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Oral Presentations

Presenting author shown - select each presentation to hyperlink to the abstract.

Monday 2 July 2018

1A Symposium - 1

109. Taking up the WHO Global Patient Safety Challenge: Medication Without Harm - the contributions of pedagogical practices
Christy Noble, Gold Coast Health; Rakesh Patel, Clinical Associate Professor in Medical Education and Honorary Consultant Nephrologist; John Thwaites (CDHB) Director of Medical Education Canterbury New Zealand; Marlise Heynike (WDHB) Senior Medical Staff involved in simulation; Avril Lee and Mary Young Quality pharmacists CDHB and WDHB; in, Education Adviser, Dunedin School of Medicine

1B PeArLs - 1

164. Sustainability- developing the next generation of medical teachers what should we be doing?
Lizzi Shires, academic registrars, junior medical officers and medical students, Rural Clinical School, University Tasmania, Australia

53. Sustainability in the HPE publishing context: Exploring researcher experiences, strategies and perceived barriers
Ruth Sladek, Flinders University, Australia

1C PeArLs - 2

267. Can Australian and New Zealand medical and health professional institutions equip graduates to become effective health advocates in the 21st century?
Nick Towle, University of Tasmania, Australia

327. Establishing a place for the arts and humanities in health professional education
Pam Harvey, Monash University Rural Health Bendigo, Australia

1D – Sustainability – Curriculum

105. Healthcare students’ engagement in the development of healthy and sustainable food systems at a primary school
Daniela Castro de Jong, University of Canberra, Australia

139. International medical electives in low and middle income African countries: a phenomenological study on host perspective
Elspeth Fotheringham, The University of Notre Dame Australia, Australia

159. Sustainable teaching of mental health in a rural context
Miranda Stephens, Rural Clinical School, UTas, Australia
250. A sustainable institutional approach to placements for international students Bella Ross, Monash University, Australia

351. Sustaining the Sustainability: use of theory-based evaluation approaches in sustaining complex programs' Nathasha Kugenthiran, The Royal Australasian College of Physicians, Australia

1E Assessment - MCQs

19. Flipping the taxonomy: an evaluation of the learning and assessment experience of student-developed multiple-choice questions Michaela Kelly, University of Queensland, Australia

207. Small changes, big differences: Increasing the perceived value of a student-generated MCQ bank Emma Osborne, University of Otago, Wellington, New Zealand

233. Students' perceptions of electronic examinations: Results from a whole-of-cohort pilot. Tammy Smith, The University of Queensland, Australia

344. Examining the impact of specific types of item-writing flaws on student performance and psychometric properties of the multiple choice question Hannah Pham, University of Adelaide, Australia

374. Student confidence and MCQ accuracy over time Deborah O'Mara, Sydney Medical School, Australia

171. Strategic Learning? Teacher and student conceptions of assessment in higher education Josie Tighe, Monash University, Australia

1F Interprofessional Education – Community

15. A faculty-wide interprofessional first-year: theories and factors influencing students' dual identities Helen Flavell, Curtin University, Australia

35. An exploration of the role of intra-professional education in vocational and higher education Gabrielle Koutoukidis, Holmesglen, Australia

44. Inspiring Health': a community-based interprofessional project Nikky Baker, Flinders University of South Australia, Australia

103. Can a purpose-built health clinic promote interprofessional learning and practice? An ethnographic study of space and place Alexandra Bowmar, AUT Auckland University of Technology, New Zealand

192. Interdisciplinary post-graduate education for diabetes educators Olivia King, Monash University, Australia

289. Interdisciplinary Education in the Health Professions: An Interactive Approach to Promote Collaborative Learning Karen Lansdown, Kimberly Coulton, The University of Sydney, Australia
1G Learning Culture – Maintaining Well-being

4. Workplace harassment in higher education
Marcus Henning, University of Auckland, New Zealand

423. Burnout rates in Medical Students in China and the effectiveness of a prevention strategy
Chunming (Michael) Wang, Renji Hospital/Shanghai Jiaotong University School of Medicine, China

343. Depression in Australian General Practice (GP) registrar consultations: prevalence, associations and implications for training, a cross sectional analysis of the ReCEnT study
Jennifer Presser, University of Tasmania, Australia

138. Give Respect: Co-creation of a voluntary respectful relationship program with Monash University Students
Jan Coles, Monash University, Australia

1H Learning Environment – Resources

26. Developing sustainable online resources - the Ethics Toolbox
Adrienne Torda, University of New South Wales, Australia

150. What are students doing? An evaluation of informal ICT affordance-effectivity seeking behaviours during formal active-learning tutorials
Gillian Kette, Flinders University Prideaux Centre, Australia

148. Early Clinical Exposure: An Integrated model of community and hospital based teaching
Jennifer Shone, University of Sydney, Australia

407. Faculty development by distance: Webinars to extend the reach of clinical supervision training
Helen Wozniak, University of Queensland, Australia

358. MOOCs: Targeted continuing health professional development for the future?
Simone Gibson, Monash University, Australia

2A Symposium – 2

283. Are we doing enough to produce culturally responsive health care graduates?
Lucy Chipchase, University of Canberra, Australia

2B Symposium – 3

355. From subsidised to sustainable: Development of simulation structures in entry level allied health profession education
Elizabeth Cardell, Marie-Claire O'Shea, Simone Howells, Nathan Reeves, James Townshend, Neil Tuttle, Griffith University, Australia

2C PeArLs – 3

56. Community-based interprofessional education and collaborative practice: Business as (un)usual?
Jane Morgan, C J Morgon, Auckland University of Technology, New Zealand
255. Cross discipline supervision of students a dream or reality?
Vanessa Ryan, Flinders University SA, Australia

2D PeArLs – 4

441. Engaging learners in the face of inconvenient, uncomfortable and alarming truths about our environment
Graeme Horton, University of Newcastle; Michelle McLean, Bond University, Lynne Madden, University of Notre Dame, Australia

338. Co-created curricula - Is it safe to let students loose in the learning kitchen? Judi Nairn, The University of Adelaide, Australia

2E ANZAHPE Prize Session

385. Global Health Classroom: Experiences and learning outcomes of virtual collaborative learning between New Zealand and Samoan medical students* Roshit Bothara, University of Otago, New Zealand

501. Core competencies in Evidence-Based Practice for Health Professionals: consensus statement based on a systematic review and Delphi survey* Loai Albarquoni, Bond University, Australia

502. How are the radiology skills of medical students assessed?*
Victoria Toal, University of Western Australia, Australia

360. Thinking of Supplementary Assessment Zarrin Siddiqui, University of Western Australia, Australia

111. Using an internationally validated clinical science exam formatively to prepare final-year medical students for the summative exit examination
Michael SH Wan, University of Notre Dame, School of Medicine Sydney, Australia

2F Assessment – OSCE Feedback

341. The VOTIS - Developing a Video Observation Tool for Assessment of Inter-professional Skills
Jodie Copley, The University of Queensland, Australia

110. OSCE-PAL: Student perceptions of a clinical Peer-Assisted Learning model Louise Wright, University of Wollongong, Australia

163. What should a final year OSCE mark sheet look like?
Lizzi Shires, Rural Clinical School, University Tasmania, Australia

294. Keeping the wheels moving: 2 years after the development and implementation of EPAs in GP Training - what have we learnt and where to from here?
Nyoli Valentine, ModMed, Australia

321. Achieving a sustainable workforce: exploring the role of professional and academic staff in coordination of an OSCE
Ashlee Forster, The University of Queensland, Australia
354. Evaluation of a Simulated Patient-allocated global score in summative OSCEs  Richard Turner, University of Tasmania, Australia

2G Learning Culture – Personal Development

213. Improving interpersonal communication with 'real' older adults Linda Ross, Monash University, Australia

445. How can clinical educators use a system approach to embed best practice motivational interviewing to enhance sustainable health behaviour change? Adrian Schoo, Flinders University, Australia

71. Factors Influencing Health Practitioners' Cognitive Processing and Decision-Making Style Michelle Parker-Tomlin, Griffith University, Australia

271. Detached Concern - Unsustainable Lorna Davin, University of Notre Dame Australia, Australia

131. Designing learner-centred in-house professional development programs for student clinical educators Christine Frith, St Vincent's Hospital, Melbourne, Australia

157. Tackling Tough Topics: developing mastery to respond effectively to challenging situations Kathryn Weston, University of Wollongong, Australia

2H Learning Culture – Behaviour Reflection

398. Teaching through "story lines" Karen Beattie, Health Education and Training Institute, Australia

118. A mentoring support group to close the cross-cultural gap between international students and Australian educators: A case study of the Monash Nutrition Program Tammie ST Choi, Monash University, Australia

147. Reminded me of a sausage factory': identity and relationship constructions in patient narratives of healthcare communication Charlotte Denniston, The University of Melbourne, Australia

181. Embedding reflexivity in health professions education to augment sustainable systems and communities Lucy Rogers, CQUni, Australia

315. Why do medical students practise invasive medical procedures on themselves? Kelby Smith-Han, University of Otago, New Zealand

3A Symposium – 4

312. Sustaining interprofessional education in a uni-professional environment - difficult but possible! A report on work occurring within the Australian context Roger Dunstom, University of Technology Sydney, Monica Moran, University of Western Australia, Gary D. Rogers, Griffith University, Maree O'Keefe, University of Adelaide
3B Interprofessional Education – Sustainability 1

17. The microsociology of spontaneous IPL in the acute health care setting
Elaine Bell, Flinders University, Australia

42. Digital Interprofessional Learning Client Documentation (D-IPL Client Docs) development
Christine Randall, Griffith University, Australia

47. Sustainable IPE for students in the workplace: investigating the value of informal interprofessional activities
Jade Courtney, Monash Health, Australia

158. Short duration clinically-based interprofessional activities prepare health professional students for the workforce: A systematic review
Peter Brack, Northern Health, Australia

231. Supporting clinical educators in interprofessional placements. Lessons from an international experience
Kay Skinner, Charles Sturt University, Australia

245. Building interprofessional learning sustainability through placement informal learning
Gillian Nisbet, The University of Sydney, Australia

318. Future agenda for Interprofessional Learning: individual and health system sustainability
Nicky Baker, Flinders University, Australia

3C Specialist Training 1

51. Identifying the enacted curriculum in our Medical Imaging workplace
Tracy Parker, Waitemata District Health Board, New Zealand

94. Facilitating Occupational Therapy students to coach teachers to teach pupils with engagement difficulties: The Orion OT Program
Judith Merritt, University of South Australia, Australia

Anthony Weber, CQUniversity, Australia

Dennis King, Alfred Hospital, Australia

227. Assessing gender effects in surgical education and training outcomes
Michael Rasmussen, Royal Australasian College of Surgeons, Australia

7. A missed training opportunity? Exploring specialty trainees' perceptions of a take-home laparoscopic simulation-training program
Erin Wilson, University of Queensland, Australia

9. Laparoscopic surgical skills in gynaecology trainees: Does a simulation program allowing self-directed training at home improve performance?
Erin Wilson, Mater Research, University of Queensland, Australia
113. Improving the surgical learning environment: Feeding back to the teachers
Sanjeev Krishna, University of Auckland, New Zealand

**3D Sustainability – Workforce**

127. Are lecture recordings sustainable for students and staff?
Warwick Bagg, University of Auckland, New Zealand

206. Building an agile and sustainable disability allied health workforce
Megan Carnegie – Brown, The Benevolent Society, Australia

247. Burden or bonus? The impact of medical student placements on health services
Elizabeth Molloy, University of Melbourne, Australia

403. The Teaching Technology Toolkit: an initiative for sustainable medical education innovation
Nalini Pather, UNSW Sydney, Australia

317. Sharing skills for sustainable curriculum quality
Nicholas Charlton, Griffith University, Australia

373. Transitioning to a sustainable AH staff education program
Molly Galea, Northern Health, Australia

377. Preparing medical graduates for the health effects of climate change - Medical Deans of Australia and New Zealand respond
Lynne Madden, University of Notre Dame, Sydney, Australia

411. An investigation of sustainable online options to support rural and remote work-integrated learning supervisors Narelle Campbell, Flinders University, Australia

**3E Learning Culture – Professionalism**

234. Sustaining the dream - the development of a medical identity in undergraduate medical education
Graeme Horton, University of Newcastle, Australia

322. Teddy Bear Hospital: the experience of medical students in a paediatric curriculum
Lilly Nheu, Eastern Health, Australia

382. Promoting professionalism: Using simulation to develop critical reflection
Andrew Lane, Sydney Medical School, Australia

18. Encouraging creativity and reflective practice in medical education
Jill Yielder, University of Auckland, New Zealand

81. Preparing the medical teachers of tomorrow: a prospective study
Khalil Bazzi, The University of Notre Dame Australia, Australia

182. Exploring practitioner and student experiences of workplace dignity during work-integrated learning (WIL): A narrative interview study across six different professions
Corinne Davis, Monash University, Australia
302. Identifying clinical educators' learning during culturally and linguistically diverse students' health professional placements Stacie Attrill, Flinders University, Australia

320. University students' resilience: Outcomes of a scoping review Margo Brewer, Curtin University, Australia

3F Simulation 1

14. Simulation-based Learning in Higher Education - an Investigation into Social Return on Investment Alison Kelly, Curtin University, Australia

34. Practicing what we preach: the use of structure to create a shared mental model for the delivery of simulation based teaching Adam Montagu, Adelaide Health Simulation, University of Adelaide, Australia

90. Volunteer Simulated Patients - A sustainable resource for patient simulation in a medical curriculum Susan Garner, Deakin University, Australia

112. Does incorporating emergency medicine simulation into a case-based learning session enhance engagement and learning? Sal Sanzone, University of Wollongong, Australia

130. Making a fully-immersive fully-simulated clinical placement for physiotherapy students sustainable Alan Reubenson, Curtin University, Australia

156. Medical student's participation in a Pre-Internship Simulation Module (PRISM) Jenny Bryce, Deakin University, Australia

170. A comparison of the clinical and simulation-based learning environments in physiotherapy education Belinda Judd, University of Sydney, Australia

435. Exploring graduate physiotherapy students' experiences of intimate pelvic examinations using peers Debra Virtue, The University of Melbourne, Australia

3G Learning Outcomes – Students

328. Aligning training and development to a structured framework for extending scope of practice Diana Sandulache, Alfred Health, Australia

345. The acquisition of Primary Health Care & General Practice relevant clinical skills in the senior years of a medical degree Joy Rudland, University of Otago, Wellington, New Zealand

353. Developing and evaluating a state-wide supervision program for health and human services workers in Victoria Vicki Edouard, Monash University, Australia

311. What predicts an interest in General Practice? Preliminary insights from a longitudinal tracking project Antonia Verstappen, University of Auckland, New Zealand
102. Influence of student debt on health career location and specialty  
Steven Ling, University of Auckland, New Zealand

141. Gathering evidence for medical students' contribution to health services: A communities of practice informed methodology  
Robyn Woodward-Kron, University of Melbourne, Australia

300. Training physiotherapy students to educate patients; a randomised controlled trial  
Roma Forbes, The University of Queensland, Australia

**3H Assessment Feedback**

36. Automated personalised video feedback on assessment  
Anna Ryan, The University of Melbourne, Australia

38. What can students learn from peer assessment of formative OSCEs?  
Helen Rienits, University of Wollongong, Australia

371. Mastering feedback for learning  
Jill Benson, ModMed, Australia

394. Student perceptions of seeking and using feedback from patients and ward staff for competency development during hospital placements  
Simone Gibson, Monash University, Australia

413. Improving student centred feedback through self-assessment  
James Bonnamy, Monash University, Australia

429. “It could be used for … revenge”: Clinician tutors’ initial perceptions of virtual peer observation of teaching  
Sharon Darlington, The University of Queensland, Australia

384. What is the cost associated with using the mini-CEX as a work-based assessment?  
Dragan Ilic, Monash University, Australia

