et al 2023 (under review) A work readiness scale for allied health graduates. Submitted to Clinical Teacher, 19<sup>th</sup> December, 2022.



## **Benefit of Assistant in Medicine (AiM) program for student perception of preparedness for internship**

**Ms Naomi Staples<sup>1</sup>, Associate Professor Karen Scott**, Honorary Professor Deborah O'Mara

<sup>1</sup>*University Of Sydney, Camperdown, Australia*

### **Introduction**

Like many countries grappling with the COVID-19 response in 2020, New South Wales Health implemented an Assistant in Medicine (AiM) program, employing final year medical students in hospitals, allowing redeployment of junior doctors. AiM was an opt-in paid position whereby students were placed in multi-disciplinary teams to provide medical care and support but not prescribe. In 2022 a redeveloped AiM was available to Sydney MD students instead of a final 4-week Pre-Internship (PrInt) placement. We conducted a comparative analysis of student perception of preparedness for Internship after 3-4 weeks in AiM or PrInt.

### **Methods**

In October 2022 students were invited to complete a Year 4 student experience survey three weeks into final PrInt and AiM placements. Quantitative survey items focused on perceptions of preparation for internship, team integration, confidence to work in a hospital environment and medical team, identity as a doctor and wellbeing. Items were derived from previous surveys and focus groups. Here we report on comparison of descriptive statistics (means and distributions) of responses of students undertaking AiM and PrInt.

### **Results**

Fifty-nine respondents undertook AiM and 71 undertook PrInt. More AiM than PrInt respondents reported being 'strongly satisfied' with their final placement (74% vs 20%). AiM respondents perceived greater development of preparedness for internship, confidence to work in a hospital environment and medical team, professional identity, wellbeing and ability to cope with uncertainty, with item means higher by 1.83-2.37 points on a 10-point scale than those of PrInt respondents. Similarly, AiM respondents gave higher ratings of team interactions and integration.

### **Discussion**

The AiM role has provided a model that better develops final year medical students' preparedness for internship. Students benefit from a sense of value and belonging to a team, securing a greater sense of confidence and professional identity.

## Undergraduate and graduate entry final year pharmacy students' work-readiness

**Dr Rebecca Roubin<sup>1</sup>**

<sup>1</sup>*The University Of Sydney School of Pharmacy, Australia*

### **Introduction**

Work-readiness is a set of competencies and attributes possessed by a prospective employee that are favourable to an employer. Four factors that are important determinants of work-readiness of an individual: personal characteristics, organisational acumen, work competence, and social intelligence (Caballero et al, 2011). The Australian Pharmacy Council's accreditation standards define "fitness-to-practise" and also describe readiness-to-practise "from a competency perspective (including knowledge, skills, behaviours and attitudes), and the capacity to undertake professional practice safely from the perspective of wellbeing and impairment".

### **Methods**

The aim of this study was to compare indicators of entry-level pharmacist work-readiness between final year students enrolled in 4-year undergraduate B.Pharm and 2-year accelerated graduate-entry M.Pharm programs between 2018-2020. This study undertook a mixed methods approach.

Quantitative analysis of performance on similar competency-based assessments in the "Professional Practice" unit of study was carried out, comparing 452 B.Pharm and 143 M.Pharm students between 2018-2020. Comparisons included individual tutorial simulated case marks, overall tutorial performance, medication review assessment marks, and final unit of study marks. Triangulation of data collected via focus groups were analysed using inductive content analysis and mapped to the self-determination theory to explore student perceptions of their own work-readiness.

### **Results**

No significant differences in performance criteria between B.Pharm and M.Pharm. The focus groups showed that students in both programs had high levels of confidence and self-perceived competence, exhibiting no major differences in the emerging four themes of Learning on clinical placements, Importance of work experience, Increased simulation-based learning and assessment, Focus on community pharmacy. The main factors affecting these perceptions were clinical placements, simulation-based learning and assessment, work-experience, and focus on community pharmacy.

### **Discussion**

The results of this study suggest that both the undergraduate and graduate-entry programs equally prepare students for entry-level pharmacist work-readiness.

Caballero CL et al (2011) *J Teach Learn Grad Employability*, 2:41-54

## Bringing it Forward: Teaching De-escalation Skills Early in Health Professional Education

**Dr Chris Moir**<sup>1</sup>, Dr Maria Baby<sup>2</sup>

<sup>1</sup>University Of Otago, Christchurch, Christchurch, New Zealand, <sup>2</sup>Te Whatu Ora Southern, Dunedin, New Zealand

**Introduction:** Workplace violence in health care has not been widely spoken about but has come to the public attention during the Covid-19 pandemic. As the health professionals dealing closely with patients and their families nurses and student nurses can bear the brunt of aggression. Skills to respond appropriately and safely have traditionally been taught before mental health clinical placements however, are apparently required from the start of nursing practice. Therefore, providing de-escalation skills early in nursing education is vital for students' wellbeing, and the longevity of their career. The aim of this research was to determine the effectiveness of teaching early communication skills training in enhancing aggression management skills when in clinical placement.

**Methods:** A quasi-experimental design with pre and post-tests of communication competence following an education module delivered as part of the curriculum was employed. Participants were students in a Masters of Nursing Science post-graduate, pre-registration course at the University of Otago, Christchurch. Thackrey's Confidence in Coping with Patient Aggression Instrument and the Interpersonal Communication Competence Scale were administered before the communication teaching session. Post-test questionnaires were administered after clinical placements in acute care and mental health.

**Results:** There were 33 student nurse participants. Outcome measures indicated significant increases in both aspects of communication confidence and competence from baseline across the two placements for the combined cohorts.

**Discussion:** The study highlights the effectiveness of the delivery of de-escalation skills training early in nursing education to enable student nurses to develop confidence in dealing with aggression across all areas of healthcare. Curriculum planners and educators should consider this important aspect of students' wellbeing in their clinical preparation.

## Why Is Patient Safety a Challenge? Insights From the Professionalism Opinions of Medical Students' Research

**A/prof Paul Mcgurgan<sup>1</sup>**

<sup>1</sup>*Uwa Medical School, Perth, Australia*

### **Introduction**

Health care is increasingly viewed as a safety-critical industry. This study examined the nature and magnitude of factors that may influence opinions around patient safety-related behaviours as a means of providing insights into how Australian doctors and medical students view these issues relative to members of the public.

We sought to address the following:

- Do members of the public/qualified doctors/medical students have different opinions on patient safety dilemmas?
- Does gender or age of respondents influence their opinions on medical students' behaviours?
- Are medical students' opinions on patient safety dilemmas influenced by what stage they are in their course or type of entry to medical school?
- Do any demographic groups exhibit cognitive biases?

