



# Pre-vocational Education Committee for Surgery (PECS). Cultivating a sustainable, committed community and a culture of surgical education.

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## Abstract

The journey to a surgical career can be unclear and inconsistent across institutions. To address this, our healthcare institution established the Pre-vocational Educational Committee for Surgery (PECS), led by junior surgical RMOs and registrars, in collaboration with senior surgeons and the medical education team. PECS provides mentorship and structured support for junior doctors' surgical skills education. Operating in a circular structure, PECS organizes bi-weekly education sessions focusing on suturing, laparoscopic skills, and endoscopy principles. These sessions emphasize informal, peer-led learning and culminate in specialist presentations. Despite logistical challenges, such as securing teaching time and space, the collaborative network has proven beneficial. Establishing such a committee is recommended for sustainable surgical education

## Introduction

- A career in surgery often lacks a clear roadmap.
- Beyond the structured Surgical Education and Training (SET) program, surgical education is variable and inconsistent (1,2).
- Our healthcare institution has established a Pre-vocational Educational Committee for Surgery (PECS), led by junior surgical Resident Medical Officers (RMOs) and registrars, collaborating with senior surgeons, nurse practitioners and the wider medical education team.
- This committee provides mentorship, structure, and support for ongoing surgical skills education of junior doctors.

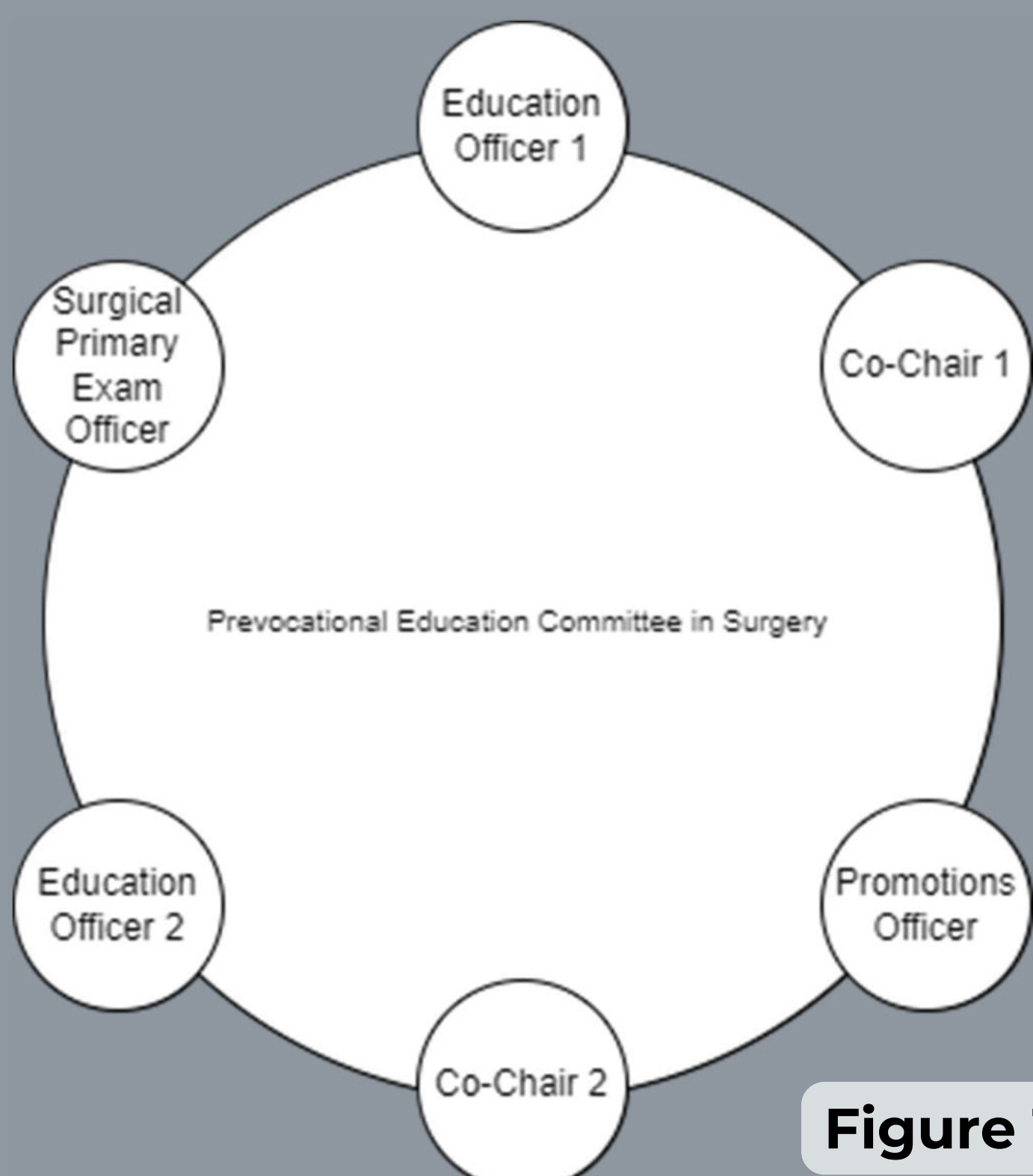


Figure 1: Circular structure of PECS.