**Tuesday 3 July 2018**

**4A Symposium – 5**

21. Developing sustainability and synergy in health professional education research (HPER) through setting priorities  
Charlotte Rees, Monash Centre for Scholarship in Health Education (MCSHE), Monash University, Australia, Lynn Monrouxe, Gung-Medical Education Research Centre (CG-MERC), Chang Gung Memorial Hospital, Linkou, Taiwan, Claire Palermo, Monash Centre for Scholarship in Health Education (MCSHE), Monash University, Australia, Tim Wilkinson, Medical Education Unit, University of Otago, Christchurch, New Zealand

**4B PeArLs – 5**

439. Reasonable accommodations in medical student's assessments, is the twin sister of 'inherent requirements' for studying medicine in Australia and New Zealand. One without the other is not sustainable. What are the different 'reasonable accommodations' we are making in our clinical skills assessments and what is our rationale?  
Liz Fitzmaurice, Griffith University School of Medicine, Australia
174. Applicants behaving badly: what do they do and do we care? 
Ruth Sladek, Prideaux Centre for Research in Health Professions Education, Flinders University, Australia

4C PeArLs – 6

30. Addressing the challenge of sustaining faculty development for clinical teachers: a multifaceted approach Anthony Ali, Megan Anakin, Tehmina Gladman, University of Otago, New Zealand,

212. Sustainable paperless hospitals - How do we prepare our students for the demise of the end of bed chart? 
Susan Clarey, School of Medicine Griffith University, Australia

4D Interprofessional Education – Sustainability 2

29. Let’s Play Nicely in the Interprofessional Sandpit 
Judith Broadhurst, Central Queensland University, Australia

178. Sustaining interprofessionality, from classroom to workplace and beyond Josephine Thomas, University of Adelaide, Australia

193. Towards a sustainable model of clinical placement integrated interprofessional education for healthcare students 
Peter Brack, Northern Health, Australia

272. How can a state-wide Learning and Development Framework promote and support interprofessional best practice now and into the future? 
Kate Colmer, Child and family Health Service, Australia

339. Collaboration to support a model of sustainable education on a health precinct 
Monica Hughes, WSLHD, SCHN, Sydney University, Australia

134. Elements of success for Faculty-wide IPL 
Phillippa Poole, University of Auckland, New Zealand

4E Learning Culture – Cultural Alignment

123. "Do you identify as Aboriginal or Torres Strait Islander?  Grappling with supporting Aboriginal students during clinical placements in rural areas 
Lauren Cone, University of Newcastle Department of Rural Health, Australia

189. Are health professional learners fit to practice with Australian Aboriginal people? 
Petah Atkinson, Monash University, Australia

204. I can tell people now that I know where they're from and it really helps me do the job': Perceived post-graduation impacts of a community-based, non-clinical rural and remote area medical student placement program 
Donna Mak, School of Medicine, University of Notre Dame, Fremantle, Australia

218. Fostering culturally responsive practice in physiotherapy: A curriculum survey of Australian and New Zealand Entry-level physiotherapy programs 
Maxine Te, Western Sydney University, Australia
304. Embedding Indigenous Knowledges Collaboratively across the Science Medicine and Health Curricula
Teresa Treweek, University of Wollongong, Australia

313. Promoting professional sustainability through strategies to support culturally and Linguistically Diverse (CALD) health students in clinical practice
Annie Yu, Princess Alexandra Hospital / Griffith University, Australia

4F Learning Culture – Professionalism and Ethics

37. Sustaining ethical practise: challenges faced by medical students
Phillipa Malpas, The University of Auckland, New Zealand

119. Asking for help in general practice training: GP registrar-initiated oversight, support and advice
Nancy Sturman, UQ, Australia

172. Geographical relocation to study medicine in Australia: a tale of 10 schools
Ruth Sladek, Prideaux Centre for Research in Health Professions Education, Flinders University, Australia

221. #tomorrowisanewdayRIP: professional social media usage and health sciences students
Rosanne Crouch, University of South Australia, Australia

236. Suppressing natural instincts or maintaining strong ties: the development of medical professional identities in older medical students Rachel Matthews, University of Otago, New Zealand

332. Development of a program targeting staff-student engagement and management of underperforming students within the clinical environment
Margo Brewer, Curtin University, Australia

4G Learning Outcomes – Workforce

142. Rural 'persisters' vs. 'switchers': the interaction of background and programme
Phillippa Poole, University of Auckland, New Zealand

383. Where are they now? A survey of Alumni from Sydney Medical School 2011-2015
Deborah O'Mara, Sydney Medical School, Australia

298. Internationally Qualified Health Practitioners - Education, Migration and Workforce Expectation in Australia
Melissa Cooper, The University of Adelaide, Australia

462. What Paediatric training do GPs want in Victoria? - a needs analysis of learning preferences
Helen Enright, Royal Children’s Hospital, Australia

124. Reflections on the development of a sustainable and responsive workforce learning and development culture within a large state-wide health network in South Australia. What have been the benefits for workforce, universities and consumers?
Kylie Eddy, SA Health WCHN, Australia

453. Growing our own in Gippsland: Selecting and educating medical specialists
Michael Nowotny, Monash University, Australia

4H Learning Environment – Community

140. Evaluation of a modified team-based learning program in anatomy in a graduate medical school course
John Lahoud, University of Notre Dame, Sydney, Australia

149. Millennial Students in Fieldwork: How do we align divergent perspectives and expectations?
Brooke Sanderson, Alan Reubenson, Curtin University, Australia

186. Impact of the learning context on undergraduate students' Evidence-Based Practice confidence and attitudes
Kylie Murphy, Charles Sturt University, Australia

279. Beyond hands-on and hands-off: A model of supervisory approaches on the inpatient ward
Rose Hatala, University of British Columbia, Canada

296. Deepening the student experience with both ways learning: evaluating immersion from a student and community perspective
Teresa Treweek, University of Wollongong, Australia

309. Community engagement with real world problem solving in a Teaching Hospital Laboratory
Amanda Charlton, LabPLUS, Auckland Hospital, New Zealand

5A Symposium – 6

292. Making education in medical sciences sustainable for health professions: organized by the International Association of Medical Science Educators
Neil Osheroff, Vanderbilt University School of Medicine, United State, Vaughan Kippers, University of Queensland, Australia

5B Symposium – 7

427. Case-based Learning: Sustaining deep learning in the increasingly crowded curriculum
Sharon Darlington, Louise Green, Iulia Oancea and Tammy Smith, The University of Queensland, Australia

5C PeArLs – 7

45. Escape Room: Effective inter-professional education or entertainment?
Leigh Moore, Flinders University, Australia

162. Me, myself and us: Unpacking the origins of our own interprofessional perspectives to facilitate collaborative patient-centred care
Jane Ferns, Alexandra Little, University of Newcastle Department of Rural Health, Australia
5D PeArLs – 8

258. How to ensure sustainability of programs designed and delivered by clinicians to enhance self-care, 'soft skills' and professionalism, despite systemic challenges
   Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar

335. Using Virtual Reality to increase self-efficacy in medical students
   Steve Gallagher, Tehmina Gladman, University of Otago, New Zealand

5E Nursing

78. Intimate Human Care and First Year Nursing Students
   Kerry Reid-Searl, CQUniversity, Australia

85. The development of the Patient Safety Competency Framework for nursing students: A Delphi Study
   Tracy Levett-Jones, University of Technology, Australia

115. Using visualisation technologies and 3D immersion to teach anatomy, physiology, pathophysiology and pharmacology in Nursing and Midwifery
   Patrea Andersen, University of the Sunshine Coast, Australia

114. Exploring the paradox: Academic misconduct among Australian nursing student
   Melanie Birks, James Cook University, Australia

256. What's Their Story?: The first rotation Graduate Registered Nurse's educational and learning journey in the Neonatal Intensive Care Unit
   Renee McKenzie, University of Western Australia, Australia

363. The usefulness of mindfulness for newly registered nurses: A pilot study
   Rosemary Wotherspoon, Peninsula Health, Australia

5F Learning Culture – Resilience and Leadership

266. Health Advocacy, finding a home within undergraduate medical education
   Nick Towle, University of Tasmania, Australia

459. Mentoring - a multi modal approach to a sustainable model
   Clare Polley, The Royal Children's Hospital, Australia

128. Educational strategies in occupational health to sustain health professionals' wellbeing
   Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar

176. Aspects of leadership best learnt at medical school and how these relate to Australian Medical Council graduate outcomes
   Oscar Lyons, University of Oxford, United Kingdom

305. Identifying excellence in professionalism
   Megan Anakin, University of Otago, New Zealand
5G Simulation 2

169. The relationship between the performances of physiotherapy students in simulation and clinical practice
Belinda Judd, University of Sydney, Australia

195. Development of a Volunteer Simulated Patient Program to strengthen and sustain simulation education programs for students and staff
Drew Aras, Northern Health, Australia

232. Exploring university staff perceptions on implementation and sustainability of a simulation model in speech pathology
Simone Howells, Danielle Aldridge, Griffith University, Australia

369. Effect of a just-in-time simulated learning module on confidence and clinical placement performance of Physiotherapy students
Neil Tuttle, Griffith University, Australia

399. Don't underestimate what we do’: a focus group study from the perspectives of simulated patients Shane Pritchard, Monash University, Australia

409. Simulation training is associated with improved performance outcomes in acute stroke management
Lauren Sanders, University of Melbourne, Australia

5H Selection

165. More than just conversation: MMI interviews predict clinical performance in senior medical student OSCEs
Lyndal Parker-Newlyn, University of Wollongong, Australia

225. Predictive utility of selection tools into Surgical Education and Training (SET) in Australia and New Zealand
Michael Rasmussen, Royal Australasian College of Surgeons, Australia

261. Video-based situational judgement tests (CASPer) can predict for national licensure scores
Kelly Dore, McMaster University, Canada

419. Exploring the key attributes and capabilities of novice physiotherapy clinical educators
Debra Virtue, St Vincent's Hospital, Melbourne, Australia

135. Supervision training interventions in healthcare: a realist synthesis
Sarah Lee, Monash University, Australia

6A Symposium - 8

166. How can health programmes sustain inter-professional learning and simulation activities?
Liz Fitzmaurice, Cherie Wells Elizabeth Elder, Matthew Molineux, Marie-Claire O'Shea, Melanie Roberts, Susan Clarey, Simone Howells, Benjamin Weeks, Nathan Reeves, Jennifer Witney, Shirley Morrissey, Gary Rogers Griffith University School of Medicine, Australia
6B Assessment – Theory

375. Continuing Professional Development: using practical assessment to meet the future needs of health students Amanda Wilson, University of Newcastle, Australia

215. Rating of physiotherapy student clinical performance in a paediatric setting: is it possible to gain assessor consistency? Tessa Fulton, Kerry Myatt, Children's Health Queensland, Australia

224. Using ShinyR to present post-exam IRT item analytics to medical educators and improve exam quality Michael Rasmussen, Royal Australasian College of Surgeons, Australia

433. Assessment: The Chamber of Horrors Zarrin Siddiqui, University of Western Australia, Australia

437. Assessing whether it is possible to create a sustainable clinical handover education and assessment process in pre-clinical medical students Liz Fitzmaurice, Griffith University School of Medicine, Australia

6C Interprofessional Education – General

64. Sustainable practice: preparing students for collaborative practice Isabel Paton, Charles Sturt University, Australia

82. Bridging Knowledge Translation Theory and Real-World Practice: The Development of an Interdisciplinary, Context-Bound Online Learning Module for Clinicians Raechel Damarell, Flinders University, Australia

167. Can point of view glasses build the bridge? Using technology to facilitate interprofessional learning, Sandra Carr, The University of Western Australia, Australia

177. Is it really about, from and with? Josephine Thomas, University of Adelaide, Australia

190. Toward a Spirit of Interprofessional Practice; A Hermeneutic Phenomenological Study Brenda Flood, Auckland University of Technology, New Zealand

319. Architecturing health: Community wellness through interdisciplinary student learning Margo Brewer, Curtin University, Australia

388. Interprofessional video simulation education for health care professionals: to enhance safety and improve quality health outcomes Terri Downer, University of the Sunshine Coast, Patrea Andersen, Buderim Private Hospital, Buderim Australia

6D Specialist Training 2

194. Oral Health Therapy Education in Partnership Scaffolding: A Reflective Analysis of Different Approaches with Student-Centred Frameworks and Peer Reviewing Ahmed Al-Humairi, Charles Sturt University, Australia

100. Development and validation of a framework for evaluating competency in medication supply Hayley Croft, University of Newcastle, Australia
200. Medication Safety Option: Inter-professional program to improve junior medical staff transition  
Avril Lee, Waitemata District Health Board and Auckland School of Medicine, New Zealand

39. The difficult art of observation: teaching dermatology through art observation training  
Pam Harvey, Monash University Rural Health Bendigo, Australia

77. Examining the Successes and Challenges of Implementing a Multi-Modality X-ray Operator Training Course  
Kellie Grant, Cunningham Centre, Queensland Health, Australia

72. Bringing the expert into the curriculum: patients as teachers in speech-language pathology education  
Philippa Friary, The University of Auckland, New Zealand

342. Prescribing Skills Assessment - initial results from an Australian cross-institutional pilot  
Claire Harrison, Department Of General Practice, Monash University, Australia

6E Health Professions Education Research

91. Research funding and the development of a healthcare professional education research culture in Taiwan: A scoping review 2006-2017  
Lynn Monrouxe, CG-MERC, Chang Gung Memorial Hospital, Taiwan

175. Translational research in medical education: What constitutes as evidence?  
Leila Mohammadi, Prideaux centre for research in health professions education, Flinders University, Australia

184. Preparing allied health students for evidence-based practice: Views and practices of workplace learning supervisors  
Tracey Parnell, Charles Sturt University, Australia

349. Not another research project! conducting research in local education and training contexts without burning out our potential participants  
Belinda Garth, Eastern Victoria GP Training, Australia

408. Using graphic elicitation as a research method to understand group work for health professionals-in-training  
Sandra Kemp, Curtin Medical School, Curtin University, Australia

187. What does Evidence-Based Practice meant to undergraduate health Students, Kylie Murphy, Charles Sturt University

356. Introducing health students to critical appraisal of evidence using a quantitative rating tool  
Amanda Wilson, University of Newcastle, Australia

280. Advancing Research Capacity in postgraduate Medical Education Elena Rudnik, Hakan Muyderman, Karen Piper, Lucie Walters
6F Learning Culture – Mental Health and Well-being

88. The prevalence of sexual harassment and bullying amongst general practice registrars at a regional training centre in 2017
Sarvin Randhawa, Rural Clinical School, University of Tasmania, Australia

101. Gender in medicine and surgery: Where are we now?
Libby Turtle, Flinders University, Australia

136. Promoting wellbeing and preventing student burnout: A transdisciplinary resilience student bundle and teacher toolkit
Jaime Wallis, Griffith University, Australia

152. Is parental involvement in their child's education healthy and sustainable? Allison Hilbig, Eastern Health, Australia

168. Psychological distress among commencing medical students: is it there at the beginning?
Sandra Carr, The University of Western Australia, Australia

185. Mental, emotional and psychological distress in ambulance practice as threats to sustainable staffing
Amy Seymour-Walsh, Flinders University, Australia

117. Flexible Training Options in Medical School: Who Wants Them and Why? Rachel Boshier-Westwood, University of Wollongong, Australia

6G Learning Environment – Innovation

144. New to Hospital Social Work Program - Finding your feet whilst hitting the ground running
Jenni Graves, South Eastern Sydney Local Health District, Australia

306. Involving students in the design of resources for learning clinical reasoning skills for collaborative practice
Megan Anakin, University of Otago, New Zealand

191. Evaluation of an Innovative Clinical skills teaching program for medical students
Reginald Ng, Eastern Health, Australia

336. You expect me do what? Exploring teacher's experience as facilitators of student affective learning through reflective journalling
Linda Humphreys, Griffith University School of Medicine, Australia

405. Pedagogical Content Knowledge (PCK), aka 'Teaching Scripts': An under-discussed and under-used concept in medical education?
Tim Clement, MCCC GP Training, Australia

436. Yes, we want to know how you feel: Measuring reflective practice development in Pharmacy students, using the GUALS tool
Fiona Miller, Griffith University, Australia
239. Self-perceived cultural responsiveness of physiotherapy students in Australia and New Zealand: A cross-sectional study Maxine Te, Western Sydney University, Australia