### **Methods**

A national, multi-centre, prospective, cross-sectional survey was conducted using responses to hypothetical patient safety scenarios. Australian enrolled medical students, medical doctors, and members of the public were surveyed. Participant responses were compared for the different contextual variables within the scenarios and the participants' demographic characteristics.

### **Results**

In total, 2602 medical student, 809 doctors, and 503 members of the Australian public participated. The three demographic groups had significantly differing opinions on many of the dilemmas. Doctors were more tolerant of medical students not reporting concerning behaviours and attending placements despite recent illness. Medical students' opinions frequently demonstrated a "transition effect," bridging between the doctors and public's attitudes, consistent with professional identity formation.

### **Discussion and Conclusion**

Although this study was directed toward hypothetical medical student behaviours, the results indicate that cognitive dissonances, biases, and heuristics that seem to influence doctor's opinions on medical students' behaviours may present significant challenges to patient safety in clinical practice. Opinions on the acceptability of medical students' patient safety-related behaviours were influenced by the demographics of the cohort and the contextual complexity of the scenario.

## Diagnosis and overdiagnosis in the medical curriculum

**Dr Iman Hegazi<sup>1</sup>**, Dr Natalie Edmiston<sup>1</sup>, Ms Lucinda Colbert<sup>1</sup>, Mr Sami Charaf<sup>1</sup>, Mr Ollie Wong<sup>1</sup>, Mr Gisung Ko<sup>1</sup>

<sup>1</sup>*Western Sydney University, Australia*

### Introduction

Learning to diagnose is a key component of medical education. Yet, overdiagnosis is a growing concern in healthcare. Overdiagnosis is the application of a diagnostic label that does not benefit and may harm the individual, and results in healthcare costs. Overdiagnosis occurs in a variety of settings with various causes including screening over detection of cancers, diagnostic creep of syndromes and over investigation producing incidental findings. Medical education should prepare graduates to work in a system where overdiagnosis is a reality and where they can play a role in preventing overdiagnosis.

### Methods

Western Sydney University students conducting individual research projects for the Doctor of Medicine program, participated as co-investigators and co-designers in a program of research and curriculum review to ensure that overdiagnosis is understood alongside developing skills in diagnosis. Qualitative research conducted by a near peer has explored the understanding of overdiagnosis within a longitudinal curriculum. A second student researcher developed a diagnostic framework inclusive of overdiagnosis and tested this with final year medical students. The curriculum has been mapped against suggested competencies in overdiagnosis. Consequently, existing teaching is being reviewed and new curriculum items are being considered for development.

### Results

Students are aware of overdiagnosis, but the curriculum is not explicit on this subject. The ability to avoid overdiagnosis is dependent not just on knowledge but also on confidence and emotional factors. Clinical placements are a key time of learning about overdiagnosis but depends on supervisor, clinical school location and specialty. Inclusion of overdiagnosis within preclinical teaching, in teaching diagnostic tests and within problem-based learning cases, plus upskilling of clinical supervisors and professional development of tutors may contribute to preventing overdiagnosis.

### Discussion

Integrating overdiagnosis within existing components of the medical curriculum has the potential to transform learning and could be done by revision of current content rather than merely adding elements to an already crowded curriculum.

## **The Runaway Train & The Sneaky Surgeon: The Principle of Double Effect in Health Professions Education**

**Mr. Hayden Frizzell<sup>1</sup>**

<sup>1</sup>*University of Melbourne, Shepparton, Australia*

### **Introduction/Background**

All students of the Health Professions are required to develop and demonstrate basic ethical competencies as part of their education. Many students find these classroom discussions about ethics and morality intrinsically stimulating, especially when applied to their own field of study. However, oftentimes this 'Ethics Education' is limited to basic common sense scenarios, and there is rarely a systematic approach to teaching relevant principles required for moral discernment.

### **Aim/Objectives**

There are times when it can be acceptable to tolerate a negative outcome of a choice, even if this negative outcome is foreseen. The classic Principle of Double Effect outlines the 4 specific conditions which must be present in a situation in order for such a choice to be justified, and therefore it is an invaluable resource when prudential ethical judgements are required.

It is proposed that incorporating explicit instruction of this principle into the education of Health Professionals can provide students with a deeper and more authentic understanding of their own ethical intuitions, and assist them with developing objective criteria for evaluating controversial medical and bioethical cases.

### **Discussion**

Many students are familiar with some variation of the classic 'Trolley Problem' scenario, and they will likely have some basic moral intuitions about the appropriate responses in these hypothetical cases. However, they are typically unable to explain why their intuitions are reversed when presented with the near-identical 'Lying Surgeon' example. When The Principle of Double Effect is applied to these scenarios, it is able to explain clearly and precisely the relevant moral difference between the two cases, and bring this to explicit awareness for students.

### **Issues/Questions for exploration**

This same philosophical principle can produce fascinating and fruitful discussions in the classroom when applied to realistic medical cases which involve competing interests, such as end-of-life care, mandatory vaccinations, and risky medical treatment during pregnancy.

This presentation will demonstrate how explicit instruction in The Principle of Double Effect can be incorporated into Health Professions classrooms in simple but powerful ways, without requiring significant alteration of curricula.

## Students' experiences of a new Team-Based Learning curriculum in a large medical school: the good, the bad and the ugly!

**Associate Professor Margo Lane**<sup>1</sup>, Dr Jack Gilpin<sup>1</sup>, Dr Steve Wilson<sup>1</sup>, Dr Anita Gatt<sup>1</sup>, Dr Dhafar Al-Bakry<sup>1</sup>, Dr Penny Mainstone<sup>1</sup>, Dr Hannah Hegerty<sup>1</sup>, Dr Shu Wang<sup>1</sup>, Dr Justine Cain<sup>1</sup>

<sup>1</sup>The University Of Queensland, St Lucia, Australia

### Introduction

The University of Queensland (UQ) Doctor of Medicine program has introduced a new curriculum in 2023 with a focus on engaging students in active learning as they are guided to meet the staged learning outcomes for each year and thus progress through the integrated program. As part of this curriculum strategy, UQ medical students will participate in Team-based Learning (TBL) during Year 1 of the program. Each student will be allocated to a small team of 5, within a large TBL group of 60 students and will work collaboratively through structured, interactive TBL sessions twice per week. Inspired by Michaelsen and Sweet's original design, the modified format will incorporate the three key components of TBL, these being individual student preparation, readiness assurance testing and in-class application exercises<sup>1,2</sup>. Student learning will be guided by clinical academic learning facilitators and diverse subject matter experts. The aim of this study is to understand students' experiences of the UQ TBL program.

### Methods

This research project is a post-activity survey design with the survey designed by the researchers to align with the structural components of the TBL sessions. A series of statements will be presented to students and a Likert scale response requested. In addition, qualitative data will be sought through two free text questions relating to strengths of the program and areas for improvement. Descriptive statistics and thematic analysis will be used to analyse the data.

