

VR its here now and worth our attention

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Health
Western Sydney
Local Health District



THE UNIVERSITY OF
SYDNEY

FramelessInteractive



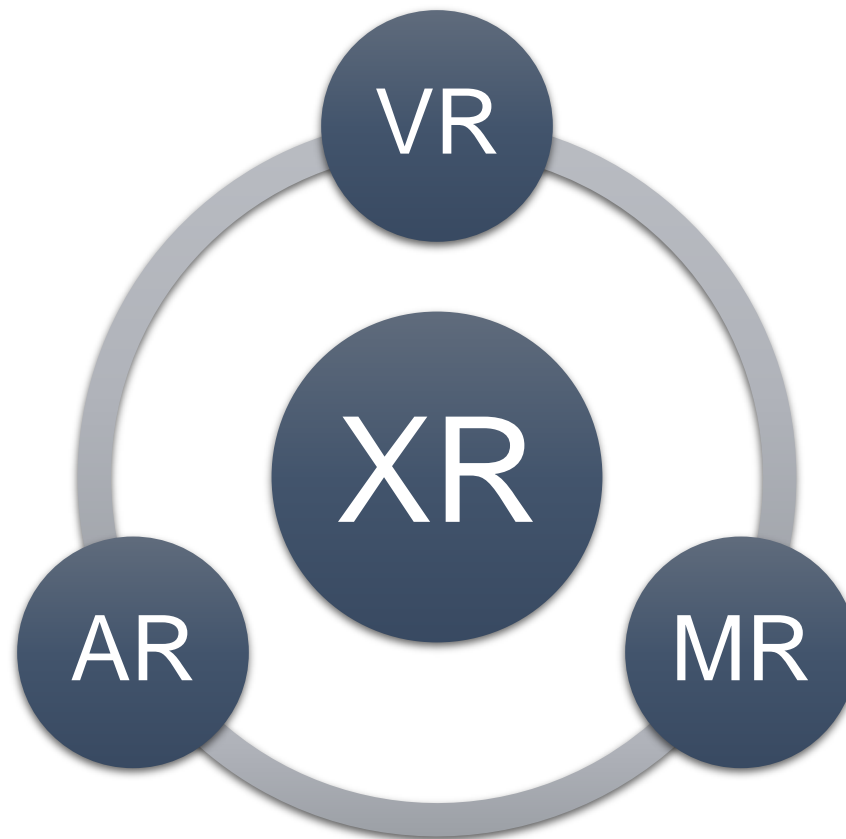
Western Sydney Local Health District



- 5 hospitals (Westmead, Blacktown, Auburn, Mt Druitt, Cumberland) more than 70 sites in total
- Delivers \$2.1 Billion in public healthcare across 120 suburbs spanning 780sq/km
- 1 000 050 residents & 17000 staff
- Diverse economic, social and cultural backgrounds (More than 50% speak a language other than English at home)
- Largest urban First Nations population



What is Extended Reality (XR)