Figure 2: Fortnightly suturing and RMO education

## References:

1. Pollett, William G., and Bruce P. Waxman. "Postgraduate Surgical Education and Training in Canada and Australia: Each May Benefit from the Other's Experiences." ANZ Journal of Surgery 82, no. 9 (September 2012): 581-87. <https://doi.org/10.1111/j.1445-2197.2012.06172.x>.
2. Dent, Andrew W, Brendan Crotty, Helen L Cuddihy, Glenn C Duns, Joan Benjamin, Carol A Jordon, Jacqueline F Satchell, Stephen Farish, Tracey J Weiland, and Brian C Jolly. "Learning Opportunities for Australian Pre-vocational Hospital Doctors: Exposure, Perceived Quality and Desired Methods of Learning." Medical Journal of Australia 184, no. 9 (May 2006): 436-40. <https://doi.org/10.5694/j.1326-5377.2006.tb00314.x>.
3. Harvin, Nancy Kymn Rutigliano, and Michael D. Phillips. "Circular Leadership: Nurturing the Human Spirit to Secure Desired Futures." In Advances in Higher Education and Professional Development, edited by Viktor Wang, 203-28. IGI Global, 2020. <https://doi.org/10.4018/978-1-7998-4141-8.ch011>.

SESSION DATE	PECS action required	PRESENTER CONFIRMED	TOPIC	SPECIALITY	CONFIRMATION STATUS
16/02/24	Nil	18/1/2024 22/01/2024	Blood product updates Paeds fasting times audit update	Clinical Nurse Consultant Anaesthetics	18/01/2024 23/01/2024
01/03/24	Nil	22/01/2024	Peri-op pain management	Anaesthetics	21/01/2024
15/03/24	Nil	18/1/2024	Appropriate antibiotics use in perioperative setting	Infectious Disease	21/01/2024
29/03/24	Public Holiday				
12/04/24	Confirmed	2/02/2024	Perioperative management	Anaesthetics	2/2/2024 @ Surg meeting
26/04/24	Confirmed	2/02/2024	Hernias	Gen Surg	2/2/2024 @ Surg meeting
26/04/24	Public Holiday				
10/05/24	Confirmed	07/02/2024	Endocrine emergencies	Gen Surg	07/02/2024
24/05/24	Confirmed	7/2/2024	Vascular trauma	Vascular	07/02/2024
07/06/24	Confirmed	23/01/2024 07/02/2024	Paeds fasting times Acute Biliary Pathologies	Anaesthetics Gen Surg	07/02/2024
21/06/24	Confirmed	23/01/2024	Interventional Radiology	Radiology	07/02/2024

Figure 3: JMO (Junior Medical Officer) Surgical Education Timetable

## Main Body

- The PECS committee operates in a circular structure (Figure 1) to involve all members in decision-making processes (3).
- Encompassing two co-chairs, two education officers, a promotions officer, and a surgical college examinations officer; this committee works parallel to the similarly structured Directors of Clinical Training (DCT).
- Bi-weekly suturing and junior medical officer education sessions (see Figure 2) are organised.
- These sessions, focus on basic and advanced suturing techniques, laparoscopic skills, and fundamental endoscopy principles.
- The environment centres around informality, active experimentation, deliberate practice and near-peer teaching. This approach enables participants to engage with peer mentors comfortably.
- Each session culminates in a presentation led by surgical and peri-operative specialists. Structured workshops with clear learning goals and objectives buttress the informal sessions.
- Success in our sessions is measured by engagement levels, and we solicit targeted feedback (Appendix 1) to review and refine the curriculum.
- Support from senior supervising clinicians was crucial to ensure protected teaching time.
- Dedicated teaching spaces required negotiation with hospital administrators for the success of the workshops and tutorials.
- Capital funding and an ongoing budget were necessary to furnish equipment for tabletop training and simulation.

Central Venous Catheter (CVC) Demo	Arterial line demo & practical	Intercostal catheter demo & practical	Ultrasound guided cannulation demo & practical	From the sessions today, please list any other information you would wish to be included:	Anything you wish to be omitted:
5	5	5	5	Tips and tricks for difficult to cannulate	No
3	3	5	5	More time with uss guided cannula	Nil
5	5	5	5	Nothing	No
5	5	4	5	N/a, great session!	Nope!
5	5	5	5	Cannot think of anything right now	Nil
5	5	5	5	-	-
5	5	5	5	Would have been better if more working ultrasounds	No all useful
2	4	3	4	A demo and explanation of chest tube before we started doing it	.
4	5	4	4	More ultrasounds probes and longer practice time at ultrasound sessions!	Nil
5	5	5	5	More hands on time with chest drain	N/A
5	5	5	5	FI block	Nothing. Everything was amazing
5	5	5	5	Nil	Nil
4	4	4	4	Excellent. Super useful	Nup
5	5	5	5	N/A	N/A

Appendix 1: Sample of responses from participants who attended the 'Advanced Surgical Skills Workop' organised by the PECS committee. Likert-Scaling system used, 1 = poor, 5 = excellent

## Conclusion

Establishing a dedicated educational committee, led by junior doctors in collaboration with experienced clinicians, is a recommended strategy for integrating a sustainable education program into clinical practice. It comes with logistical and funding challenges but once overcome, reaps benefits