### Results

Student experience data from the first semester of the TBL program will be analysed and presented at ANZAHPE 2023 conference.

### Discussion

Study findings will be discussed at the conference. Conclusions will be drawn regarding the strengths and weaknesses of first offering of the new TBL curriculum from the student perspective. These results will inform iterative quality improvement and future development of this student learning experience.

1. Michaelsen, L.K. and Sweet, M. (2008). The essential elements of team-based learning. *New Directions for Teaching and Learning*, 116: 7-27. <https://doi.org/10.1002/tl.330>
2. Parmelee, D, Michaelsen, LK, Cook, S, Hudes, PD. Team-based learning: A practical guide: AMEE Guide No. 65. *Medical Teacher* 2012;34 e275-287

## The Quality Community of Practice: Deep diving into student experience feedback to catalyse change

Professor Andrew Teodorczuk<sup>1,2,3</sup>, **Dr Asela Olupeliyawa**<sup>2</sup>, Professor Ian Yang<sup>1,2,4</sup>, Dr Chantal Bailey<sup>2</sup>, Dr Julie Ball<sup>2</sup>

<sup>1</sup>Metro North, Brisbane, Australia, <sup>2</sup>Faculty of Medicine, Brisbane, Australia, <sup>3</sup>Griffith University, Southport, Australia, <sup>4</sup>Thoracic Program, Metro North, Brisbane, Australia

### Introduction/Background

Medical Schools, Universities and stakeholders (eg Medical Deans) invest considerable time and effort into capturing student experience feedback with the ambition to quality improve curriculum. However, responses rates are typically low and in the context of generic non course specific questions may have limited relevance to drive valid changes in line with the intent of the survey. Arguably low rates can also occur because students, suffering from survey fatigue, question whether any real improvements come from completion of such feedback. There is also a possibility that sometimes students may use these surveys to vent frustration with the curriculum, in practice and so such approaches can have negative effects of Faculty if not carefully managed

### Aim/Objectives

Within the UQ Medical faculty we developed a “Quality Community of Practice” with membership from staff and students to facilitate taking a deep dive into student experience outcome measures such as SeCAT, MSOD, QILT data. This involved undertaking a thematic analysis using NVivo of the qualitative findings, triangulating by means of focus groups with students, clinical teachers and interns to develop initial action points and then using a Delphi process with key stakeholders to gain consensus on action points.

### Discussion

In this presentation we outline the robust process undertaken at UQ to allow the identification of robust action points to improve student experience at medical school and help prepare students for practice. We will also specifically report on the work readiness principles that we found and illustrate how they have been instrumental in driving further change and innovations.

### Issues/Questions for exploration or Ideas for further discussion

1. What is the relevance and usefulness of the findings from this Quality Improvement process?
2. How sustainable is this approach to improving quality of student experience?



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## **Working with medical students to enhance the pre-clinical medical curriculum**

**Dr Victoria J. Mansour**<sup>1</sup>, Dr Elizabeth D. O'Connor<sup>1</sup>, Dr Kim A. Ramjan<sup>1</sup>, Dr Iman Hegazi<sup>1</sup>

<sup>1</sup>*Western Sydney University, Campbelltown, Australia*

### **Introduction**

The curriculum of a medical program is developed primarily by academic and clinical staff with minimal input from students. Student feedback on the program is usually after completion and utilised by educators to address the gaps between student and teacher expectations. The MD program at Western Sydney University presents an opportunity through the "scholarly project attachment" to have Year 3 and 4 medical students become partners in the co-design of the curriculum with their input extending beyond end-point feedback.

### **Objective**

The Medical education stream provides projects focused on creating curricular materials including problem-based learning case scenarios, formative assessments and/or evaluating curricular design and delivery with focus on the pre-clinical curriculum. This partnership with medical students has been mutually beneficial with the program having detailed review and renewal from the student's perspective to enhance future cohort experience, as well as the student gaining a deeper appreciation of the work behind the scenes. The team would like to share our experiences including what worked for setting up students for success, and the considerations when working with students.

### **Issues/Questions for exploration OR Ideas for further discussion**

We would like to explore how other institutions are implementing strategies to partner with students to enhance their medical curriculum.

## Assessing the impact of lecture embedded animations on medical student learning

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### Introduction

Educational theories such as the cognitive theory of multimedia learning (CTML) and dual coding theory propose that information presented visually and verbally can enhance the learning experience. In this way the technology enabled learning provides a platform for lectures to be delivered with these two criteria in mind. Regardless of the mode of lecture delivery (face to face, live zoom or pre-recorded presentation), the design of the lecture material can be further improved to support student learning, engagement, motivation and/or academic performance.

### Aim

At Western Sydney University, medical students are given pre-recorded lecture videos to cover the content within the pre-clinical years. While this promotes ease of use and flexibility in accessibility to suit an individual student to progress at their own pace, we wanted to explore the impact of short virtual 3D animations embedded within lecture videos on student learning.

### Discussion

Year 1 medical students were asked to complete a survey prior to and post exposure to animation embedded lectures in their gastrointestinal block in 2021/2022. Ongoing preliminary results from pre-survey responses highlighted that students utilise a variety of learning styles, with visual being the most preferred. YouTube was shown to be the largest source of videos to support their learning, however, only 50% of students check the credibility of videos. Post-survey responses indicated that the animations supported engagement and motivation to learn the content, with 100% of student responses indicating preferring lecture content with animations. Preliminary analysis of exam outcomes for 2021 has shown better performance on questions based on lecture content with embedded animations. The evidence gathered thus far shows the potential for the inclusion of animations within lecture material to be a beneficial tool for educators to enhance the student learning experience.

## COVID-19 as a Multiwave Pandemic: Awareness and Preparedness among Malaysian Medical Students to Recurrence of Disease

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### Introduction

Medical school teaching and training has been impacted significantly from the COVID-19 pandemic leading to steep adaptation to the crisis. Here, the levels of COVID-19 awareness and knowledge on self-protection against COVID-19 amongst medical students of a tertiary education hybrid-COVID center, and roles of medical students in pandemic relief efforts were analysed.

### Methods

Medical students (n=759) from Universiti Malaya, were administered a prospective online survey amidst a reemergence of COVID-19 cases that led to a second nationwide lockdown. All students were confined to off-campus online learning. Demographic data together with opinions of the participants' awareness and preparedness towards facing the pandemic were recorded. Descriptive and chi-square analysis of data were performed after eliminating missing datasets. A p-value of <0.05 considered significant.