**6H Learning Outcomes – Postgraduate**

395. The development and repurposing of an Online Master's Program for Cancer Clinicians Michelle Barrett, Victorian Comprehensive Cancer Centre, Australia

326. Depth of Field: Exploring Stroke Recovery Gabrielle Brand, The University of Western Australia, Australia

333. Readiness for clinical practice as an occupational therapy student or graduate student perspective to inform curriculum design Cheryl Neilson, La Trobe Rural Health School, La Trobe University, Australia

121. Rural Generalist workforce development model: Palliative Care Rosemary Ramsay, Specialist Palliative Care Service THS North West, Australia

270. Ten years of medical education registrars - value added? Lorna Davin, Bond University, Australia

329. Interprofessional education in Aged Care: Challenges and considerations in the development and maintenance of a sustainable activity Jordan Armao, Griffith University, Australia

461. How employers perceive new graduate physiotherapists' skills and performance in evidence-based practice Caroline Fryer, University of South Australia, Australia

**7A Symposium – 9**

76. Learning about workplace learning: can video research methods help? Christy Noble, Gold Coast Health & Griffith University, Charlotte Rees, Monash Centre for Scholarship in Health Education (MCSHE), Monash University, Victoria Brazil, School of Medicine, Bond University, Elizabeth Molloy, Department of Medical Education, School of Medicine, University of Melbourne, Australia

**7B Symposium – 10**

422. When the health workplace is unhealthy-can we change the culture? Louise Nash, University of Sydney, Australia Louise Nash, Brain and Mind Centre University of Sydney, Sydney Local Health District, Karen M. Scott, Discipline of Child and Adolescent Health, University of Sydney, Jenny Barrett, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Anthony Llewellyn, University of Newcastle Claire Hooker, Sydney Health Ethics, University of Sydney

**7C PeArLs – 9**

62. Considering economic sustainability in educational practice and research Jonathan Foo, Dragan Ilic, Monash University, Australia

425. Does linking licensure and continuing professional development sustain or unnecessarily burden health care professionals? Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar
7D PeArLs – 10

376. Prescribing Skills Assessment - lessons learnt and plans for the future
Claire Harrison, Department of General Practice, Monash University, Australia

503. When disaster strikes. A lesson from the shaky isles
Peter Fleischl, Allan Mbita.
RNZCGP, New Zealand

7E Assessment General

73. Considering evidence for ethnicity bias using assessment case scenarios and medical student response correctness and certainty
Mike Tweed, Otago Medical School, New Zealand

48. A digital assessment and feedback tool Kwang Meng Cham, University of Melbourne, Australia

391. Cross-institutional benchmarking of the workplace based performance of physiotherapy students
Megan Dalton, Australian Catholic University, Australia

79. Maximizing placement opportunities How we can assess each others' students
Kay Skinner, Charles Sturt University, Australia

455. Factors influencing Global Assessments in General Practice training - The Global Assessment tools in (medical) Education (GATE) project
Rebecca Stewart, Medical Education Experts, Australia

7F Interprofessional Education – Environment

299. Interprofessional Learning on rural placement: a thematic analysis
Rosanne Crouch, UniSA Department of Rural Health, Australia

330. Educating for collaborative healthcare opportunities (ECHO): Ideas for a sustainable model
Alexandra Little and Jane Ferns, University of Newcastle Department of Rural Health, Australia

352. Integrating Professional Identity into an Exercise Science Program
Elizabeth Cardell, Griffith University, Australia

362. Team -based interprofessional student placements: Key design elements identified by students Margo Brewer, Curtin University

397. Understanding the wider health context - an innovative interprofessional education program Drew Aras, Northern Health, Australia

447. Exploring effectiveness of interprofessional education - medicine, nursing and physiotherapy: a pilot study
Joanne Connaughton, The University of Notre dame Australia, Australia
**7G Learning Culture – Complexity**

66. Implementation of an operational education framework in the workplace: two year evaluation Melanie Farlie, Monash Health, Australia

137. Health professions educators in a complex system: a conceptual model Adrian Schoo, Flinders University, Australia

151. Social Work Educators - Ten years strong, lessons learnt and current questions Jenni Graves, South Eastern Sydney Local Health District, Australia

314. Innovation in ethics education: an interactive, interprofessional, online ethics resource for health science students Belinda Kenny, University of Sydney, Australia

347. Planning Responsibly in Medical Education (PRIME) - a holistic approach Rebecca Udemans, Royal Australasian College of Physicians, Australia

451. Creative approach to building a shared understanding of patient-centred care requirements Kathryn Ogden, University of Tasmania, Australia

**7H Learning Environment – General**

214. What should we teach the teachers? Learning priorities of clinical supervisors Margaret Bearman, Deak, Australia

244. Pots on the net - student usage of a virtual pathology museum Diane Kenwright, University of Otago, Wellington, New Zealand

308. Australian physiotherapy clinical educator characteristics, confidence and training requirements Clint Newstead, The University of Sydney, Australia

386. Making sense of phronesis in clinical education Neville Chiavaroli, University of Melbourne, Australia

457. What motivates clinical teachers in Intensive Care? Emma Merry, University of Otago, New Zealand
1A – Symposium – 1

Taking up the WHO Global Patient Safety Challenge: Medication Without Harm – the contributions of pedagogical practices

Dale Sheehan 1 (Chair of Symposium), Rakesh Patel 2, John Thwaites 3, Marlise Heynike 4, Avril Lee 4, Mary Young 3, Christy Noble 5 6 7, Megan Anakin 8

1 Unitec – University of Technology, Auckland, New Zealand, 2 University of Nottingham, UK, 3 Canterbury District Health Board (DHB), Christchurch, New Zealand, 4 Waitemata DHB, Auckland, New Zealand, 5, Gold Coast Health, Queensland, Australia, 6 Griffith University, Queensland, Australia, 7 University of Queensland, Queensland, Australia, 8 University of Otago, Dunedin, New Zealand

Introduction/background

The WHO's Global Patient Safety Challenge: Medication Without Harm describes a vision and global strategic direction to reduce the level of severe, avoidable harm related to medications by 50% over the next five years. Enhancing patient safety by reducing prescribing errors made by junior medical staff is an urgent priority since this group make twice as many errors compared to any other prescribing healthcare professionals. Further investigation about the possible aetiology for prescribing errors among this group also reveals missed educational opportunities in the form of ‘just in-time feedback’, distractions in the workplace and the prevailing culture in the learning environment, all likely contribute to the performance of individuals in the workplace.

To address these challenges, a global group of medical educators with representation from across the various healthcare professions (medicine, nursing and pharmacy) worked with researchers across the various disciplines (education, psychology and sociology) to design, implement and investigate the effectiveness of a series of context-specific patient safety interventions.

These interventions focused on three specific areas of interest:

1. The role of feedback about clinical diagnostic decision-making and self-regulated learning behaviours for improving junior doctors’ performance in the workplace
2. The role of the pharmacist as an expert medical educator for junior doctors in the workplace
3. The development of a prescribing ‘practice community’ for improving the patient safety culture in the workplace

This symposium draws together the learning from the regional and national implementation of interventions in Australia, New Zealand and the United Kingdom for sharing with others facing similar challenges in their local contexts. All speakers will bring unique interdisciplinary and interprofessional insights to enrich our currently understanding about prescribing errors and making improvements to patient safety in the workplace.

Aim/ objectives:

To illuminate our understanding of prescribing errors made by junior doctors in the workplace and identify key areas for targeting educational interventions to improve patient safety in the workplace

Presenters will:

1. Share the educational philosophy and evidence-base underpinning interventions and programmes of work for prescribing practice in the workplace
2. Describe the lived experience of implementing interventions alongside demonstrating evidence of impact in the workplace
3. Discuss strategies for sustaining, spreading and scaling interventions in the local context, as well as regionally, nationally and globally.

List of Presentations

There are 6 presentations

1. Christy Noble, Principal Medical Education Officer, Gold Coast Health
2. Rakesh Patel, Clinical Associate Professor in Medical Education and Honorary Consultant Nephrologist
3. John Thwaites (CDHB) Director of Medical Education Canterbury New Zealand
4. Marlise Heynike (WDHB) Senior Medical Staff involved in simulation
5. Avril Lee and Mary Young Quality pharmacists CDHB and WDHB
6. Megan Anakin, Education Adviser, Dunedin School of Medicine.

Chair - Dale Sheehan, NZ Project Lead

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

What are the clinical service challenges and opportunities for developing a trustful relationship between pharmacists, junior doctors and their clinical educators?

What educational design features (i.e.; concept of marginal gains, ward coaching following simulation, near peer other profession support) could be applied to other areas of skill development?

What are the faculty development challenges and opportunities to integrating the clinical diagnostic decision-making skills into existing teaching and learning activities for junior doctors?

What are the cultural challenges or opportunities for delivering more interprofessional educational interventions to junior doctors in the workplace?

Is there a role of pharmaceutical companies as funders of medication safety education?

**1B PeArLs – 1**

**Sustainability- developing the next generation of medical teachers what should we be doing?**

Lizzi Shires, Academic registrars, Junior medical officers and medical students

Director Rural Clinical School, University of Tasmania.

**Introduction/background:**
Teaching is an integral part of being a doctor and a core graduate outcome for the Australian Medical Council. With increasing numbers of students and junior doctors, the need for medical educators and doctors with skills in teaching is vital for our future medical work force. In many parts of Australia, it is becoming increasingly difficult to attract and retain clinical teachers.

**Aim/ objectives:**
This symposium will talk about how we develop a ‘career pathway’ for both career medical academics and for doctors as they participate in specialist training and who will teach in the clinical setting

**List of Presentations**
Lizzi Shires Director of Rural Clinical School
Medical student educators
Junior Doctors from the North West Regional Hospital
Academic Registrars from the Rural Clinical School
Post graduate Medical Council Medical Educator

**Discussion: Issues/questions for exploration or ideas for discussion:**
Lizzi Shires – Overview of the challenges in developing a new generation of medical educators
Developing a pipeline of medical educators – starting at medical school, developing teaching fellows and academic registrars.
Presentations from the future medical educators about what they do, what they have learnt and what they need to support them
Floor discussion and wrap up including Development of academic teaching fellows and teaching pathways in Universities to support clinical training - lessons from the UK.

**Sustainability in the HPE publishing context: Exploring researcher experiences, strategies and perceived barriers**

_Ruth Sladek^1_, _Raechel Damarell^1_ & _Svetlana King^1_

^1Prideaux Centre for Research in Health Professions Education, Flinders University, Adelaide, Australia

**Introduction/background:**
Health professions education (HPE) is arguably a challenging field in which to publish, with journal acceptance rates typically around 10 per cent. Scholars must navigate often invisible barriers, negotiate gatekeeping procedures, and develop their own strategies to achieve the goal of publication. It is important to maximise published scholarship outputs to ensure our own professional sustainability.

We recently conducted a study which sought to better understand the nature of the HPE literature in terms of the range, scope and citation patterns across the set of 51 HPE journals we identified. In doing so, we examined the range of health professional disciplines represented, and the extent to which these disciplines ‘talk’ to each other, using journals as the unit of analysis. Our next study examines authorships and language use at the journal article level.

**Purpose/objectives:**
This PeArLs will draw upon the audience’s experiences of publishing in HPE journals. We are interested in learning about the strategies authors have used, and the perceived barriers they have encountered in the HPE publishing context. This session is intended to inform our understanding and future study of the HPE literature.

**Issues/questions for exploration or ideas for discussion:**
What sort of systematic barriers do you perceive you have faced in publishing your research in peer reviewed journals?
What sort of implicit gatekeeping exists that makes publication in peer reviewed journals difficult?
What are your experiences of citing works from other health professional disciplines in the HPE literature and vice versa?

**Can Australian and New Zealand medical and health professional institutions equip graduates to become effective health advocates in the 21st century?**

_Nick Towle_

University of Tasmania, Tasmania, Australia

**Introduction/background:**
A landmark study by Frenk et al. demonstrates a failure of global medical and health education institutions to produce graduates who are equipped to meet the rising challenges of providing adequate, quality health care in the 21st century. Compounded by rising inequalities within nations and looming ecological crises, such as climate change, there are calls for a reorientation of the purpose of health professional education institutions to become more socially accountable.

The response of medical and health education institutions must come in form of training future graduates with the capacity to reach beyond the clinic and advocate for measures that address these
wider threats to health. Such responsibility is enshrined in formal mandates for the inclusion of health advocacy curriculum. Surprisingly, a review of international literature found no contributions to this global challenge from Australian medical schools.

**Purpose/objectives:**
Participants in this PeArL will be challenged to reflect on their own definitions and engagement in health advocacy. 
This session will seek to discover examples of recent or innovative health advocacy curriculum development.

Through sharing of the ways we seek to define and embed health advocacy this session will explore the foundations for greater collaboration in this challenging domain.

**Issues/ questions for exploration or ideas for discussion:**
Is there scope for wider collaboration between health professional educators across Australia and New Zealand to accelerate the development of health advocacy curriculum?

What are some of the key barriers and enablers for academics in health professions to overcome in order to be more effective in developing health advocacy curriculum?

**Establishing a place for the arts and humanities in health professional education**

Pam Harvey1, Giskin Day2, Neville Chiavaroli3

1Monash University, Bendigo, Australia; 2Imperial College, London, U.K.; 3University of Melbourne, Melbourne, Australia

**Introduction/background:**
The Health Humanities is a field of enquiry that draws on the unique disciplinary perspectives and intellectual energy of the arts and humanities to explore ways of enhancing health professional education and broader understandings of health and wellbeing. Increasingly, it is recognized that incorporating health humanities into curricula develops transferable skills that are highly relevant to healthcare professionals. But incorporating the arts into education also enriches the learning environment and enhances the student experience. In an era in which burnout is a major concern, the health humanities may also help to sustain and inspire students as they prepare to embark on demanding careers. This symposium draws on the collective expertise of the panel members on the benefits and challenges of integrating the humanities in health professions education.

**Aim/ objectives:**
(1) To discuss the rationales for using arts and humanities in health professions education
(2) To give practical examples of how arts and humanities are used to develop and enhance communication, professionalism, creativity and resilience in educational settings.

**List of Presentations**
1. Giskin Day, Principal Teaching Fellow, Imperial College London

Title: The creative curriculum

This presentation will draw on Gisin’s experience of designing a delivering medical humanities at Imperial College London, with a particular focus on the value of the arts in enhancing core competencies and creativity.

2. Neville Chiavaroli, Senior Lecturer, Department of Medical Education, Melbourne Medical School, University of Melbourne

Title: Bringing the humanities into professionalism education

This presentation will focus on applications of the arts and humanities in supporting education for professionalism in medical and health professions curricula
3. Pam Harvey, Lecturer, School of Rural Health, Monash University

Title: Enhancing narrative capabilities in health professional students

This presentation will examine the use of patient and health professional narratives in health professions education for cultivating clinical competence.

Discussion:
How do we overcome institutional resistance to incorporating humanities in clinical and science-based education?

What evidence is there for the effectiveness of the humanities in health professional education? How do we justify creating space for the humanities in already-overcrowded curricula?

How do we develop confidence amongst educators to draw on resources and perspectives from the humanities paradigm?

1D Sustainability – Curriculum

Healthcare students’ engagement in the development of healthy and sustainable food systems at a primary school

Daniela Castro de Jong¹, Cathy Knight-Agarwal¹

¹University of Canberra, Canberra, Australia

Background:
Gardening has been progressively used in school settings to increase ecological awareness, healthy eating habits, and knowledge about locally produced herbs and vegetables. This is an 18-month project regarding the implementation of healthy and sustainable food systems at a primary school in the Australian Capital Territory. The project considers the collaborative participation of three healthcare disciplines’ students (Nutrition & Dietetics, Public Health and Occupational Therapy) from a local university. During phase one, evaluation, re-design and renovation of the existing garden was considered in close consultation with the school community, in particular children and teaching staff engaged in gardening activities. The herbs and vegetables produced in the garden will be used in healthy cooking workshops at the school’s canteen in phase two.