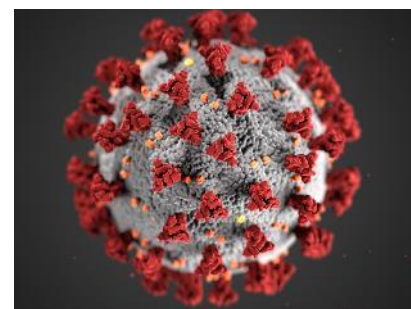
Virtual Reality



The Problem



🇪🇺 Between the Flags 🇪🇺



The Solution

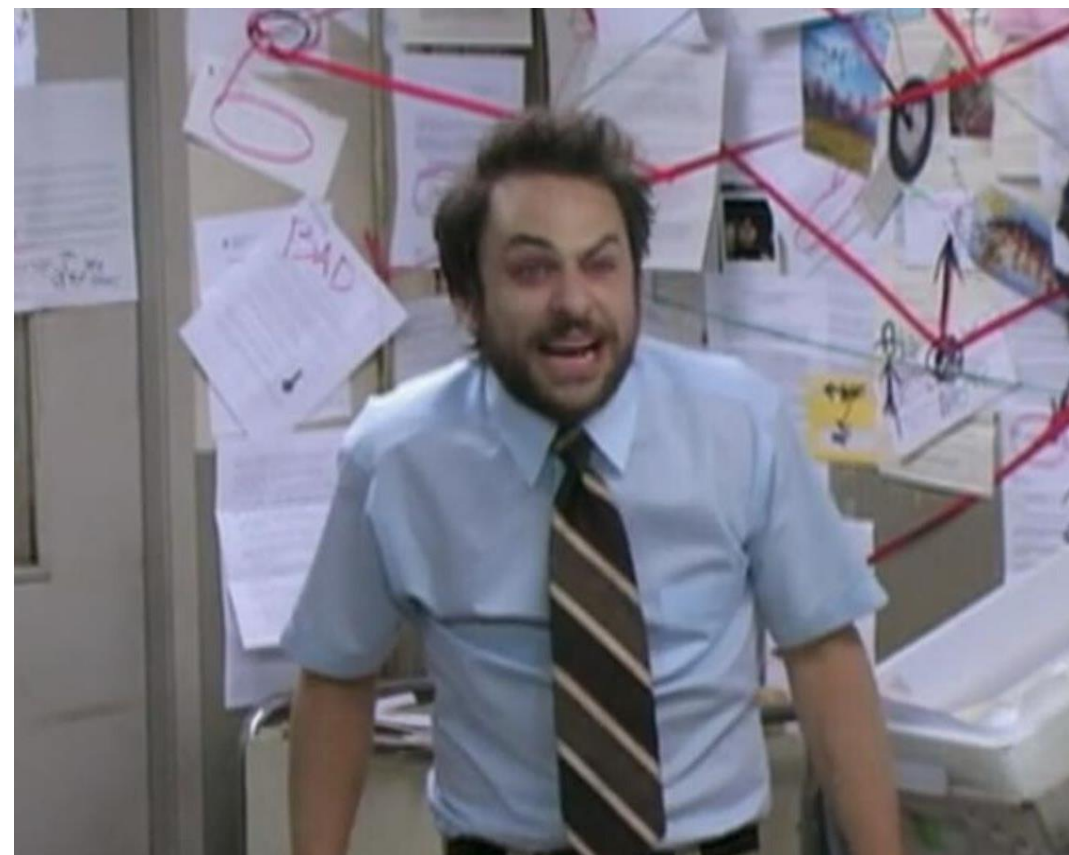


12:06:18



Interconnected blueprints

Its all connected!



Violence and Aggression

(Code Black)



Aggressive patient restraint



Situational Awareness



Verbal De-escalation





CALL CODEBLACK

DEESCALATED

Reflex VR

Walking in someone else's shoes....



- Dignity in the workplace
- Breaking bad news
- Clinical Communication
- Interview practice



Deteriorating Patient



Clinical Handover analysis

Sometimes it is about what you say



The screenshot shows a virtual simulation environment. On the left, a large black panel displays a list of bullet points and a recommendation. In the center, a female nurse avatar in teal scrubs stands next to a gurney. On the right, a computer monitor displays a "Patient Record" for Elizabeth Dunbar, including her photo, name, date of birth (01/01/1955), age (65), and sex (Female). Below this, there are tabs for "Airway", "Breathing", "Circulation", "Disability", "Exposure", "Further info", and "Gl". The "Breathing" tab is active, showing "History" (Prolonged expiratory phase, end-expiratory crackles), "Medication" (O2 saturation is 85%, Respiratory Rate is 35), and "A-G" and "Finish" buttons. In the bottom right corner, a "Handover Assessment" panel shows scores for Introduction (1/1), Situation (1/3), Background (0/3), Assessment (0/1), and Recommendation (0/1), with brief feedback text for each. An "End Scenario" button is at the bottom right of the assessment panel.

Traction

Awards and Recognition



JMIR SERIOUS GAMES Moore et al

Original Paper

Exploring User Needs in the Development of a Virtual Reality–Based Advanced Life Support Training Platform: Exploratory Usability Study

Nathan Moore¹, MEd, BSN; Soojeong Yoo², PhD; Philip Poronnik³, PhD; Martin Brown⁴, MHum; Naseem Ahmadpour², PhD

JMIR SERIOUS GAMES Moore et al

Original Paper

Designing Virtual Reality–Based Conversational Agents to Train Clinicians in Verbal De-escalation Skills: Exploratory Usability Study

Nathan Moore¹, BN, MEd; Naseem Ahmadpour², PhD; Martin Brown³, MH; Philip Poronnik³, PhD; Jennifer Davids⁴, PhD

frontiers in Digital Health OPINION published: 09 July 2021 doi: 10.3389/fdg.2021.629452

Innovation During a Pandemic: Developing a Guideline for Infection Prevention and Control to Support Education Through Virtual Reality

Nathan Moore^{1,2*}, Kathy Dempsey³, Peter Hockey^{1,2}, Susan Jain³, Philip Poronnik⁴, Ramon Z. Shaban^{1,4,7,8} and Naseem Ahmadpour⁹



Utilising virtual reality to supplement clinician education

Western Sydney Local Health District

Increasing pressures on clinicians' time have forced healthcare systems to create efficient ways of addressing the educational requirements of healthcare providers. Western Sydney Local

Health District partnered with the University of Sydney to supplement clinician education in identified areas of need with locally developed virtual reality training. While traditional immersive education methods are often expensive and inflexible, this training capitalises on virtual reality's cost-effective, scalable method of communication.

Partners: The University of Sydney, Frameless Interactive



Congratulations Emerging researchers@Sydney

Health design and implementation
Nathan Moore, Western Sydney Local Health District | Virtual Reality emerging in chronic low back pain.

Health communication through technology
Sarah Barakat, The University of Sydney | King Eating eTherapy: A randomised controlled trial of an online cognitive behavioural therapy program for bulimic nervosa.

Social media and disruptive technology
Nathan Moore, Western Sydney Local Health District | AIS-SivVR: Advanced Life Support Team Leader Training in Virtual Reality.

Emerging researchers in mobile health
Jessica Orchard, The University of Sydney | Use of a smartphone electrocardiogram, electronic prompts and electronic decision support for critical fibrillation screening in metropolitan general practices (AF-SMART).

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Questions?