### Results

There were 81.2% (616/759) respondents, of which 250 (40.6%) and 366 (59.4%) were males and females respectively. Most students were well-informed about the pandemic (87.5%; n=539), having neutral responses (44.8%) about personal protective equipment (PPE) provided. Majority agreed that COVID-19 prevention strategies were well adhered to in the hospital (61.8%, n=381). 22 students were actively involved in COVID-19 related projects (3.6%), despite many feeling ready to serve as frontliners (77.4%; n=477) and agreeing that authorities should encourage their participation in COVID-related activities (58.4%; n=360). Ethnicity, year of study and average monthly household income were the only significant factors towards opinions about COVID-19 in relation to (i) availability of information, (ii) adequacy of personal protection against COVID-19 and (iii) student participation in pandemic related activities.

### Discussion

Ethnicity, socioeconomic status, and year of study could potentially affect medical students' adherence and interpretation of COVID-19 protocols besides their response as a medical student towards the pandemic. Despite low student participation in COVID-19 related activities, students wish to actively contribute towards pandemic relief efforts, electing to serve on the front-lines voluntarily.

## Examining undergraduate nursing students' self-efficacy in clinical teaching: Validating the Self-Efficacy in Clinical Teaching (SECT) instrument.

**Ms. Beth Pierce**<sup>1</sup>, Associate Professor Jeanne Allen<sup>2</sup>, Professor Thea van de Mortel<sup>1</sup>  
<sup>1</sup>*School of Nursing and Midwifery, Griffith University, , Australia*, <sup>2</sup>*School of Education and Professional Studies, Griffith University, , Australia*

### Introduction

Effective intra/interprofessional clinical teaching by nurses is known to contribute to their professionalism, enhance other health professionals' knowledge and improve overall healthcare quality. Despite this, graduating nurses report their clinical teaching capabilities to be underdeveloped compared to other professional nursing competencies. Research suggests that to enhance their clinical teaching capabilities, nursing students must develop their self-efficacy beliefs. In Australia, little is known about nursing students' self-efficacy in clinical teaching. This research aimed to examine nursing students' self-efficacy in clinical teaching through validation of McArthur's (2016) Self-Efficacy in Clinical Teaching (SECT) instrument. Developed for general practitioners, the SECT includes three domains: *customising teaching to learner needs*, *teaching prowess* and *impact on learner's development*.

### Methods

Content validity of the SECT was established by four nursing education experts. Third-year nursing students piloted the SECT, providing feedback on question wording and order to determine face validity. The modified SECT was administered by paper to a convenience sample of undergraduate nursing students at a Southeast Queensland university. Analysis of SECT total scores and domain scores was undertaken using SPSS.

### Results

Preliminary results indicate participants (N=321) were predominantly female, <24 years, enrolled full-time and in their second (n=185) or final year (n=136) of study. The SECT domain with the highest mean score was *teaching prowess*; the lowest was *impact on learner's development*. The mean SECT score was significantly higher for final-year students compared to second-year students ( $p < .001$ ). Cronbach's alpha for each domain ranged from 0.946-0.95 and was 0.978 for the total scale.

### Discussion

The SECT is a valid instrument for administration in undergraduate nursing student populations. Self-efficacy in clinical teaching appears to develop with year-level experience, however further research is required to understand the influences on nursing students' self-efficacy in clinical teaching, particularly related to perceptions of their teaching impact on others.

### References

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## "They are excited when they see their name in print": Trends in publication rates from medical student research projects at UNSW.

Mr Harry Dinh<sup>1</sup>, **Dr Kerry Uebel**<sup>1</sup>, Dr Maha Pervaz Iqbal<sup>2,3</sup>, Ms Ari Grant<sup>4</sup>, Professor Boaz Shulruf<sup>5</sup>, A/Professor Sally Nathan<sup>1</sup>, Ms Khanh Vo<sup>5</sup>, A/Professor Greg Smith<sup>6</sup>, Dr Jane Carland<sup>7,8</sup>

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### Introduction

To promote evidence-based practice, international best practice in medical education is to offer students opportunities to undertake their own research projects. One important measure of the success of these programmes is publication of student research findings. It has been reported internationally that an average of 30% of medical student research projects result in peer-reviewed publications. In 2006, UNSW Medicine implemented a mandatory research program in the 4<sup>th</sup> year of the undergraduate medical education program. This study aimed to document changes in student publication rates over time and explore student and supervisor experiences with the publication process.

### Methods

Mixed methods were used; a retrospective audit of student publications from the 2007, 2011, and 2015 cohorts and semi-structured interviews conducted with undergraduate students (n=11), medical graduates (n=14), and supervisors (n=25) and analysed using an inductive thematic approach.

### Results

Student publication rates increased significantly (P=0.002) from 28% in 2007 to 50.2% in 2015. Students were first author in almost half of all publications. Students reported personal affirmation and development of research skills from publishing their research findings, while graduates noted improved career opportunities. Supervisors expected students to publish but identified the time to publication and student motivation as key factors in achieving publication(s).

### Discussion

A mandatory research program in an undergraduate medical programme providing students with a dedicated block of time, the opportunity to negotiate their own project and the mentorship of experienced supervisors can achieve high publication rates. Achieving a publication provided students with critical research training and supported career development. Time following the research year to develop and submit the manuscript, and faculty and supervisor support, are key to a successful publication. Given the importance of the supervisor's role, development programs and support for supervisors to confidently guide and mentor students is required.

## On-campus factors that influence the development of professional subjectivity in individuals who study physiotherapy

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### Introduction

Given the significant societal and personal investment involved, understanding individuals' motivations for studying physiotherapy, their effective preparation and retention is important. Central here is how they engage with and identify as physiotherapists: i.e., their subjectivity. Understanding how this subjectivity develops, necessitates elaborating how individuals engage in their study as this illuminates the complex of factors shaping that decision-making.

### Aim:

To identify the complex of factors influencing individuals' engagement in physiotherapy study.

### Methods

Retrospective interviews with 9 physiotherapists and 15 final-year physiotherapy students subjected to narrative analysis.

### Results

Informants (n=21) reported on-campus programs with practical classes preparing them for placements positively impacted their engagement and development. Informants (n=20) reported experiencing the scope of physiotherapy assisted their engagement by revealing unknown aspects of practice. They (n=19) also reported being more likely to engage in content when it aligned directly with placements, and that a strong community of peers was critical to their productive engagement and development (n=18).

### Discussion

Informants often had a background in sport and described themselves as individuals who enjoyed applying their knowledge practically. Hence, they were attracted to an educational model featuring practical activities, but which were challenging intellectually. Informants claimed activities directly preparing them for or aligning with clinical placement had a significant impact on their development, as they were seen as closer to being a physiotherapist. Informants stated a strong community of peers had assisted them to be better students and, therefore, nascent physiotherapists. Especially when classes required students to collaborate and/or were challenged in ways, pressing them to understand and critically appraise physiotherapy work. The inference is that an on-campus program that is practical, aligns and prepares students for clinical placement, exposes students to the scope of physiotherapy practice and promotes a strong community of peers can be influential in developing their professional subjectivity.