Objectives:
To describe the re-development of a healthy and sustainable food systems at a primary school in the Australian Capital Territory.

Discussion:
Healthcare students investigated the requirements for the re-design of the existing garden, considering national and public policies, local weather, stakeholders’ requirements, aesthetics, accessibility and sustainability among other aspects. Following this, students proceeded to renovate the garden. The implementation of such primary school based programs assists learning, promotes healthy lifestyles, demonstrates the principles of stewardship, and fosters wider community engagement.

Questions for exploration:
Further implementation is required regarding the usability of the herbs and vegetables produced at the garden in phase two. Healthy cooking classes and educational programs will be provided by healthcare students to the school to support the ongoing usability and sustainability of the garden.
International medical electives in low and middle income African countries: a phenomenological study on host perspective

Elspeth Fotheringham¹, Pippa Craig¹, Elina Tor²

¹The University of Notre Dame, Sydney, Australia
²The University of Notre Dame, Perth, Western Australia

Introduction/background:
As interest in global health has grown, increasing numbers of medical students have chosen to participate in international medical electives (IMEs).

Aim/objectives:
This pilot study explores the host perspective on international medical electives at a selection of hospitals in low- and middle-income countries in Africa. Outcomes of the study may be used to inform and improve the preparation of global health curriculum, pre-elective training and debriefing for international medical electives.

Methods
A phenomenological study was undertaken. Semi-structured interviews were conducted with ten elective hosts at seven sites. Convenience and snowball sampling were utilised. The data was thematically analysed and interpreted to develop knowledge and understanding of international medical electives from the host perspective.

Results:
Six main themes emerged from the thematic analysis of interview data. These were grouped as representing: international medical student contribution to host hospitals, host professional and personal fulfilment, barriers to student learning experience, international medical student preparedness, hope for reciprocity and barriers to cultural immersion and patient care.

Discussion
An understanding of the host perspective provides stakeholders with a clearer idea of what is important in preparation, organisation and evaluation of the elective experience.

Conclusions:
This exploratory study provides a platform for further research to examine the effectiveness of introducing appropriate pre-departure training and post elective debriefing to students embarking on international medical electives.

Sustainable Teaching of Mental Health in a Rural Setting

Miranda Stephens, Colleen Cheek

Rural Clinical School, School of Medicine, University of Tasmania, Burnie, Tasmania.

Introduction/background:
Co-ordinating mental health teaching for medical students in rural areas can be challenging. Obvious difficulties include the paucity of services, shortage of staff and the high turnover of clinicians, particularly psychiatrists.
Additional challenges include managing multiple settings, potential teaching gaps, competition for learning opportunities, the tension between clinical service delivery vs teaching in stretched services and the lack of opportunities for students to practice skills in complex or acute settings.

Aim/objectives:
This paper presents an overview of the model utilised in rural North West Tasmania aimed at addressing these challenges. A sustainable teaching model was developed which provided new learning opportunities. This allowed students to develop skills to meet the present and future needs of
the community. Anonymous surveys and focus groups collected student perceptions of the most valuable elements of this model.

Discussion:
Results indicated students valued opportunities that maximised their direct patient interactions, including simulated experiences. A rotation co-ordinator enhanced the student experience, as did specialist-delivered small group tutorials. Collaborations with a range of private organisations and school-based experiences allowed for “Apprenticeship” rather than “Observership” opportunities.

Issues/questions for exploration or ideas for discussion:
How can we provide increased opportunities for ‘active learning’ rather than “watching” in mental health settings?
What role might students play in service delivery whilst learning?

A sustainable institutional approach to placements for international students

Ross, B.,1, Grieve, A.1 & Ta, B.2

1Monash University, Caulfield, Australia 2Monash University, Clayton, Australia

In recent years there has been a rapid increase in the number of international students studying health professional degrees such as social work in Australia. Research indicates that perceived extra time and effort is required by field educators to support international students on placement due to, for example, language barriers and cultural and educational differences.

This presentation reports on the findings from a nationwide research project investigating the experiences and support needs of field educators supervising international social work students on placement. The data consists of 16 in-depth interviews and 197 survey responses from field educators’ experiences of supporting international students on placement.

One of the themes to emerge from the research is that field educators feel pressure from universities to take on international students and help them pass their placements, yet they also feel they lack university support to do so adequately. They cited a dearth of both contact and coordination between their agencies and universities, as well as a clear understanding of the university’s expectations of their supervision. Many field educators call for closer contact between agencies and the universities than is currently offered.

Such findings suggest that, in order to sustainably maintain quality placements for international students, institutional support for, and collaboration with, field educators is required. This presentation will explore how field educators can best be supported prior to, and during, placement from their agencies and partner universities.

‘Sustaining the Sustainability: use of theory-based evaluation approaches in sustaining complex programs’

Priya Khanna1, Rebecca Udemans1, Rebecca Aichinger1, Libby Newton1, Nathasha Kugenthiran1

1 The Royal Australasian College of Physicians, Sydney, NSW

Introduction/background:
Program initiatives which are designed for the benefit of society, such as the ones in healthcare education have been acknowledged as ‘complex’, and the environments in which these are placed are complex themselves. Compared with the traditional methods-based approaches, theory-based evaluation approaches such as realist evaluation are regarded as more appropriate for long-term sustainability of complex programs. The Royal Australasian College of Physician (RACP) is renewing
various components of its education programs, and one of them includes introduction of a multi-stage, multi-tool selection system. Keeping in view the complexity of the program, the RACP is referring to theory-based approaches to evaluate the utility and long-term sustainability of the initiatives.

Aim/objectives:
This presentation aims to explain the application of theory-based evaluation approaches, particularly the use of a realist evaluation approach to understanding how complex initiatives such as a multi-stage, multi-tool selection system can facilitate better understanding of what works, for whom and in what circumstances.

Discussion:
Theory-based approaches such as realist evaluation provide a good understanding of how program outcomes behave in complex environments. Such approaches can help in understanding causation in terms of why, where and how programs work. This is pertinent in ensuring long term sustainability of complex program initiatives.

Issues/questions for exploration or ideas for discussion:
1. How can causation be best understood in complex programs?
2. How do we ensure a balance between qualitative and quantitative data collection methods in theory-based evaluation approaches?
3. How best can we develop program theories aligned with multiple stakeholders' perspectives?

1E Assessment – MCQ’s

Flipping the taxonomy: an evaluation of the learning and assessment experience of student-developed multiple-choice questions

Kelly, Michaela¹; Henderson, Margaret¹; Hegerty, Hannah¹; Delany, Clare²; Ryan, Anna²

¹University of Queensland, Brisbane Australia
²University of Melbourne, Melbourne Australia

Background
Multiple choice questions (MCQs) are used at all stages of medical training. It is challenging to write MCQs that assess complex cognitive skills and the select-response nature of MCQs is not conducive to dealing with multifaceted and equivocal subject matter, nor does it provide students the opportunity to construct their own knowledge. One method of addressing these problems is to involve students in writing MCQs.

Methods
Third-year medical students were required to write MCQs as part of a course centred on vulnerable populations. Following academic review, a selection were offered as weekly formative quizzes and a percentage were included on the final exam - comprising 25% of the exam content. The student experience of MCQ writing was explored through surveys and focus group interviews. Survey responses were analysed using descriptive statistics and focus groups were analysed thematically.

Results
Students reported that writing MCQs for formative quizzes led them to more actively and thoroughly research course content and to benchmark their learning to their peers. Students described that the process enhanced their learning and prompted a deeper rather than superficial learning approach, which improved their exam preparation and reduced their exam-related anxiety. Students also reported increased agency over their learning and deliberately designed more practice-oriented questions which they felt were more interesting and vocationally important for their future work.
Conclusion
This model of student-developed MCQs aligned with adult-learning principles. It provided students with agency and encouraged students to engage in deeper learning and privilege the vocational learning they desired.

Small changes, big differences: Increasing the perceived value of a student-generated MCQ bank

Emma Osborne¹, Rebecca Grainger², Wei Dai², Diane Kenwright²

¹ Higher Education Development Centre, University of Otago, Wellington, New Zealand ²Department of Pathology and Molecular Medicine, University of Otago, Wellington, New Zealand

Introduction/background:
Vignette-based multiple-choice questions (MCQs) can test knowledge application effectively. Additionally, the process of writing MCQs engages students in deep learning. However, students may not see peer-created resources as useful.

Aim/objectives:
To assess the effect of increased scaffolding on students’ perception of a student-generated MCQ activity.

Methods
Medical students in two consecutive years of a fourth-year pathology course (N=106 in 2016, N=102 in 2017) wrote, answered and evaluated MCQs using PeerWise. The first cohort chose their own topics and were given guidance based on Bloom’s taxonomy. The second cohort was assigned topics and given examples of vignette-based questions. A paper-based survey was administered to investigate students’ learning strategies and perceptions of the activity.

Results:
Sixty-two students from each cohort completed the survey. Both groups used deep learning strategies such as self-evaluation and synthesising multiple sources. Student satisfaction increased from 37% (22/62) to 50% (31/62), and the proportion of students who saw the task as beneficial to their learning increased from 31% (19/62) to 77% (42/62). Students’ free-text comments showed the second cohort found the task more straightforward and had greater confidence in the validity of their peers’ questions.

Discussion
Removing topic choice may have decreased extraneous cognitive load and increased perceived usefulness of the question-bank for revision. Students preferred model MCQs to theoretical guidance. Confidence in MCQ quality could be further increased with instructor feedback on disputed questions.

Conclusions:
Student-generated MCQ-writing engages students in active and deep learning. Confidence in peer learning can be increased with appropriate scaffolding.

Students’ perceptions of electronic examinations: Results from a whole-of-cohort pilot

Tammy Smith¹, Kate Drinkwater¹

Office of Medical Education, Faculty of Medicine, The University of Queensland

Introduction/background:
After a small-scale opt-in pilot of an electronic examination platform (ExamSoft) in 2016, we moved to a whole-of-cohort roll-out for the 2017 Semester 2 exams for Year 1 and 2 MD students (n~1000).
Aim/objectives:
To determine how students' experiences with electronic examinations and the resultant feedback affects their perceptions of this assessment delivery modality.

Methods:
Students were invited to complete a survey both before and after their first summative electronic examination. The survey explored a range of topics including reliability of technology, exam anxiety, and quality of feedback.

Results:
75% of respondents were more or equally relaxed about computer-based exams after their first experience. There was a significant increase in the percentage of respondents agreeing that computer-based exams should replace paper-based exams. There was both a decrease and an increase in the percentage of students who believed that computer-based exams were more stressful than paper-based exams, with fewer being neutral. The improved quality of feedback was an acknowledged benefit for the vast majority of respondents.

Discussion:
Students are naturally cautious about changes to assessment practice. Our data shows that there was a sway of opinion towards the use of computer-based assessment once students had experienced it. Much of this could be attributed to the timeliness and quality of the feedback generated by the platform.

Conclusions:
While the majority of students accept the benefits of electronic exams, a minority remain resistant for a range of reasons. However from a whole-of-cohort perspective, it appears that the benefits outweigh any perceived disadvantages.

Examining the impact of specific types of item-writing flaws on student performance and psychometric properties of the multiple choice question

Pham Hannah¹, Besanko James¹, Devitt Peter¹

¹ Department of Surgery, University of Adelaide, Adelaide, South Australia, 5000

Background: Item-writing flaws (IWFs) are common in multiple choice questions (MCQs) despite item-writing guidelines. IWFs may affect validity as observed through student performance, item difficulty and discrimination. Most previous studies have examined IWFs collectively and have shown that they have a diverse impact. This study aims to characterise the impact of specific types of IWFs.

Method: A cross-over study design was used. 100 pairs of MCQ items (with and without an IWF) were constructed to test ten types of IWFs. Medical students were invited to participate in a mock examination. Paper A consisted of 50 flawed followed by 50 unflawed items. Paper B consisted of the same items with the first 50 unflawed followed by 50 flawed. The effect of each of the IWFs on mean item scores, overall student performance (using comparisons with a hypothetical unflawed examination), item difficulty and discrimination were examined.

Results: The hypothesised effect of IWFs was confirmed in only 4 out of 10 cases. ‘Longest choice is correct’, ‘Typical errors of students’ and ‘Implausible distractors’ positively impacted, while ‘Central idea in choices rather than stem’ negatively impacted mean item scores. Other flaws had either the opposite or no effect. At the overall performance level, no significant effects were found. IWFs did not impact item difficulty or discrimination.

Conclusion: The effect of IWFs is neither systematic nor predictable. Unpredictability in testing is best avoided as it produces error and thus loss of validity. Therefore, IWFs should be avoided. Faculties should be encouraged to invest in item-writing programs to improve MCQs.
Student confidence and MCQ accuracy over time

Indako E. Clarke¹, Deborah O’Mara¹

¹Sydney Medical School, University of Sydney Australia

Introduction:
Confidence ratings are an increasingly common tool for measuring metacognitive monitoring during assessments. Confidence has been identified as a strong predictor of academic performance in multiple education settings, however there is limited research available in the Australian health professional education literature.

Aim:
This research had two primary aims. First, to examine whether medical students’ confidence ratings change over time. Second, to examine if this change is related to the accuracy of confidence ratings and the level of assessment performance.

Methods:
Confidence ratings from two mid-semester summative assessments, in Year 1 and Year 2, were collected for 314 students enrolled in the Sydney MD Program. Students completed pen-and-paper assessments and a four-point Likert confidence rating scale.

Results:
Students’ average confidence ratings in Year 2 were significantly lower than those in Year 1 (p<.001). Two-thirds of students decreased in confidence level over time and one-third increased in confidence. Students whose confidence ratings increased over time were found to be more accurate in their confidence ratings – they were more confident for items they answered correctly and less confident for items they answered incorrectly. However these students did not improve in their assessment performance over time.

Discussion:
Our finding of decreased levels of certainty for more challenging assessments later in a medical program highlights the need for improved feedback and mentoring of students for basic and clinical sciences as well as for clinical assessments.

Conclusions:
Students’ confidence levels in basic and clinical science assessments has important implications for medical education curriculum and ultimately for patient safety.

Strategic learning? Teacher and student conceptions of assessment in higher education.

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Introduction/background: Indications from the higher education sector suggests students approach to assessment is becoming overtly strategic. Staff and student conceptions of assessment no longer match. The high stakes nature of assessment warrants greater understanding of the misalignment of conceptions of assessment.

Aim/objectives: This project aims to evaluate staff and students’ conceptions of the assessment regimen in Biomedical Science and Nursing to identify trends, and highlight mismatches in the expectations of assessment between students and staff.
Methods: In 2017 a cross sectional research design using a validated Questionnaire (Conceptions of Assessment (CoA), was used to survey students and academic staff. Factor analysis was undertaken to identify the strength of responses, and Mann-Whitney tests were undertaken to compare staff and student responses.

Results: The survey was completed by 383 students and 39 teachers. Difference exists between Biomedicine students and teachers on 24 of 27 items (p<0.05). Nursing-Midwifery students differed to teachers in 20 of 27 items (p<0.05). Little difference existed between student groups in 23 of 27 survey items and there was no statistical difference between Biomedicine teachers and Nursing and Midwifery teachers (p=0.068).

Discussion: Biomedicine student conceptions indicate assessment is for student ranking while nursing and midwifery students indicated assessment is integrated with and used to modify teaching. Nursing and midwifery staff regarded assessment more positively that biomedicine staff.

Conclusions: The results shows a misalignment of assessment conceptions between students and teachers and further research is required to determine if trends persist over time and to understand the trends.

1F Interprofessional Education – Community

A faculty-wide interprofessional first-year: theories and factors influencing students’ dual identities.

Ruyi Tong¹, Margo Brewer¹, Helen Flavell¹, Lynne Roberts¹

¹Curtin University, Perth, Australia

Introduction/background: It is posited that healthcare students’ professional and interprofessional identities develop through interprofessional education, thus preparing them for collaborative practice as graduates. However, a paucity of research exists exploring interprofessional identity, its relationship with professional identity and factors influencing how students develop both identities.