## Speaking up in healthcare - wading through data using narratives and a realist lens

**Philippa M. Friary**<sup>1</sup>, Professor Suzanne C. Purdy<sup>1</sup>, Assoc Professor Mark Barrow<sup>1</sup>, Emeritus Professor Lindy McAllister<sup>2</sup>, Dr Rachelle Martin<sup>3</sup>

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Poor skills in speaking up impact team functioning, resulting in reduced work satisfaction and negatively impacting patient care and safety. We need to learn more about the speaking up behavior of allied health new graduates in healthcare. A better understanding of what activates recent graduates to speak up effectively will enable tertiary and healthcare institutions to create systems to enhance these skills for this healthcare sector. This paper will describe how we used realist-informed methods and narrative analysis to understand this phenomenon.

We are in the final phase of a two-phase realist informed PhD study exploring speaking up in allied health new graduates. In phase two, we interviewed 10 new graduates who were working within a healthcare setting within a large New Zealand city. These new graduates engaged in semi-structured interviews three times over one year, at four-month intervals.

Analysis involved coding using context-mechanism-outcome configurations, a method used in realist research to refine and refute a developing program theory about what influences new graduates to speak up and how this changes over time. We then used Labov's narrative model to re-story a series of narratives from the interviews under different themes. These themes typify five main trajectories related to latent speaking up behaviours – some encouraging them, others impeding them. As well as sharing these narratives, we will discuss the processes employed and consider their strengths as a research tool in this area.

## Supporting professional identity formation in research-intensive periods of pre-qualification health professions programs

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### Introduction/Background

Many pre-qualification health professional programs seek to provide students with flexible opportunities to extend their interests through elective, specific curricular tracks and intercalated pathways (Barrett et al. 2022). MD-PhD, MD-Masters, research-intensive subjects and electives are described for students whose interests align with research scholarship. Collectively referred to as 'research-intensive periods' herein, these curricular options aim to develop high level research skills and potentially facilitate the pathway for future generations of clinician-scientists.

Supporting the professional identity development of these clinicians-come-scientists has proven challenging during these research-intensive periods. When the focus is singularly on clinical practice, curriculum initiatives to support development of *clinical* professional identities are commonplace. However, when the focus of learning shifts, the same cannot be said for *scientist (or researcher)* identities. In the pre-qualification space where students are still forging their identities, how can programs best support *clinician* identity formation whilst also developing *scientist/researcher* identities? And how might courses, who offer these research-intensive options, best support learners to navigate this duality?

This PeArLS looks to the wisdom of the ANZAHPE community to explore ways in which this problem has been tackled in other health professions programs.

### Purpose/Objectives

The purpose of this session is to explore participants' experiences in supporting students' clinician: scientist identity formation in the context of research-intensive periods within health professions programs. Drawing on the discussions, this session will also highlight the features of curriculum initiatives that already exist.

### Issues/Questions for exploration OR Ideas for discussion

What are your experiences of research-intensive periods in pre-qualification health professions programs (e.g. research electives, MD-PhDs)?

What has been the influence of this research-intensive period on developing clinician professional identities? And scientist/researcher professional identities?

How has the researcher/scientist professional identity been supported in your program?

Barrett, A., Cheshire, L., & Woodward-Kron, R. (2022). Flexibility in primary medical programs: A scoping review. *Focus on Health Professional Education: A Multi-Professional Journal*, 23(4), 16–34. <https://doi.org/10.11157/fohpe.v23i4.579>



## Seizing the opportunity to address healthcare workforce shortages: Portraits of doctors choosing anatomical pathology training and suggestions for targeted recruitment

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### Introduction

Anatomical pathology (AP) is a medical specialty devoted to tissue-based diagnosis of disease. The field faces a current and predicted workforce shortage, likely to increase diagnostic wait times and delay patient access to urgent treatment. Thus, increasing recruitment of doctors suited to AP is of priority. To do this, understanding the doctors' decision-making process when choosing AP may be of value, but this has not been explored in depth. This study aims to answer the research question: *Why, and how do doctors decide to pursue AP training?*

### Methods

Following institutional ethics approval, a qualitative research approach was undertaken. Narrative interviews were conducted with junior doctors, AP registrars, and AP consultants. Transcribed interviews were re-written into stories using a problem-solution 'restorying' protocol (Ollerenshaw and Creswell, 2002), which were refined through participant consultation. Narrative synthesis of stories identified the reasons and chronology of events involved in choosing AP (i.e., participant portraits). Thematic framework analysis of stories were used to identify themes, and further explore theme relationships.

### Results

Three portraits were identified: (1) the *die-hard* (a doctor who chooses to pursue AP upon their first exposure), (2) the *negotiator* (a doctor who chooses to pursue AP after comparing it to one or more non-pathology specialties), and (3) the *migrant* (a doctor who chooses to pursue AP to 'escape' a non-pathology specialty). Within the *negotiator* and *migrant* portraits, doctors' decision-making processes occurred during their junior doctor years. Within the *die-hard* portrait, doctors' decision-making process occurred before and during medical school.

### Discussion

These findings suggest a potential avenue for addressing the workforce shortage is to target AP recruitment efforts towards doctors whose narratives contain *negotiator* or *migrant* portrait elements, perhaps by increasing AP educational opportunities available to junior doctors. This may support the field to target more doctors to happily choose AP training, facilitating recruitment into the field.

### References

Ollerenshaw JA, Creswell JW. 2002. Narrative research: A comparison of two restorying data analysis approaches. *Qual Inq* 8:329-347.

## Medical Professionalism – The Synergy of Self and Society

**Dr Lorna Davin**<sup>1</sup>

<sup>1</sup>*University of Notre Dame Australia, Fremantle, Australia*

### **Introduction/Background**

A constant challenge in medical education and curriculum delivery continues to be our quest to define professionalism, often defaulting to an abstract concept divorced from the reality of practice.

This reductionist reframing leads to discrete, fragmented, measurable chunks being taught and assessed offering little guidance to students in navigating their evolving identity. This approach is heavily dependent on the trope of the 'good' doctor, a binary construct often bearing little relevance to the complex messiness of clinical practice thereby creating a less meaningful learning experience for students.

### **Aim/Objectives**

This paper considers contemporary tropes, embedded within the challenging dichotomy of self and society, exploring the contradictions between what is taught, and what is learned, as medical students explore the evolving definition of what it means to be a good doctor and practice authentically.

### **Discussion**

The system and culture our students traverse, sitting on the periphery of practice, clearly illustrates the contradictions in what they aspire to be and what they fear they will become ...

We continue to challenge students' professional misconduct, from the minor to the major, yet medical students and junior doctors are confronted by a whole range of unprofessional behaviours, which go unaddressed in the clinical setting.

As medical educators we need to provide real world examples which address the formal, informal, hidden and null curriculum providing opportunities to unpack professional and unprofessional behaviour and the slippery slope we all tread.