Aim/objectives: This study explores the influence of stereotype, contact and demographic variables on the strength of healthcare students’ professional and interprofessional identities at the start of a faculty-wide interprofessional first-year programme.

Methods: First-year healthcare students from 12 health science professions (N=253) completed an online questionnaire within the first six weeks of commencing undergraduate studies. The questionnaire included a validated social identity measure of professional and interprofessional identities. Data was analysed using hierarchical multiple regression analyses and a repeated measures t-test.

Results: Age, autostereotype and quality of contact accounted for significant unique variance in both identities. Professional identity was stronger than interprofessional identity.

Discussion: An early inclusion of interprofessional education into undergraduate health science degrees is supported, to develop, maintain or strengthen existing dual identities.

Conclusions: Our findings support further research using this validated social identity measure to explore the developmental trajectories and stability of both identities over time. Findings may also inform a re-design of future health curricula to include interprofessional education vertically throughout students’ education, to facilitate graduating professionals with strong professional and interprofessional identities.
An exploration of the role of intra-professional education in vocational and higher education

Gabrielle Koutoukidis
Holmesglen Institute, Victoria Australia

Introduction/background:
The purpose of this study was to explore the effectiveness of an intra-professional education model and how it could be integrated into vocational courses that have a pathway into the higher education courses offered at one multi-sectoral institution.

Aim/objectives:
To explore: how and to what extent can participation in intra-professional education influence VET students’ intention to pathway into higher education; what benefits does intra-professional education have for: VET students; higher education (HE) students and teaching faculty; the design features of effective intra-professional education; and the critical factors that support implementation of intra-professional education at a multi-sectoral tertiary institution.

Methods
Utilising an organizational change action research cycle, there were two cycles in this study; planning and an action cycle.

Results:
What could be inferred from the data is that participatory VET students were more likely to enrol in a degree program, than the non-participatory VET students.

Discussion
The design features of an effective intra-professional education model unfolded as having five distinct components. Critical to the successful implementation of an intra-professional education model were: (i) effective management and leadership (ii) an organisation culture that fosters collaboration (iii) governance and (iv) organisation infrastructure.

Conclusions:
An intra-professional education model could be seen as a strategy in assisting VET students to make the decision to pathway and transition to HE; including fostering collaboration, interaction and team building between HE and VET teaching faculty.

‘Inspiring Health’: a community-based interprofessional project

Helps, L1, Bell, E1, Baker, N1, Murray, J1, Gordon, S1

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Introduction/background:
‘Inspiring Health’, a new community-based interprofessional (IP) placement, involved partnership with local council and business, and enabled teams of health students (allied health, nursing and medicine) to complete health screening assessments and reports for seemingly healthy people aged 40 to 75 years.

Aim/objectives:
To measure the effectiveness of this team based, health focussed community placement to provide interprofessional learning (IPL) especially with respect to student year level and the number of hours of placement.
**Methods**
A quantitative evaluation of the IPL experience for the students was conducted using the Interprofessional Learning Outcome Scale (IpLOS) by comparing pre- and post-placement scores. Statistical analysis was conducted to determine whether the year of study or number of hours on placement altered the change in IpLOS score.

**Results:**
120 students from 8 disciplines assessed and reported on the health of 578 participants over the 19 week project. Most students rated themselves highly in each domain of the IpLOS: experience, knowledge, attitudes, self-efficacy and behaviour before ‘Inspiring Health’. These ratings increased significantly after the placement in each of the five domains and in the overall IpLOS score (p<0.001). The largest change occurred in self-efficacy (change of 10%). Total IpLOS scores post-training were significantly higher in students from the second year of their program. There was a positive correlation between higher IpLOS scores and the number of hours on placement.

**Conclusions:**
Health profession students rated this newly developed interprofessional learning opportunity highly and reported significant improvement in Interprofessional capabilities.

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**Can a purpose-built health clinic promote interprofessional learning and practice? An ethnographic study of space and place.**

**Alexandra Bowmar¹, Sue McNaughton¹, Ailsa Haxell¹, Brenda Flood¹, Jane Morgan¹**

¹AUT Auckland University of Technology, Auckland, New Zealand

**Introduction/background:**
Interprofessional learning (IPL) occurs when two or more health disciplines come together in a patient-centred-care (PCC) manner to learn with, from and about each other. Studies examining the influence of the built healthcare environment on IPL have identified both favourable and unfavourable environments for IPL. Researchers have reported on the use of previously established spaces, mostly for one point in time, or post occupancy.

**Aim/objectives:**
This study explores the evolution of occupancy use of a purpose-built university integrated healthcare clinic (AUT Integrated Health) by students and clinical educators with respect to IPL.

**Methods**
An ethnographic approach informed by Actor Network Theory (ANT) is used in the analysis of movement maps. The lived experience of students and educators with their clients in the clinic were gathered through observations and movement map creation. These were collected during the initial weeks of settling in (August/September 2017), and again after one year occupancy (June 2017).

**Results:**
We will present the background, study design and initial findings of this study, including photos and movement maps at AUT Integrated Health. The movement maps show the importance of people making the space into a place and suggest environmental and human factors that enable or inhibit interprofessional interaction.

**Conclusions:**
While space influences interprofessional practice, student interprofessional learning is promoted primarily through staff making place through practices, specifically designed programmes and leading by example for the benefit of clients.
Interdisciplinary post-graduate education for diabetes educators

Olivia King

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Introduction/background:
Diabetes is considered the epidemic of the twenty-first century. Diabetes educators are health professionals with post-graduate qualifications and work with people to optimise their self-management skills. Registered nurses, podiatrists, dietitians and several other health professions are able to train and practise as diabetes educators. Historically nurses have filled diabetes educator roles and anecdotally, nurse diabetes educators are perceived to have a wider scope of practice than those from an allied health background.

Aim/objectives:
This research explored the interdisciplinary diabetes educator role with a focus on the nature of the perceived role boundaries between diabetes educators of different primary disciplines.

Methods
Interviews were undertaken with 19 key stakeholders. Neo-Weberian theory provided an analytical framework for emerging data. A constant comparative method was used throughout the data collection and analysis processes.

Results:
Interview data suggest that perceptions of role boundaries between diabetes educators of nursing and those of allied health backgrounds were based on a number of factors including the inadequacy of the post-graduate education program to prepare all aspiring diabetes educators to undertake the full scope of the diabetes educator role.

Discussion
With health policy oriented toward role flexibility and interprofessional practice, this research illustrates that diabetes education is an area lending itself to interprofessional practice but is limited by perceptions of interprofessional role boundaries. Among a number of factors, these perceived role boundaries were founded upon the inadequacy of the post-graduate education program.

Conclusions:
To foster a sustainable healthcare workforce, particularly in priority areas such as diabetes care, interdisciplinary post-graduate education programs must meet the needs of each eligible primary discipline. This ensures all graduates are competent to practise to the full scope of their role.

Interdisciplinary Education in the Health Professions: An Interactive Approach to Promote Collaborative Learning

Karen Lansdown, Kimberly Mathieu Coulton

The University of Sydney, Sydney, Australia

Introduction/background:
For optimal patient care, healthcare professionals are expected to work in tandem with one another; however, health professionals are predominately educated in isolation or ‘professional silos’ with coursework focused on a particular set of didactic and clinical skills guided profession specific accreditation standards (Margalit, Thompson, Visovsky, Geske, Collier, Birk & Paulman, 2009). According to the U.S. Institute of Medicine Committee on Quality of Health Care (2001), the highest standard of patient care requires effective teamwork amongst health professionals.
**Aim/objectives:**
Using an innovative teaching approach, the project aims to increase engagement across the health disciplines, foster partnerships for future multi-disciplinary health research, and support the development of attributes and level of competency required of the graduate health professional.

**Discussion:**
Demanding curricula and overloaded timetables create substantial barriers to the integration of sustainable interdisciplinary learning activities. This project incorporates the use of the pedagogical practice of peer-teaching to provide an opportunity to identify the unique roles of individual health professionals and emphasise the importance of teamwork in comprehensive patient care. Teaching resources are developed, and peer reviewed by students (and academics), providing students the opportunity to utilize their strengths and creativity - i.e. videos, interactive presentations, quizzes and cases to share discipline specific information in an interdisciplinary environment.

**Issues/questions for exploration or ideas for discussion:**
Interprofessional collaboration relies on the commitment and full support of academics from health disciplines. It's time for healthcare educators to step up! As educators, we need to be open and committed to employing learning activities to prepare future healthcare professionals for true integrated practice.

**1G Learning Culture – Maintaining Well-being**

**Workplace harassment in higher education**

**Marcus A. Henning¹, Chen (Eileen) Zhou¹, and Craig S. Webster¹**

¹University of Auckland, Auckland, New Zealand

**Introduction/background:**
Workplace harassment in higher education adversely impacts workforce productivity and has deleterious health effects on victims. There are clear anecdotal cases and some studies suggesting this is a problem amongst the medical and health sciences professions with less clear evidence on the extent and type of harassment within higher education. There are also discussions around solutions, although without detailed and comprehensive research strategies, solutions appear to be generated without a strong evidence base.

**Aim/objectives:**
The aim of this study was to review the literature pertaining to workplace harassment in higher education.

**Discussion:**
This systematic literature search began in December 2013 and was completed in January 2014. Refereed journal publications from 1994 to 2013 inclusive were identified. The strategy was conducted on seven major databases. A total of 3278 articles were initially screened, and after review 51 refereed journal articles were included in the final analysis. A thematic analysis identified six themes: causation, types, employee roles, measurement, consequences and interventions. The published evidence, mainly from North America, suggests that workplace harassment is prevalent in higher education, such as gender harassment, workplace bullying, and mobbing. The leading implication is the need for more contextually laden research to examine the unique nuances operating in countries not well represented in the literature.

**Issues/questions for exploration or ideas for discussion:**
How do we as educators in the health professions research this issue? How do we collect primary data? And what are some of the precautions? What are the management, regional and culture issues? How do we ensure there is an aligned approach to management of these issues from reporting of incidents to identification of cause to postulation of solutions whilst at the same time ensuring measurement of efficacy?
Burnout rates in Medical Students in China and the effectiveness of a prevention strategy

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Introduction/background:
Burnout in medical students is of increasing concern in many countries including China. Burnout is an index of exhaustion related to work and current literature shows that burnout may lead to increased stress, reduced confidence and suicidal ideation.

Aim/objectives:
The main aims of the research were to explore the rates of burnout amongst medical students in China and evaluate the effectiveness of an intervention that was designed to reduce levels of burnout.

Methods
A systematic review with narrative synthesis of studies exploring burnout among medical students in China was conducted. The effectiveness of a peer mentoring program designed to reduce levels of burnout amongst postgraduate medical students in China was evaluated through a pre-intervention and post-intervention survey using the ‘Maslach Burnout Inventory – Student Survey’.

Results:
The review findings highlight the magnitude of the problem of burnout among medical students in China (ranging from 20.8% to 71.1%). The peer mentoring program led to a statistically significant reduction in burnout levels amongst the study participants.

Discussion and conclusions:
This is one of the first reviews of burnout studies in the Chinese context that has been conducted in English. The review findings indicate that burnout is a significant problem in this context. The evaluation of the peer mentoring program suggests that it is an effective strategy to reduce burnout in this group of students. The inclusion of peer-mentoring programs are likely to be an important part of broader strategies that are developed to address this problem.

Depression in Australian General Practice (GP) registrar consultations: prevalence, associations and implications for training, a cross sectional analysis of the ReCEnT study.

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Introduction/background
Depression is a leading cause of disability worldwide. In 2015-2016, around 12% of GP consultations in Australia were for mental health, and one third of these (4%) were for depression.

Aim/objectives
This research documents self-reported prevalence and associations of a depression in consultations undertaken by Australian General Practice registrars.
Methods
This research used cross-sectional analysis of survey and patient encounter data of general practice registrars training across five Australian states.

Results
Of the 340,453 problems available for analysis from the ReCEnT database, 8,908 (2.6%) involved a diagnosis of depression. Patients seen with a depression were less likely to be new to the practice (OR 0.64) or new to the registrar (OR 0.58), than those seen for other problems (p<0.0001). Patients with depression were more likely to been seen by a senior registrar (OR 1.07, p=0.0498 for Term 3 vs Term 1). Consultations involving depression were longer (OR 1.05 for each additional minute) and involved less problems (OR 0.78) that other consultations (p<0.0001).

Registrars were less likely to seek advice (OR 0.63, p<0.0001) when seeing depression, although more likely to make a referral (OR 1.98, p<0.0001). Patients from a non-English speaking background were less likely to be seen for depression (OR 0.61, p<0.0001). Significant differences were seen between training regions that did not relate to rurality or other covariables.

Discussion
Our findings will inform general practice vocational training. Further investigation of registrar’s depression-related referral and information-seeking, and into regional variations in prevalence of consultations involving depression is warranted.

Give Respect: Co-creation of a voluntary respectful relationship program with Monash University Students

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Introduction/background
There is increasing recognition within Australian universities of the harm caused to students who experience sexual violence, partner violence, and/or are targeted by racism, homophobia, sexism and other forms of discriminatory interactions.

Aim/objectives
The aims of the project were to co-create program content with students that increased student:
- awareness of the signs of peer/partner violence
- understanding that sexist, demeaning, and disrespectful attitudes and behaviours cause harm
- willingness to speak out against disrespectful language/behaviour
- competency in finding resources to help support friends/peers, including if violence has already occurred

Methods
Three focus and nine interviews were conducted with students recruited through the Monash University Clubs and Societies. Coding occurred independently by 4 members of the team, drawing on ethnographic and thematic analytic processes from across the disciplines, and a common coding framework was created to inform ongoing coding.
Results
Themes identified so far include: (1) conceptualisations of respect and disrespect, (2) the importance of diverse viewpoints, (3) factors contributing to experiences such as cultural dominance, (4) consequences of experiences, and (5) recommendations for promoting engagement with a voluntary program that promotes respectful behaviours.

Discussion
Participants struggled to articulate what they meant by respect, but a wide range of ‘disrespectful’ experiences were discussed. Power and dominant culture was singled out as an important area that negated the experiences of non-dominant groups, reinforcing the need to include non-dominant experiences in any education program developed.

Conclusions
Our preliminary findings demonstrate the importance of engaging with students, particularly those from marginalized groups to co-create an educational resource that aims to promote respectful behaviours amongst students.

1H Learning Environment – Resources
Developing sustainable online resources – the Ethics Toolbox
Adrienne Torda¹
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Introduction/background:
Millennials now make up the bulk of our university population and learn differently to the generations that came before them. In response to this, and the changing environments in which we teach, we need to develop different tools to support our learners to the traditional ones. Learning medical ethics can also be a challenge for some of our students, because the concepts are vastly different to those learnt in other content areas, often call on articulation and understanding of one’s own personal values and then require application of these to complex workplace issues and situations.

Aim/objectives:
The aim of this project was to develop an online learning tool that matched how our learners learn, and supported them in a fun and engaging way for learning medical ethics.

Discussion:
A survey of year 1 and 2 medical students confirmed that they no longer learn from textbooks. Over one third didn’t purchase a single one. In response to this, we developed an online learning tool, The Ethics Toolbox (https://ethics.med.unsw.edu.au/). It is engaging, fun, visually appealing and delivers a large amount of content to the learner with just in the click of the button and a spin of the box. Feedback on the use of this by both students and teachers has been overwhelmingly positive and nearly all said that they would use this as their first learning resource. It also provides a very sustainable teaching resource in that, updates and additions can be made simply via the hosting website.

What are students doing? An evaluation of informal ICT affordance–effectivity seeking behaviours during formal active-learning tutorials.

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Flinders University, Prideaux Centre for Research in Health Professions Education, Adelaide, South Australia
**Introduction/background:**
Students are controlling their information needs by accessing Information-Communication-Technologies (ICT) on smart devices. Universities also utilise ICT affordances to present courses. Yet pedagogies, such as active-learning, have remained unchanged from prior to the advent of ICT. Essentially education pedagogies are assumed to be compatible with ICT affordances. But this is not known.

Active learning, such as Problem-Based-Learning (PBL), presumes the learner activates their memory to learn and not their smart devices. Learning is considered a cognitive and constructivist process whereby the learner actively constructs knowledge through collaboratively working in small groups on contextually relevant scenarios. So the question is when ICT access during active-learning incurs a cost on learning and cognition and when it adds?

**Aim/objectives:**
The aims of this research are to ascertain the informal ICT affordance seeking behaviour during formal active-learning sessions. Research presented will characterise the ICT seeking behaviour of first year graduate-entry-medical-doctorate (GEMD) students during one complete in situ PBL case cycle.

**Discussion:**
Informal ICT affordance have created an array of student controlled and generated effectivities. Educators could simply ban or ignore this. However, this may not only be futile but possibly unwise and certainly unsustainable.

**Issues/questions for exploration or ideas for discussion:**
This research component will present strategic data and analyses for discussion on the behavioural component of what students are doing when seeking informal ICT affordances. An active-learning framework (construction of knowledge, collaboration and contextualisation) will be compared and contrasted with ICT affordances (creativity, communication, communities, collaboration and convergence).

**Early Clinical Exposure: An Integrated model of community and hospital based teaching**

1Jennifer Shone, 1Narelle Shadbolt, 1Chris Roberts, 1Joel Cohen, 1Greg Don, 1Sylvia Guenther

1Northern Clinical School, Hornsby, University of Sydney, Australia,

**Introduction:**
Recent changes in health care provision include increased delivery within community settings and reduced hospital stays requires us to re-evaluate the optimal setting for junior students to learn basic clinical skills.

**Aims**
What factors in an integrated model of systems-based teaching using community settings as well as traditional in-patients impact student learning?

**Methods**
In a systems block in the 2nd year of a 4-year graduate entry program, basic communication and clinical skills teaching used an integrative approach including general practice, specialist rooms and traditional in-patient bedside teaching. A mixed methods analysis included a pre-post design with a comparison group (traditional bedside teaching only). Data included survey, log books of clinical cases and focus groups.

**Results:**
Students in the integrative approach consistently rated higher self-confidence across block learning outcomes, especially developing differential diagnoses and interpretation of commonly used investigations. They were also exposed to a broader range of clinical conditions, particularly chronic
illness. Although variability in teaching quality was noted, most students saw the community as positive learning spaces. Other outcomes included an appreciation of holistic care, and the importance of patient-doctor relationships.

**Discussion**

Early clinical exposure integrating hospital and community settings enhances student learning. Adequate training of tutors and preparing students to get the most from their placements is essential.

**Conclusions**

Whilst innovative funding models will be required to extend this approach to all students in the early years of medical programs, both general practice and specialist rooms provide a rich learning environment which warrants further exploration.

**Faculty development by distance: Webinars to extend the reach of clinical supervision training**

Helen Wozniak¹, Narelle Campbell², Elizabeth Devonshire³

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**Introduction/background:**

Work-integrated learning (WIL) is a cornerstone of health professional education. In order to deliver quality WIL, supervisors need to configure their time to manage both learners and patients, while simultaneously attending to multiple requirements as a supervisor. Being an expert practitioner is not sufficient and access to faculty development and support is imperative. In remote and rural contexts, supervising WIL placements becomes even more challenging because of limited access to support and resources.

**Aim/objectives:**

This project provided an innovative evidence-based accessible faculty development solution for dispersed clinicians wishing to develop their expertise in providing quality WIL.

**Methods**

Our highly successful face-to-face faculty development program for clinical supervisors was redesigned to enable delivery as a series of interactive webinars. The web-based delivery allowed easy access and active engagement by widely distributed clinical supervisors.

**Results:**

We delivered seven highly successful, free clinical supervision webinars during 2017 attended by 125 participants dispersed across remote, rural, and urban areas throughout Australia. More than half the participants attended more than one webinar, and predominantly access was via a workplace computer. Evaluation results demonstrated the webinar format was accessible, allowing for engagement and interaction, despite the technical challenges. Additionally the content and collegial engagement was valued by the participants.

**Discussion and Conclusions:**

Our project provided evidence that the webinar context is a viable medium for faculty development to geographically dispersed WIL supervisors. In this presentation we will share the lessons we learned, the challenges that we managed and future directions for delivering sustainable faculty development.

**MOOCs: Targeted continuing health professional development for the future?**

Melissa Adamski¹, Simone Gibson¹, Helen Truby¹

¹ Department Nutrition, Dietetics and Food, Faculty Medicine, Nursing & Health Sciences, Monash University, Victoria, Australia
Introduction/background:
Rising rates of non-communicable diseases could be reduced with changed dietary choices. Evidence suggests doctors and nurses are highly trusted sources of nutrition information. Massive Open Online Courses (MOOCs) are online courses whose design facilitates accessible and flexible professional development for busy healthcare professionals (HPs) which can bridge the nutrition-disease knowledge gap and support appropriate referring onto specialist dietitians.

Aim/objectives:
Our aim was to develop flexible, short, on-line nutrition education courses, in a modified MOOC style fee-paying model, specifically targeted to non-nutrition trained HPs. Designed to address common nutrition challenges faced by GPs and practice nurses, the courses deliver evidence based advice and support decision making for referral onto specialists when required. The delivery method was specifically designed to be practical for HPs using case studies, scenarios with discussion forums.

Discussion:
Five 2-week courses were developed on ‘hot’ topics including inflammation, nutrigenomics and weight management. The format included videos, articles and activities involving approximately 4 hours per week of learning per week and accredited for professional development points including the Royal Australian College of General Practitioners. The first of these courses were released September 2017 with 170 participants to date and are currently being evaluated.

Issues/questions for exploration or ideas for discussion:
Is MOOC style online learning an acceptable format for healthcare professionals’ continuing professional development? Does this mode of professional development enhance patient care?

2A Symposium – 2
Are we doing enough to produce culturally responsive health care graduates?
Lucy Chipchase¹, Maxine Te² and Tracy Levett-Jones³
¹University of Canberra, Canberra, Australia, ²Western Sydney University, Sydney, Australia, ³University of Technology Sydney, Sydney

Introduction/background:
Like many countries, Australia is a culturally diverse society. The growth in migrants and refugees, many of whom have been displaced due to conflict and persecution, along with Indigenous populations has fuelled debate about the preparedness of health care workers to meet the challenges associated with such cultural diverse populations. With international migration continuing to rise and the health status of Indigenous populations continuing to be depressingly low, it is important that we consider whether beginning health professionals are equipped to deliver culturally responsive healthcare. Are we doing enough?

Aim/ objectives:
The aim of this symposium is to raise questions, present issues and discuss solutions for how learning and teaching processes can be woven into health programs to ensure that graduates are able to provide culturally safe and responsive practice.

List of Presentations
Lucy Chipchase will present data on our current understanding of cultural responsiveness and the value of educational processes. Data will be presented highlighting the incongruence between theory and practice related to culturally responsive practice, how clinicians can take a more active role in providing culturally adapted interventions, how clients from CALD backgrounds may be assessed in a more holistic way and how this can be integrated into entry level education.
Maxine Te will discuss how cultural content is integrated into the undergraduate education of physiotherapists, and the challenges associated with integrating this content from the academics’ perspective. In addition, she will present findings on the relationship between perceived cultural responsiveness, social desirability and dogmatism and how these factors relate and impact on our understanding of how cultural responsiveness is measured.

Tracy Levett-Jones will describe and present outcomes data on an innovative method used to enhance cultural empathy and responsiveness in nursing students by exposing them to an immersive 3D simulation experience. The simulation consists of a 10-minute video of an unfolding scene in a hospital ward of a developing county. The hospital environment, language, and clinical practices exhibit an amalgamation of cultural behaviours, symbols and metaphors unfamiliar to, and incongruent with, Anglo-Celtic Australian culture. This is a sensory experience with students exposed to a range of unfamiliar sights, sounds and smells.

**Discussion: Issues/questions for exploration or ideas for discussion:**
Discussion will focus on whether enough is being done to ensure graduates are culturally responsive. Discussion with participants will explore how methods to facilitate cultural responsiveness can be integrated and scaffolded throughout entry level health care programs.

### 2B Symposium – 3

**From subsidised to sustainable: Development of simulation structures in entry level allied health profession education**

Elizabeth Cardell ¹, Fiona Kelly ², Fiona Miller ², Lana Mitchell ¹, Marie-Claire O’Shea ¹, Simone Howells ¹, Nathan Reeves ¹, James Townshend ², Neil Tuttle ¹

¹ School of Allied Health Sciences, Griffith University of Australia, Gold Coast, Australia, ² School of Pharmacy, Griffith University of Australia, Gold Coast, Australia

**Introduction/background**
In 2010, the Australian Government acknowledged the need to increase the quality and quantity of clinical education experiences for health students, and funded a range of simulated learning initiatives. For these initiatives to become sustainable, the simulated learning environments needed to demonstrate efficacy and be cost-effectively embedded into curricula. From 2012 through 2016, six health disciplines developed a suite of uni- and inter-professional simulations.

**Aim**
Representatives from the professions will discuss, with a range of examples, the initial objectives, shared themes that emerged, and strategies that assisted sustainability. During the funding period we moved from relative novices in simulation to a community of practice as creators of innovative, effective and sustainable client-centred simulations of clinical practice.

**List of Presentations**
Preparation for placement: (NT, MCO)

Given the increasing burden on clinical placement sites due to workforce changes, students need to be better prepared for placement to reduce the need for remedial time, and to allow students to understand the nature of learning on placement (including interaction with clinical educators). The upfront simulation costs are offset by improved student success on placement. A student-as-simulated patient model increases cost-effectiveness.

Simulation of practice: (EC, JT)

The original project allowed development of modules to (1) scaffold learning clinical skills that are difficult to practise in the placement environment, and (2) to address accreditation requirements by targeting practice areas where limited clinical placement opportunities existed. Simulations were
constructed to address specific aspects of practice (such as paediatrics and end-of-life), and complex skills, such as motivational interviewing.

Interprofessional interaction: (FM, LM, NR,)

The ability to provide team-based care is increasingly a requirement in the accredited health professions. Simulated IPL activities resulted in new and authentic partnerships, exposing students to disciplines they had previously had little interaction with.

Shared resources and simulation expertise: (All)

Strategies for reducing costs included development and sharing of resources including scenarios, facilitators and equipment. Our ‘train-the-trainer’ approach (within and across disciplines) ensures that discipline champions can upskill colleagues. Funding enabled us to embed simulation pedagogy within disciplines and create lasting simulation cultures.

Discussion:
Sustainability in terms of cost and resources presents a challenge with simulated learning environments. Student preparedness and available sites presents a challenge with placement. This seminar will describe useful strategies and obstacles that have created challenges. We look forward to discussing strategies that may support participants on their own simulation journey.

2C PeArLs – 3

Community-based interprofessional education and collaborative practice: Business as (un)usual?

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Introduction/background:
Interprofessional education and collaborative practice (IPECP) is the preferred option for clients living with chronic conditions and for students preparing to work in contemporary health settings (Institute of Medicine, 2015; World Health Organization, 2016). For those living with a long-term condition, effective community-based ICECP must recognise the social, interpersonal and environmental factors impacting on the client experience and outcomes (Lévesque, Hovey, & Bedos, 2013), and on student learning (Thistlethwaite, 2016). The complexity of these interlinked factors creates tensions when trying to embed and sustain IPECP as “business as usual” in community-based clinical practice.

Purpose/objectives:
To explore critical factors impacting on the sustainability of community-based IPECP practices for clients living with chronic health conditions.

Issues/questions for exploration or ideas for discussion:
1. How do we get the point where IPECP is embedded and becomes “business as usual” in community-based clinical practice for clients with chronic conditions?
2. What are critical factors that impact on the sustainability of such practices?

This PeArL provides an opportunity for those grappling with the sustainability of IPECP community-based programmes to discuss this issue, with a specific focus on identifying critical factors and collectively strategising on how to address some of these.

**Cross discipline supervision of students a dream or reality?**

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**Introduction/background:**

University programs, particularly within the health professions, seek to ensure relevance and preparedness for clinical practice. The contribution of teamwork and collaboration have long been recognized as essential components of improved patient care and safety. Interprofessional Education (IPE) is aimed at preparing students for effective collaborative practice in the clinical context.

IPE has been shown to increase student's awareness and understanding of interprofessional learning competencies for practice but how well is IPE translated in the clinical workplace? The clinical workplace provides students with exposure to professional attitudes, skills and behaviours. It is this context where students begin to translate knowledge into practice.

Cross discipline supervision of health professions students is one way to model Interprofessional practices and attitudes in the clinical workplace. It reinforces the learning students undertake in the IPE space and works towards developing an interprofessional workplace culture and student learning environment.

This discussion will explore cross discipline supervision of students through the sharing of ideas and experiences of participants.

**Purpose/objectives:**

The purpose of this PeArLs is to explore participants understanding of interprofessional supervision and examine the experience that clinicians have had supervising health professions students outside of their own discipline.

Objectives of the session include, orientating participants to think about cross discipline of students in the context of interprofessional practice. The facilitator of this session will utilise the discussion to understand clinicians thoughts and experience around cross discipline supervision to further develop the conceptual stages of her PhD.

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

What does cross discipline supervision look like to you?

What could you assess as a cross discipline supervisor?

What are the enablers and barriers to cross discipline supervision?

**2D PeArLs – 4**

**Engaging learners in the face of inconvenient, uncomfortable and alarming truths about our environment**

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**Introduction/background:**

Healthcare education must prepare healthcare professionals to work with patients and communities in the face of a range of emerging challenges. Climate change is once such challenge. Climate change
is being viewed by many as the defining public health issue this century. While it has also been described as one of the greatest of threats to human health, the optimists also regard it as one of the greatest global health opportunities. Truth can, however, be threatening. Predictions of the health impacts of climate change are becoming more serious with each passing year as global carbon emissions continue to increase. Learners, when faced with large scale societal challenges, can become overwhelmed which can lead to disengagement and even cynicism.

**Purpose/objectives:**
To discuss ways to positively engage both educators and students in creative problem-solving about climate change and to explore a range of strategies for upskilling future health care workers to address its impacts on human health and healthcare delivery.

**Issues/questions for exploration or ideas for discussion:**
How do we balance the need for accurate predictions of the harmful impacts of climate change on human health and healthcare delivery, with the need for positive messaging and optimism about the future?

Can overwhelming feelings of powerlessness be avoided or at least minimised for those learning about what action is required to address climate change, and if so, how can we achieve this?

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**Co-created curricula – Is it safe to let students loose in the learning kitchen?**

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**Introduction/background:**
Co-creation is a process of student engagement that encourages students and staff members to become partners who each have a voice and a stake in curriculum development. Engaging students in curriculum has the potential to enhance student agency, authentic learning and hence effective preparation for the work environment. Curriculum design is often bounded by the complexities of professional requirements and academic priorities and expectations, without consideration to what students might contribute to the process. Processes which bridge these boundaries and encourage student engagement are needed to facilitate a shift from transferring knowledge to students into mutual co-constructions of knowledge between students and teachers.

**Purpose/objectives:**
During this session, we will present and discuss our curriculum co-creation experiences. We will explore strategies to create a learning community of students and staff working as peers and equals so courses are more effective.

The objective of the session is to develop a framework that can inform co-creation projects and to define the roles and responsibilities of both faculty and students. Interested participants will be invited to share resources and ideas via an on-line Community of Practice

**Issues/questions for exploration or ideas for discussion:**
How can a student co-created curriculum be introduced, enacted, and sustained in health profession education?

What are the possibilities and challenges?

Can we fully share power with students?

Is it ok if it’s not 50/50?

How do participants navigate power in co-production?

What are the potential risks of co-creation?”
Global Health Classroom: Experiences and learning outcomes of virtual collaborative learning between New Zealand and Samoan medical students

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Background
Global Health Classroom (GHCR) is a virtual collaborative global health learning model being developed at the Otago Medical School (OMS) in partnership with Patan Academy of Health Sciences, Nepal (PAHS) and School of Medicine, National University of Samoa, Samoa (Samoa).

Aims
To explore the learning and experiences of New Zealand and Samoan medical students in the GHCR, and ascertain the key elements contributing to their learning and experience.