### **Issues/Questions for exploration OR Ideas for further discussion**

This presentation, drawn from contemporary literature and research, and grounded in patient-centred care, considers strategies which support identity formation tethered to societal and cultural expectations while aligning with individual agency.

## **Opinions towards Medical Students' Self-Care and Substance Use Dilemmas—A Future Concern despite a Positive Generational Effect?**

**A/prof Paul Mcgurgan<sup>1</sup>**

<sup>1</sup>*Uwa Medical School, Perth, Australia*

### **Introduction**

The aims of this study were to examine the nature and scale of factors which may influence opinions around medical student self-care/substance use related behaviours as a means of providing insights into how future doctors view these issues, compared to Australian doctors and members of the public; the implications of this for future health care professionals, and those who may be involved in their care.

### **Methods**

National, multicenter, prospective, on-line cross-sectional survey methodology using hypothetical scenarios to three cohorts- Australian medical students, medical doctors, and the public. Participants' responses were compared for the different contextual variables within the scenarios and the participants' demographic characteristics.

### **Results**

In total 2602 medical students, 809 doctors and 503 members of the public participated.

The results demonstrate that opinions related to alcohol and substance misuse by medical students are influenced by a variety of factors, some of which are inter-related:

- Medical students have significantly different opinions towards alcohol/substance use than doctors or members of the public;
- Student respondents in the latter stages of their medical course were significantly more likely to consider either stimulant drug use or taking cannabis as being acceptable;
- In comparison with other international studies, Australian medical students were more likely to consider it acceptable to use stimulant drugs to assist with study.

### **Discussion and Conclusion**

Although medical students have similar opinions on self-care dilemmas as members of the public/qualified doctors, they differ significantly in their opinions towards alcohol/substance use when compared to these other groups.

As future health care providers with known risk factors for burnout and psychological distress, medical students' views on the acceptability for cannabis to help manage anxiety, and use of prescription-only drugs to help study are a concern. However, if medical student's opinions on alcohol persist, the most prevalent current substance addiction amongst doctors may decrease.

## Breaking down the silo mentality: Participation in Student Workshops in Interprofessional Education during clinical placement

**Ms Christine O'Connell<sup>1</sup>**, Lin Wegener<sup>1</sup>, Nicola Cotter<sup>1</sup>, Neil Cottrell<sup>2</sup>, Dr Anthony Fallon<sup>1,3</sup>  
<sup>1</sup>*Southern Queensland Rural Health, Toowoomba, Australia*, <sup>2</sup>*The University of Queensland, Brisbane, Australia*, <sup>3</sup>*The University of Southern Queensland, Toowoomba, Australia*

### Introduction

Interprofessional education (IPE) occurs “when students from two or more professions learn about, from, and with each other”.<sup>1</sup> IPE is crucial for health professional students to develop behaviours that are collaborative, preparing them to practice within interprofessional rural and remote workforce environments and cultivate a sustainable health workforce in these regions. Southern Queensland Rural Health (SQRH), a University Department of Rural Health, developed an interprofessional workshop, covering the six competency domains identified by the Canadian Interprofessional Health Collaborative (CIHC).<sup>2</sup> The workshop was presented in either a one-day format or three shorter sessions, conducted over consecutive weeks for health students participating in rural and remote clinical placements. This study aimed to determine the impact of these workshops upon the interprofessional competencies of participating students.

### Methods

Health students on clinical placement in the Darling Downs or South West region of Queensland, who participated in the SQRH interprofessional workshops during their placement, completed an online survey. This consisted of demographic data and the Interprofessional Collaborative Competencies Attainment Survey (ICCAS), a validated retrospective pre-post self-reporting tool, that measures changes in behaviours in relation to the CIHC competency domains.

### Results

Between 2020 and 2022, 163 participants provided completed responses to the survey. Significant large positive changes in all competency domains were observed after workshop participation, with greater improvements in Collaboration, Roles and Responsibilities, and Patient-Centred Care domains. Students with previous exposure to IPE had higher pre-workshop ICCAS scores than those who had not previously been exposed to IPE. Feedback was generally positive, with minor improvements suggested.

### Discussion

Providing IPE to health students on rural clinical placement helps consolidate their interprofessional skill development and positively influences behaviours associated with interprofessional practice. Participation in IPE workshops of this type should be open to students at all levels of study, even if previously exposed to IPE opportunities.

### References

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## Systems Thinking to Break Down Interprofessional Siloes: preliminary outcomes of piloting a serious game intervention.

**Ms Katherine Delany**<sup>1</sup>, Mrs Angela Wood<sup>1</sup>, Ms Rachel Phillips<sup>1</sup>, Dr Nigel Fellows<sup>2</sup>, Ms Bernadette Thomson<sup>3</sup>, Dr Hannah Mayr<sup>4</sup>, Dr Susan Stoikov<sup>4</sup>

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**Introduction:** Healthcare professionals continue to predominately train and work in silos, impacting how interprofessional teams' function in the workplace. Persistent challenges embedding a culture of interprofessional education (IPE) and interprofessional collaboration (IPC) into clinical practice demands consideration of novel interventions to support behaviour change beyond didactic education. Use of low-fidelity simulation games may provide a solution.

**Aim:** To evaluate the impact of an experiential interprofessional education intervention ("Friday Night at the ER©" [FNER]) across clinical care teams within a large metropolitan health service.

**Methods:** To introduce principles of IPEC, FNER was piloted with established interprofessional clinical teams in 2.5 to 3-hour workshops. Consenting participants provided demographic data and completed the Systems Thinking Scale (STS), Attitudes Towards Interprofessional Health Care Teams (ATIHCT) and Adapted Interprofessional Collaboration Scale (ICS) immediately prior to the workshop, and with a 6-8 week follow up. Available pre- and post-intervention data was compared using parametric (STS) and non-parametric tests (ATIHCT and ICS).

**Results:** A total of 211 staff, from 11 teams participated in Friday Night at the ER sessions between August 2022 and January 2023. One hundred and sixty-two eligible staff completed the pre-evaluation survey and 50 post surveys have been completed to date. Participants were from Medicine (n=5), Nursing (n=14), and the Allied Health Professions (n=26). Preliminary data demonstrates a significant improvement in participant's scores on the STS (mean change 61±8 to 65±7, p <0.001), ten of the 14 subscales of the ATIHCT, and one subscale of the Adapted ICS. Data collection is ongoing.

**Discussion:** Serious games are an emerging pedagogy within the education of health professionals, with this simulation demonstrating a positive shift in attitudes towards IPE, IPC and systems thinking. The results will inform ongoing IPC implementation.