Methods
A mixed-method study approach using a post-GHCR questionnaire and semi-structured interviews. A triangulation approach informed the synthesis of the data.

Results:
Of the participants, 85% (74/87) responded to the post-GHCR questionnaire. Nineteen interviews were conducted: 13 OMS students and six NUS students. Students reported gaining knowledge about patient care, healthcare systems, and the culture and determinants of health, in their partner country. There was evidence that attitudes such as cultural understanding and respect were promoted among students by their GHCR experiences. Reported outcomes in the GHCR align favourably with the recommended global health learning concepts.

Discussion
Key elements in the GHCR were: clinical cases and global health themed guiding questions, teachers as facilitators and students as self-directed learners, peer learning and social interaction, and video-conferencing. Students in the GHCR found that learning with their international peers in a virtual classroom made learning about global health “more real and tangible” and “much more accessible than learning [global health] on a purely theoretical basis.”

Conclusions:
The findings in this study suggest that GHCR presents a promising global health learning model with core values of partnership, collaboration and reciprocity between medical students and institutions. Medical schools in different countries can partner together to deliver global health learning for their students by integrating the GHCR into their curriculum.
Core competencies in Evidence-Based Practice for Health Professionals: consensus statement based on a systematic review and Delphi survey

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Introduction/background:
Evidence-Based Practice (EBP) is necessary for improving the quality of healthcare as well as patients’ outcomes. EBP is commonly integrated into the curricula of undergraduate, postgraduate, and continuing professional development health programs. There is, however, inconsistency in the curriculum content of EBP teaching and learning programs. A standardised set of minimum core competencies in EBP that health professionals should meet has the potential to standardize and improve education in EBP.

Aim/objectives:
To develop a consensus set of core competencies in EBP that should be covered in EBP teaching and learning programs.

Methods:
We developed a set of EBP core competencies in four stages: (i) generation of an initial set of relevant EBP competencies derived from a systematic review of EBP education studies for health professionals; (ii) a two-round Delphi survey to prioritise and gain consensus on the most essential EBP core competencies; (iii) a consensus meeting to finalise the consensus on the most essential core competencies; and (iv) feedback and endorsement from EBP experts.

Results
From an earlier systematic review of 83 EBP educational intervention studies, we identified 86 unique EBP competencies. We conducted a Delphi survey and of 234 people who registered interest, 184 (79%) participated in Round 1 and 144 (62%) in Round 2. We reached consensus on 68 EBP core competencies. The final set of EBP core competencies were grouped into the main EBP domains. A description of each key competency and the level of details or delivery for each was identified.

Discussion:
A consensus-based, contemporary set of EBP core competencies is presented to inform curriculum development of entry-level EBP teaching and learning programs for health professionals and benchmark standards for EBP teaching.

Conclusions:
Based on a systematic consensus process, a set of core competencies in EBP to inform the development of EBP curricula for health professional learners has been developed and described.
How are the radiology skills of medical students assessed?

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Introduction/background:
Radiology is a medical discipline involving the application of various imaging modalities to aid the diagnostic process, monitor disease and treatment progress, as well as inform prognosis of medical conditions. It also encompasses interventional aspects to directly treat medical conditions. Radiology skills are important for every medical graduate embarking on their internship, from the ordering of appropriate imaging to basic image interpretation. This work explores the preparation that medical students experience in radiology skills.

Aim/objectives:
The aim of this work was to explore the question of how medical students are assessed for their radiology skills, considering both the Australian and international contexts.

Discussion:
Radiology skills are integral to the everyday activities expected of junior doctors. By exploring published literature, this work examines the expectations of medical graduates’ radiology skills. The approach to teaching radiology skills to medical students is reviewed, before appraising how such skills are assessed. Finally a brief discussion on the application of technology in radiology education and assessment for medical students is presented.

Issues/questions for exploration or ideas for discussion:
The changing environment of medicine, with increasing data and imaging options, and a shift toward digital systems will need to be reflected in medical student education. This work may provide a starting point for further development of effective education and evaluation of radiology skills for medical students.

Thinking of Supplementary Assessment

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Introduction/background:
Supplementary assessment is offered by the institutions to students who have come close to a pass mark in order to provide another opportunity to demonstrate their satisfactory attainment of specific learning outcomes as specified for a unit.

Purpose/objectives:
To determine the issues that faculty face in administering supplementary examinations for medical students.

Issues/questions for exploration or ideas for discussion:
Need for a supplementary examination
Timing of Supplementary examination
Role of Remediation and feedback on the performance of students in Supplementary examination
Using an internationally validated clinical science exam formatively to prepare final-year medical students for the summative exit examination.

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**Background:**
The International Foundations of Medicine® (IFOM®) Clinical Science Exam (CSE) is developed by the National Board of Medical Examiners in USA to assess knowledge considered essential for the provision of safe and effective patient care. It consists of 160 MCQ questions covering all disciplines of medicine calibrated to the USA licensing standard. Individualised performance feedback is given two weeks after the exam.

**Aim/objectives:**
The aim of the study was to determine the usefulness of IFOM® in preparing final year students for the summative MCQ examination.

**Methods**
The IFOM® exam was offered formatively to the final-year students 8 weeks before the summative graduating MCQ examination in 2016 and 2017. Students sat the 4-hour examination under invigilated conditions either online or using pen and paper. The correlation between the IFOM® and summative MCQ results was analysed. Students’ feedback on using IFOM was also collated.

**Results:**
A total of 108 and 82 students participated in the IFOM® in 2016 and 2017 respectively. The Pearson correlation between the IFOM® and summative MCQ scores was 0.70 (p<0.0001) and 0.66 (p<0.0001) respectively. Students’ feedback strongly agreed that the IFOM® could identify their area of deficiency and help in preparing them for the summative examination.

**Discussion**
The internationally calibrated IFOM® seems to be useful for final-year students to use formatively to prepare for their graduating written examination. It could also provide the School with metadata to identify relative gaps in the curriculum teaching and delivery in relation to students’ performance in particular disciplines.

2F Assessment – OSCE Feedback

The VOTIS – Developing a Video Observation Tool for Assessment of Inter-professional Skills

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**Introduction/background:**
Inter-professional (IP) models of care are one solution to ensuring effective client-centred practice in health care delivery. Currently, there is a focus on building meaningful opportunities for students to develop the knowledge and skills related to IP education and practice to prepare them for professional roles. Assessment of IP skills is often embedded into discipline-specific competency evaluation tools, but little guidance is provided to assist clinical educators in gathering evidence for assessment of these skills.
**Aim/objectives:**
Development and evaluation of a video-based tool for formative and summative assessment of observable IP behaviours.

**Methods**
A review of literature regarding competencies required for IP practice and IP assessment tools was undertaken. An audit of profession-specific IP assessment requirements within physiotherapy, occupational therapy, audiology, speech pathology and dentistry was completed. The Video Observation Tool for Inter-professional Skills (VOTIS) was developed, allowing students and clinical educators to generate ratings of students' skills in eight IP competency areas and an overall rating. The tool was piloted across a range of student IP clinics involving 60 students and 10 educators.

**Results**
Inter-rater reliability was established and student and educator feedback was gathered through focus groups and interviews. Student participants reported that the use of structured reflection on IP skills improved their awareness of their own communication with team members and lead to behaviour change.

**Discussion**
Recommendations for increasing the utility of the VOTIS and for its embedded use in curriculum and clinical placements will be discussed.

**OSCE-PAL: Student perceptions of a clinical Peer-Assisted Learning model**

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**Introduction/background:** Peer Assisted Learning (PAL) increases student knowledge, confidence, and social support and may help address variabilities in practical clinical education.

**Aim/objectives:** OSCE-PAL was senior student initiated, designed and delivered to support integration of junior students into clinical placements, address educational variability across clinical rotations and aide clinical assessment preparation. It uses a constructivist case-based framework to enable students to plan OSCE approaches with exploration of relevant medical science theory.

**Methods:**
OSCE-PAL was piloted at 3 hospitals longitudinally using a consistent near-peer tutor base. It was offered to students during their first clinical year (Phase 2). Participation was voluntary. Phase 2 students evaluated OSCE-PAL by peer-reviewed questionnaire to determine whether it supported phase transition, facilitated learning and aided assessment preparation.

**Results:** There was a 70% response rate and questionnaire Cronbach alpha = 0.8. OSCE-PAL was attended by 67% of respondents either 'every' or 'most' weeks. All respondents agreed that it benefitted learning. There was strong agreement that regular contact with near-peer tutors enabled clinical confidence and that OSCE-PAL should be offered to future cohorts.

**Discussion:**
The positive evaluation enabled presentation of a successful business case to the University. A succession plan has been implemented and OSCE-PAL appears longitudinally sustainable. Keys to successful PAL implementation included tutor consistency, alignment to formal curriculum and consistency across geographic sites, using social media to maximise learning equity.

**Conclusions:** A clinical PAL model is feasible, positively received and sustainable to support student learning across different clinical locations and disciplines.
What should a final year OSCE mark sheet look like?

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Introduction/background:
Australia has 19 medical schools with graduating students, 15 are members of ACCLAiM, a national collaboration to develop and compare standards for OSCE’s across Australia. Medical schools meet twice yearly to develop OSCE’s and compare and contrast current standards in assessment. This paper was developed from a workshop where marking was discussed.

Aim/objectives:
To compare exit OSCE mark sheets across 15 medical schools and to ascertain what were the similarities and differences.

Methods:
15 medical schools contributed their mark sheets to the research collaboration. During the workshop, representatives from each university discussed their mark sheet and methods of marking. The mark sheets were coded into checklist, competency-based and mixed method. The use of the global score was recorded as well as how that score was used. How the standard setting was determined was also documented.

Results:
15 medical schools mark their OSCE’s in different ways. There is a spectrum of scoring systems from pure checklist to completely competency-based. Global scores are used in some medical schools; however, they are used in different ways. Decisions over how students pass or fail a station are variable across schools.

Discussion:
Would a shared marking sheet allow more comparable standards in exams across medical schools? Should we aim for more standardisation in marking sheets for exit OSCE’s? Should we have a universal exit OSCE marking sheet? If so what would the features be?

Conclusions:
For exit OSCEs, marking sheets having a shared system of marking, would have considerable benefits for benchmarking, in sharing stations and in the management of supplementary exams.

Keeping the wheels moving: 2 years after the development and implementation of EPAs in GP Training – what have we learnt and where to from here?

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Introduction/background:
The literature on Entrustable Professional Activities (EPAs) is growing rapidly. Many institutions are convinced of their value and have made steps towards implementing EPAs as part of their assessment program. However, the implementation, capacity development and change management process can be daunting. During 2016, EPAs were developed for GP Training in South Australia and successfully implemented in January 2017.
Aim/objectives:
The aim of this presentation is to share the process of development of the EPAs, how appropriateness of the content was assured, and the findings from the evaluation study 12 months after the initial implementation.

Discussion:
EPAs are a valuable assessment tool which can be used in health profession education. Critical to the success of our implementation journey was engaging our stakeholders, both within and externally, as part of a strategy to build awareness and engagement. In addition, communication, leadership and faculty development and inclusion were all seen as essential elements for successful implementation. Ongoing evaluation through focus groups, written surveys and analysis of the EPA assessment reports of registrars has clearly articulated the value of their use in general practice training.

Issues/questions for exploration or ideas for discussion:
In what other situations could EPAs be utilised, for example remediation? What further challenges might be apparent after ongoing use of EPAs?

Achieving a sustainable workforce balance: exploring the role of professional and academic staff in coordination of an OSCE

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Introduction/background:
Collaboration between professional and academic staff is fundamental to a successful and sustainable workforce in a medical program. The delivery of medical programs requires input from many professional administrative and project management staff in order to realise common goals and provide integrated high-quality teaching. Specific challenges arise when both professional and academic staff are required to come together to deliver high-stakes assessment, such as an Objective Structured Clinical Examination (OSCE).

Aim/objectives:
To explore the interface between professional and academic staff and define specific challenges which arise during OSCE preparation, delivery and aftermath. To identify what factors strengthen teamwork and promote quality output in dynamic events such as OSCEs.

Discussion:
Effective communication, clearly defined roles and responsibilities, well-documented processes and appropriate resourcing all contribute to a high-functioning examination team; a breakdown in any of these areas can create significant operational barriers. This becomes apparent when one staff group (e.g. academics) are highly reliant on another staff group (e.g. professionals) to deliver large-scale, high-stakes assessment items simultaneously across multiple clinical sites. Findings of the enablers and barriers to achieving a sustainable, highly functioning OSCE ‘team’ will be presented.

Issues/questions for exploration or ideas for discussion:
How can we use this information to adapt organisational practices for future exams? How can we evaluate whether these suggestions are successful in increasing the overall standard of OSCE delivery?

How Simulated Patients can contribute to student assessment in OSCEs

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Introduction/background:
OSCEs rely on competent Simulated Patients (SPs) who respond authentically to students’ communication cues. Multiple perspectives provide more valid assessments of complex clinical tasks, particularly where student performance is considered borderline. Health consumers also deserve a voice in the quality assurance of their future healthcare providers.

Aim/objectives:
We piloted an SP-allocated global process score to complement that of the clinician examiner in an OSCE station.

Methods
Experienced SPs undertook an online training module on the principles of global assessment and an explanation of the 5-point rating scale to be used. This was followed by a station-specific calibration exercise allowing online discussion of ratings given by other SPs.

Results:
The pilot was well received by stakeholders. Over 12 stations, 1416 data units from 118 students were collected.

SP scores correlated positively with all components of the examiners’ marking schema, but to the greatest degree with the standard setting global rating.

With Borderline Regression standard setting, adding an SP score to the examiner-allocated content/process score generated six new pass and five new fail decisions involving 7 of 12 OSCE stations. This resulted in one additional student not reaching the pass standard for the whole OSCE, with a total of six students failing overall.

Discussion
An additional SP score may be useful in arbitrating pass-fail decisions for borderline students, particularly in stations requiring nuanced communication skills.

Analyses attributing different weightings to the SP score may be useful in determining optimal discrimination.

Conclusions:
Qualitative data from students, SPs and examiners will further validate SP assessment in OSCEs.

2G Learning Culture – Personal Development

Improving interpersonal communication with ‘real’ older adults

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Introduction/background:
Paramedics are required to provide care to an aging population with complex issues. Experiential learning with older people provides realistic and contextualised experience which can improve interpersonal communication and holistic patient focused care.

Aim/objectives:
To determine the effects of an educational intervention with older people on student paramedic knowledge, attitudes and behaviour toward older patients.

Methods
A single institution controlled before-after study with parallel groups.
Results:
A total of 124 paramedic students were included in this study; intervention (n=60), control (n=64). Both groups showed improvement in communication skills with real older patients (p < 0.001, \( \eta^2 = 0.41 \)) and (p < 0.001, \( \eta^2 = 0.35 \)). The intervention group showed greater improvements in the ‘understands the patient’s perspective’ element for both the self-assessment (p < 0.001) and the clinician assessment (p = 0.01). Multiple linear regression found gender (\( \beta = -0.25; p = 0.01 \)) was the best predictor of clinician-assessed communication, with females having higher scores.

Discussion:
While both groups improved the most notable change in the intervention group verses the control group was in the ‘understands the patient’s perspective’ communication element. This indicates that visits with older adults, influenced the intervention group’s perspective of older people and allowed them to communicate more effectively as a result.

Conclusions:
This first study to observe, measure and report on the interpersonal communication skills of paramedic students’ with ‘real’ older patients found that their skills were fair/good at baseline and improved to good/very good post the intervention.

How can clinical educators use a system approach to embed best practice motivational interviewing to enhance sustainable health behaviour change?

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Introduction/background:
Motivational interviewing (MI) is internationally recognised as an effective intervention to facilitate health related behaviour change and takes place on the clinical microsystem level (departmental), whereas training is more likely to take place at the meso-level (health disciplines across the university and health organisation). Successfully embedding MI in client-centred health care requires awareness of the possible barriers and facilitating agreed guidelines and processes that not only support education and skills development of MI and interprofessional collaborative practice on the micro-level. Meso and macro-level related factors to be considered include professional standards and associated training requirements, local and regional health needs, acute versus chronic condition management, and associated funding.