## **Exploring Collaboration in Clinical Placements across the Faculty of Medicine Dentistry and Health Sciences at The University of Melbourne - the SPAG contribution**

**A/Professor Anthea Cochrane<sup>1</sup>**

*<sup>1</sup>The University Of Melbourne, Parkville, Australia*

The principles of clinical teaching and supervision across Medicine, Dentistry and Health Sciences have much in common. Like many Universities The University of Melbourne has tended to work in SILOed Schools or Departments when considering clinical placements and the expertise and resources underpinning Clinical Placements have not been well shared. The Student Placement Advisory Group (SPAG) was renewed in 2022 to reinvigorate and encourage knowledge sharing and opportunities across Departments and Schools. This presentation will describe how SPAG has gone about this and the early learnings a year into their existence. Interestingly COVID and risk analysis has helped this process and this will be discussed.

Workplace Teaching

Inter-professional education and practice, WIL, Clinical placements, Clinical supervision

## Engaging students to co-design and deliver a program to support the development of interprofessional practice

**Dr Claudia Ng<sup>1</sup>**, Dr Aishah Moore<sup>1</sup>, Dr Samuel Bulford<sup>1</sup>, Mr David Donato<sup>2</sup>, Mr Sidney Fleggo<sup>1</sup>, Ms Katarina Needham<sup>1</sup>

<sup>1</sup>University Of Notre Dame, School Of Medicine, Sydney, , Australia, <sup>2</sup>School of Paramedicine, University of Tasmania, Sydney,

Despite the uptake of Students as Partners (SaP) pedagogy (1) in other tertiary disciplines, medical students are reported to be under-engaged in content development and curriculum design, possibly due to a lack of opportunity and an overlying hierarchical culture in medicine which tends to devalue the relatively inexperienced student voice (2). Collaborations between faculty and students in co-designing and delivering IPE programs are uncommon even though students are recognised as essential stakeholders in IPE.

Rural Trauma Week is a week-long interprofessional activity between medicine and paramedicine students across two tertiary institutions. The program involves online lectures, case-based discussions, and face to face simulation scenarios in interprofessional teams. The most recent iteration of the program engaged student partners in the co-design and development of the program.

This presentation will describe the use of SaP pedagogy in the co-design and delivery of an IPE program in a collaboration between The University of Notre Dame (School of Medicine, Sydney Campus) and University of Tasmania (School of Paramedicine, Sydney). Experiences of the perceived benefits and barriers of engaging students in IPE design and delivery are explored from the perspectives of the educators and student partners. We consider whether modelling effective educational partnerships can prime students for future collaborative practice and explore how health faculties can engage students as effective partners in the development of future IPE activities.

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2. Pereira JV-B, Vassil JC, Thompson RE. Students as partners in an Australian medical program: Impact on student partners and teachers. *International Journal for Students as Partners*. 2020;4(2):110-21.

## Allied Health Professional training needs: are we all cut from the same cloth?

**Chanelle Louwen**<sup>1</sup>, Mr James Bartholomew<sup>2</sup>, Mrs Vanessa Atterton-Evans<sup>2</sup>, Kirby Adams<sup>1</sup>

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### Introduction

Targeted education and training is essential in ensuring a workforce is equipped with skills and capabilities to deliver high quality care. Utilisation of evidence-based training needs analyses is a strategic and efficient way to forming education and training initiatives. The project aimed to identify the training needs across an allied health workforce utilising a validated and reliable tool, comparing intra- and inter- professional identified importance vs performance (ii) years of experience and (iii) health professional level.

### Methods

Training needs were measured using an adapted version of The Hennessy-Hicks Training Needs Assessment Questionnaire (Hennessy & Hicks, 2011). The survey was open for 4-weeks (July 2022) to all allied health professionals (Audiologists, Dietitians, Occupational Therapists, Physiotherapists, Psychologists, Social Workers, and Speech Pathologists). Training 'gaps' and subsequent priorities were identified by how the respondent perceived a task 'importance' compared to 'performance', with larger variance indicating a greater training need (defined as a critical index factor of 0.8). Results were averaged for each individual profession and then compared across professions and by professional level.

### Results

83 responses (57% of the workforce) were received, ranging from HP3 – HP7 clinicians and representation from all professional groups. Across professions, six tasks with a critical factor of >0.8 were identified, all in the category of research. Individual professional analysis identified heterogeneity with lowest number of two (Social Work), and highest 18 (Audiology). Health Professional level had a positive association with less identified training needs.

### Discussion

Education and Training is a key strategy to ensure a highly skilled, diverse allied health workforce that exemplifies a high quality, evidence-based, patient centred approach. Understanding clinicians training needs, and whether these are intra- or inter- professional can better inform and prioritise Divisional education initiatives and service priorities. Further research is warranted in longitudinal monitoring, and comparison with other allied health services to identify local culture or professional influences of results.

### References

Hennessy, D.A. and Hicks, C.M. (2011) Hennessy-Hicks Training Needs Analysis (TNA) questionnaire and manual. Manual. World Health Organisation



## Evaluation of a short course in practical medical genomics for healthcare professionals

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**Introduction:** Incorporating genomic information in disease diagnosis and management is becoming an integral part of healthcare delivery. However, healthcare professionals both in Australia and globally have reported low confidence, knowledge, and skills in this area. A short continuing professional development course in practical medical genomics was developed at UNSW Sydney to address this growing area of need. The course has been offered twice to date to a total of 63 participants.

**Aim:** To evaluate the impact of the short course on participants' perceived competence and confidence in incorporating genomic medicine into their clinical practice.

**Methods:** The Capability, Opportunity and Motivation Model for Behaviour change (COM-B) underpinned the design and evaluation of the course. Participants could consent to providing researchers with access to their course activities, including an anonymous reflective pre- and post-course survey and their assessed self-development action plan. The surveys included questions on perceived competence in relation to the course learning outcomes and perceived confidence in undertaking professional activities in genomic medicine. The surveys were constructed using existing evaluation instruments.

**Results:** Of the course participants who consented to research, 100% reported improvement in their understanding of topics covered relating to various aspects of genomic medicine. Participants' confidence in developing evidence-based patient and family-centred care plans, and in peer and patient genomic communication increased by 46% and 51% respectively. Perceived preparedness to incorporate genomics into practice increased from 23% to 79% at course completion.

**Discussion:** Participants' perceived confidence and competence in practicing genomic medicine improved across the cohort. Our analysis also identified areas where further training is required together with barriers to practicing genomic medicine that were identified by the participants in their self-development action plans. Data suggests that short courses could be an effective component of continuing professional development to support a competent and confident healthcare workforce capable of incorporating genomic medicine into routine practice.

## **Project based learning and student outcomes in health professions education: A literature review**

**Associate Professor Melanie Aley**<sup>1</sup>, Ms Jordana Wang<sup>1</sup>, Ms Regina Lee<sup>1</sup>, Ms Joy Wang<sup>1</sup>, Ms Sophia Zheng<sup>1</sup>

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### **Introduction**

Project-based learning (PjBL) is an instructional method designed to help students cultivate skills transferable beyond traditional education systems focused on didactic learning. This literature review aims to critically summarise existing literature on PjBL and its value in tertiary healthcare curricula, especially with regards to cognitive, affective and behavioural student outcomes. In doing so, this study seeks to inform future pedagogical approaches that nurture skills desirable in professional settings, particularly within the context of dentistry.

### **Methods**

An electronic search for relevant English journal articles was conducted using four databases; EBSCOhost, Medline, Web of Science and Scopus. Studies which pre-date 2012, fail to or incorrectly define PjBL and/or did not explore its effect on student outcomes through original research were excluded.

### **Results**

By applying theory to practice in a real-world setting, PjBL has been shown to not only enhance course-based knowledge but also successfully facilitate cognitive strategies in critical analysis and problem solving. The construction of tangible artifacts as part of PjBL projects also stimulates engagement and interest in the subject area amongst students and nurtures a greater sense of fulfillment from the learning process. Consequently, students experience increased confidence in operating autonomously in professional settings and are empowered to engage in healthcare advocacy. Furthermore, the role of faculty supervisors as facilitators rather than instructors also promotes interprofessional collaboration amongst students, thereby fostering skills in teamwork competencies, leadership and communication. The benefits of integrating PjBL into healthcare professions curricula is historically underexplored with most existing literature focusing on K-12 education or non-health disciplines.

### **Discussion**

Evidence presented in this review strongly supports the favourable effect of PjBL on health profession student outcomes, with the potential to outperform traditional pedagogies. Future research should consider the implementation of PjBL across diverse disciplines with a focus on exploring its long-term effects.

## From Complex Understanding to Complex Learning- Adopting 4C/ID Model for Teaching And Learning Of Pharmacology Threshold Concepts

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### Introduction

Pharmacology education faces substantial difficulty in transforming students' knowledge, skills, and attitudes into the competency required for complex tasks like rational prescribing. We designed a blueprint for pharmacology education to assist students in grasping complex concepts by integrating their knowledge, skills, and attitudes. Our approach is informed by the utilization of a web of concepts, including the pivotal threshold concepts of pharmacology that shape learners' ways of thinking and practising.

### Methods

We employed the 4C/ID paradigm, which integrates knowledge, skill, and attitude into a holistic, task-centric framework. Our blueprint for the exemplar pharmacology "Antimicrobial Module" incorporates four components as specified by the model: a) Real-life based tasks with varying degrees of complexity from pre-clinical to clinical years, b) Supportive information at the task level, including general information, modelling examples, and case studies, c) Provision of procedural information, and d) Part-task practices to help develop high-level automaticity of recurrent skills.

### Results

The module preparation commenced with a meticulously crafted web of concepts and a well-organized hierarchy of prescription writing. The hierarchy, outlining both routine and non-routine sub-skills crucial for prescription writing, directed the formulation and integration of performance objectives with relevant concepts underlying those skills. Having established the performance objectives, we crafted the "Antimicrobial Module" to facilitate students' understanding of the identified threshold concepts through a holistic task-based approach guided by the 4C/ID principles.

### Discussion

A comprehensive approach to teaching threshold concepts offers a paradigm shift for overcoming procedural threshold in pharmacotherapy. The learners are challenged with whole-task activities and are assisted in transferring their learning to real-world situations through mental models, procedural knowledge, and repetitive practice. We aim to adopt a blended learning approach for this module, using proven strategies in other domains. This module provides a promising solution to current thresholds that may impact learners' ways of thinking and practicing in pharmacology. eractive Media & Learning, University of Technology Sydney, Sydney, Australia

## Experience-led learning, and the experience of teaching experience-led learning

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### **Introduction/methods/results**

Following an extensive qualitative evaluation of the Rural Stream of the Doctor of Medicine (MDRS) delivered through Flinders University in South Australia, clinical educators teaching into the program have been developing new teaching methods based on the educational principle of 'experience-led learning' (ELL), in which the rich experiences of students on longitudinal integrated curriculum (LIC) are foregrounded as the starting place for academically elaborating clinical skills and medical knowledge. The basic framework for ELL is: start with people's actual experiences; anchor to relevant frameworks; elaborate with diverse contexts and perspectives; and identify new and needed skills and knowledge.

### **Discussion**

Questions we can ask about this might include: *What kinds of experiences present as high-value for learning? What is it like to teach from an 'open slate', not knowing what students will share? What ethical and supports are needed?*

This presentation will share:

1. the theoretical framework for ELL and how it was arrived at;
2. the kinds of ELL teaching practices clinical educators are employing in the academic tutorial setting;
3. how educators are leading their own 'experience-led' shifts to established teaching practices;
4. initial insights from educators' experiences implementing ELL, including the kind of experiences students are sharing, and how these experiences map to the Australian Medical Council's graduate outcome statements;
5. implications for evaluating the effectiveness of ELL for clinical learning.

## **Subject matter experts' experiences as contributors to a new Team-Based Learning curriculum in a large Australian medical school.**

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<sup>1</sup>*The University Of Queensland, St Lucia , Australia*

### **Introduction**

In a move away from Case-Based Learning, Year 1 students in the re-visioned Doctor of Medicine (MD) program at The University of Queensland (UQ) will participate in twice weekly Team-Based Learning (TBL) sessions. An essential component of UQ TBL design is involvement of Subject Matter Experts (SMEs) from a range of disciplines including clinical medicine, public health and ethics. These nationally and internationally recognized experts will co-facilitate TBL sessions with UQ academic staff and provide immediate feedback to students aiming to enhance content learning and retention, and positively impact on team development<sup>1</sup>. It is hoped that their involvement in TBL will promote early connections between students and SMEs, as an increased sense of belonging to the medical school and the medical profession is a key outcome. The aim of this study is to explore the Subject Matter Experts' experiences of the UQ TBL program, including their perception of its impact on students' acquisition of foundational knowledge and skills.

### **Methods**

Post-activity survey design methodology has been employed for this study. The online survey was designed by the researchers and comprises a series of statements requiring Likert scale responses and free text comments providing the opportunity for SMEs to give qualitative feedback on their TBL experiences. Descriptive statistics and thematic analysis will be used to analyse the data.

### **Results**

Subject matter expert experience data from the first semester of the UQ TBL program will be analysed and presented at ANZAHPE 2023 conference.

### **Discussion**

Preliminary results will be presented at the ANZAPHE 2023 Conference. We believe the SME experience will vary depending on a range of factors including prior teaching experience, personal expectations, understanding of TBL pedagogy and their ability to share knowledge at a foundational level whilst meeting diverse student expectations. These results will inform iterative quality improvement and future curriculum development.

- Michaelsen, L.K. & Sweet, M. The essential elements of team-based learning. *New Directions for Teaching and Learning* 2008;116: 7-27.