Purpose/objectives:
(1) To identify barriers and enablers to implementation and maintenance of MI in clinical practice; and
(2) To outline a conceptual framework(s) to assist clinical educators in embedding MI in their practice and learning environment and to enhance practitioners’ and students’ competence and confidence in using MI as part of routine care, and or interprofessional practice, to optimise health outcomes.

Relevant issues/questions that need to be considered:
How is MI as an intervention implemented (or can be implemented) in clinical practice and learning environments?
How are MI skills best developed and maintained in a high workload practice environment that includes students?
How to ensure the sustainability of MI in clinical practice and learning environments?
Factors Influencing Health Practitioners’ Cognitive Processing and Decision-Making Style

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Introduction/Background: Successful interventions, healthcare planning, and patient-centred care require explanation, justification, and collaboration through interprofessional clinical decision making (CDM). Understanding health practitioners’ decision-making, processing styles, and influencing factors can enhance CDM capabilities.

Aim/Objectives: The study investigated a limited number of theoretically relevant factors that were hypothesized to influence novice and expert health practitioners’ decision-making and processing styles.

Methods: Health professionals and students (N=229) completed an online survey on their decision-making styles, interprofessional education, interprofessional practice, discipline education, clinical experience, processing styles, personality, interpersonal motivational factors, and age. To assess the influence of task structure, participants answered CDM questions on high- and low-structured case studies.

Results: Age demonstrated an effect on level of clinical experience, while clinical experience also mediated the effect of age on rational processing styles. While personality results were mixed, consistent with previous findings, conscientiousness predicted rational processing style. Effects of interpersonal motivation on personality were also mixed, insofar as results indicated an association between agreeableness and experiential processing style, and between conscientiousness and both experiential and rational processing styles. Interpersonal motivation also predicted a rational processing style.

Conclusion: The complexity of CDM and factors influencing healthcare practitioners’ processing and decision-making styles was highlighted. To optimize CDM processes by addressing errors, biases, CDM, and practice complexity, healthcare practitioner education should include theory-driven CDM orientation frameworks.

Detached Concern - Unsustainable

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Introduction/background: Medical education and practice continues to struggle to provide medical students and doctors safe ways to express emotion beyond ‘detached concern’, ways which do not place their own ongoing emotional wellbeing and professional identity as a doctor, at risk.

Aim/objectives: This study explores the influence of the social and cultural context of the clinical setting on affective learning, through asking junior doctors – ‘how have you learned to express compassion for your patients when working in the clinical context’?
Methods:
Narrative was generated from the reflective journals of, and semi-structured interviews with, eight interns as they progressed through their first year of medical practice. A thematic analysis of the intern’s individual narratives was undertaken.

Results:
Reflecting the unwritten rules of their community of practice, the interns preferred to ‘act on the side of coldness’ rather than to be seen as too emotional.

Discussion
The findings from this study closely align with developments in medical education which recognise the primacy of emotion as intimately tied to the development of a doctor’s identity.

Conclusions:
This study highlights how the systemic and cultural pressures toward detachment, efficiency, and productivity continue to collude to inhibit compassionate care. What then does this mean for us as educators, for our colleagues, our students, and for our patients - being each of us as consumers of healthcare?

Designing learner-centred in-house professional development programs for student clinical educators

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Introduction/background:
There is increasing interest in the design of professional development of teaching for clinical educators to support the development of clinical teaching expertise, quality student learning and subsequent clinical practice. Exploring and reviewing teaching beliefs is often overlooked within professional development programs.

Aim/objectives:
This research explored physiotherapy clinical educators’ beliefs of teaching and learning and their preferences for their own learning of education, to inform the design of in-house professional development programs of education.

Method:
Volunteer clinical educators completed a questionnaire on teaching and learning beliefs. The questionnaire results informed the focus group template. Focus group participants were recruited according to educator experience. There were two focus groups; early-career (less than 5 years) and experienced (5 or more years). Focus groups were led by an independent facilitator. The audio-recorded transcripts were thematic analysed by two independent researchers.

Results:
The survey response rate was 40/55 and 18 participants attended the focus groups. Preferences for development programs of education were affected by experience, career stage and contextual influences. Early-career educators preferred learning with mentors, experienced educators preferred peer group discussions and educator enthusiasts preferred formal graduate education programs.

Discussion:
Professional development programs could be improved by accommodating for educator preferences, experience and exploring their beliefs of teaching. Delivery methods should include: lecture, workshop, peer discussions and individual mentoring to improve educator engagement.
Conclusion:
In-house professional development programs are more likely to be effective if they are learner-centred and designed to align with contextual and experiential needs of participants.

Tackling Tough Topics: developing mastery to respond effectively to challenging situations

Kathryn M Weston¹, Tony Chu², Brett Thomson³

¹,³University of Wollongong, Wollongong, Australia; ²The Wollongong Hospital, Wollongong, Australia; ³Milton Medical Centre, Milton, Australia

Introduction/background:
Teaching medical students how to respond effectively to confronting situations, with positive patient outcomes, can be a challenge. Engaging students in their own learning fosters ownership and helps students develop mastery. Employing real-life scenarios and role play is effective in knowledge translation and students can learn to apply course content in managing a range of encounters.

Aim/objectives:
The aim of this project is to develop a module that helps students develop skills to effectively respond to challenging situations. The exemplar scenario of parental concerns about vaccinating a child uses the concept of story-board and drama to create a scenario that can be filmed and distributed to peers. The result is a short video-clip filmed simply using SmartPhones then edited. The story-board ideas and video are retained as resources into the future.

Discussion:
Employing real-life scenarios and role play is effective in knowledge translation, and students appreciate how to apply course content in managing a range of encounters. Novel approaches harnessing the medical humanities, such as story-board and drama, have potential for positive educational outcomes, and development of skills applicable in the students’ future careers. Moreover, a module that engages students in their own learning by reflecting on issues and experiences through role-play, is relatively cheap, easy to undertake and adaptable across any sphere of professional education, is valuable as a university-wide resource and beyond.

Issues/questions for exploration or ideas for discussion:
How can we use the Arts in educating health professional students about tackling tough topics?

2H Learning Culture – Behaviour and Reflection

Teaching through “Story Lines”

Karen Beattie¹

¹Health Education and Training Institute, Kempsey, Australia.

Introduction:
The Training and Support Unit provides education and support to Midwives, Nurses and Aboriginal Health Workers, from the Aboriginal Maternal Infant Health Services (AMIHS) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF) programs across NSW, providing staff development which supports sustainable, culturally appropriate care to Aboriginal women, families and communities.

Recognising the diverse range of skills and knowledge required by these staff, a training needs analysis undertaken in February 2017 identified current and future education needs.
Aim:
To address identified diverse learning topic areas using appropriate methodology, which supports the different learning styles and needs of multidisciplinary program staff.

Discussion:
Utilising the Aboriginal ‘Eight ways of learning’ and “story lines”, a case scenario following a family’s journey through pregnancy and early childhood was used to create a framework for the August 2017 ‘Creating Connections’ workshop.

The family’s “story lines” enabled the connection of key topic areas and learning outcomes. Underpinned by sensitive cross-cultural communication, respect, knowledge, and learner centred modalities with a translation to practice lens focused on participants working environments, client and staff needs, the “story lines” were interwoven throughout the program.

Multidisciplinary staff (33) from 26 sites across NSW attended the workshop. Comparative analysis of pre and post workshop surveys revealed the strengths and value of the learning methodology in meeting learning outcomes, strengthening ways of working and professional networks.

Ideas for discussion:
The utilisation of “story lines” and the Aboriginal ‘Eight ways of learning’ as the foundation of education and learning frameworks.

A mentoring support group to close the cross-cultural gap between international students and Australian educators: A case study of the Monash Nutrition Program

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²Faculty of Medicine, Nursing and Health Sciences, Monash University, Australia

Introduction/background:
International students often face significant challenges in the Australian classroom and clinical environment due to English-language skills and different cultural learning orientation. While some culturally-bound learning-behaviours on assertiveness and independent problem-solving skills may challenge educators in assessing students, the misaligned expectations could also leave both parties confused and feeling negative about the learning / teaching experience.

Aim/objectives:
To explore the mismatch of learning and teaching orientation impact on the international student education experience, collectively identify academic, acculturative and social challenges in the Australian education environment and collaboratively address issues through mentoring group activities.

Methods
Using participatory action research methods, Monash Nutrition international students were invited to participate in a facilitated monthly mentoring support group where they were empowered to openly discuss their challenges, problem-solve in small groups, and take part in activities that scaffold development of Western-orientated learning skills.

Results and discussion:
The mentoring support group was attended by 12-30 international students across all year-levels. During the small-group topical discussion of Australian educators’ expectations, assessment rubrics, professionalism and career-planning, students developed critical thinking skills and enhanced communication of ideas. The mentoring group became a platform for emotional support and skills-development, and the recorded discussion has alerted educators about the students’ cross-cultural needs to inform better teaching and learning.
Conclusions:
The mentoring support group is an empowerment tool that closes the cross-cultural gap between the international students and Australian educators. Learnings will form the foundation for ongoing educator support, particularly in the work integrated learning environment.

‘Reminded me of a sausage factory’: identity and relationship constructions in patient narratives of healthcare communication

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³College of Intensive Care Medicine of Australia and New Zealand, Prahran, Australia

Introduction
Narratives are constructions of individuals’ lived realities that have become part of their biographies. As such, patient narratives are constructions of both their experiences and identities. This research focused on collecting patient narratives of healthcare communication interactions. Through focussing on patients’ communication stories, we explored how patients constructed their identities, the identities of healthcare professionals (HCPs) and the patient-HCP relationship.

Aim
This research aimed to engage with the patient experience to inform communication skills teaching in health professions education. We asked: ‘what do narratives of healthcare communication reveal about the construction of patient identities and relationships?’

Methods
This interpretivist research was underpinned by social constructionism. We employed a narrative inquiry approach to design an online questionnaire that was advertised to patients in the community. The stories that were generated were analysed using both framework and narrative analysis.

Results
This study collected 180 narratives from 124 patients. Narratives included linguistic and symbolic devices, including metaphor, through which participants constructed their identities and patient-HCP relationships. A prominent finding was interactions that diminished patient agency. For example, patient participants constructed themselves as ‘sausages’, the HCP as ‘production worker’ and the patient-HCP as ‘production line.’

Discussion
We explored the patient’s voice, a voice underrepresented in medical education, to better understand communication in healthcare. Gaining insights into identity and relationship constructions through patient narratives can be a useful means by which HCPs can teach, learn and explore the patient’s perspective.

Embedding reflexivity in health professions education to augment sustainable systems and communities.

Lucy Rogers

Central Queensland University, Australia.

Introduction/background:
Reflective practice is a core component of health professions education. It is also an Australian Health Practitioner Regulation Agency (AHPRA) continuing professional development requirement for those on the national register. Critical reflection facilitates a reduction in health care errors and has, alongside reflective practice, become an educational, operational and professional norm.
The aforementioned reflective practices are evidence-based and strengthen community outcomes; however, they do not enhance health education profession sustainability in its entirety. With weak or absent sustainability, the health profession education core can become unstable with generational and often permanent consequences such as reversion to older practice or approaches. Reflexivity is the last step and encompasses reflection and critical reflection in a holistic evidence based approach. Reflexivity is the capstone that provides the coalescence for education, the profession and reflective practice.

**Purpose/objectives:**
The session will explore the concept of reflexivity in health education to advocate for continuing sustainable growth in the health of communities and health professions.
At the end of the session participants will be able to;
Differentiate between reflexivity and reflection.
Define reflexivity and reflexive practice.
Apply reflexivity to health profession education.

**Issues/questions for exploration or ideas for discussion:**
What does reflexivity look like and is it different from what we are already doing?
Where can reflexive practice be used?
Is reflexive practice discipline specific?
When can you start being reflexive?
Does reflexivity have a place in health profession education?
Can reflexivity be taught and if so how and when?
Is reflexive practice sustainable?

**Why do medical students practise invasive medical procedures on themselves?**

 Kelby Smith-Han¹, Helen Nicholson¹

¹Department of Anatomy, School of Biomedical Sciences, University of Otago, New Zealand

**Introduction/background:**
In 2016, the authors published research demonstrating that medical students practised invasive medical procedures on patients, peers, and also on themselves. One of the findings was that not only did some medical students practise an invasive procedure on themselves, some practised the invasive procedure alone. This practice raises certain safety concerns for the student, yet also raises further questions about their professional development in terms of their ethical reasoning and decision making of performing an invasive procedure on their own body. Moreover, is there any perceived learning benefit for students that practice invasive procedures on themselves?

**Aim/objectives:**
This project investigates the reasoning behind medical students practising invasive procedures on themselves. The presentation will involve looking at a preliminary analysis of the results of this study.

**Methods**
Qualitative interviews were undertaken with students in the clinical years of their medical degree that had practised invasive procedures on patients, peers, and also themselves. A grounded theory methodology was used to develop a theory behind the rationale for students practising invasive medical procedures on themselves.

**Results:**
In the preliminary analysis, themes will be presented that address why medical students practise invasive medical procedures on themselves combined with elements of the reasoning process linked with this practice.
Conclusions:
Understanding why students practised invasive medical procedures on their own body may help identify any gaps in how students learn certain aspects of professional development, for example ethical reasoning and how students understand the idea of self-care. Discussion will focus on these areas.

3A Symposium – 4

Sustaining interprofessional education in a uni-professional environment – difficult but possible! A report on work occurring within the Australian context

Roger Dunston¹, Monica Moran², Gary D. Rogers³, Maree O’Keefe⁴

¹University of Technology Sydney, ²University of Western Australia, ³Griffith University, ⁴University of Adelaide

Introduction:
The Sydney Interprofessional Declaration bestows on citizens an entitlement to ‘fully integrated, interprofessional collaborative health and human services’ but interprofessional education programs to ensure fulfilment of this entitlement have proven difficult to sustain over time. An integrated series of funded national Australian projects has sought to address the many challenges of growing and sustaining a national and inclusive approach to interprofessional education. This symposium will provide an update on progress of this work including the development strategies employed, their impact and outcomes. There will be a particular focus on governance and influencing at the macro level – the level of national peak bodies, professional governance and accreditation. The symposium will also identify how educators, practitioners and other stakeholders could become involved in these developments and what these developments mean for how we think about and develop interprofessional and uni-professional curriculum, advocacy and leadership.

Objectives:
1. To describe the way in which a series of studies, in particular ‘Securing an Interprofessional Future for Australian health professional education and practice’, have been conceptualised and implemented
2. To provide an analysis of what interventions and strategies have worked and how they have worked
3. To facilitate a discussion of how change-focused strategies might be taken up in a variety of local contexts.

List of Presentations
Roger Dunston: Introduction
1. Roger Dunston: Designing for complexity in health professional education and practice – what did we draw on and how did we do this?
2. Monica Moran and Maree O’Keefe: Co-producing with all relevant stakeholders – why, how and to what effect?
3. Gary Rogers: Addressing complexity and culture as key variable of curriculum and pedagogy – when and how?
4. Maree O’Keefe: The Australian interprofessional context, reflections on the past and future, and where to from here?

Discussion: Issues for discussion:
1. Why does interprofessional education pose such a radical challenge?
2. How can we work with these challenges?
3. What do we mean when we talk about working with complexity and culture in health professional education?
4. How can we mobilise and empower those involved with interprofessional education and practice?
3B Interprofessional Education – Sustainability 1

The microsociology of spontaneous IPL in the acute health care setting

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1Flinders University, South Australia, Australia 2 The University of Sydney, NSW, Australia

Introduction/background:
There are few existing studies that demonstrate or use theory to understand the processes underpinning spontaneous IPL at the micro interactional level. The three key areas of inquiry that have not yet been considered from a sociological perspective in terms of spontaneous IPL in the acute health care setting will be outlined.

Aim/objectives:
To explore how different professional groups perceive and enact spontaneous inter-professional learning in the acute health care setting

Methods
The methodological paradigm of symbolic interactionism informed the chosen methods of work shadowing, interviews and participatory network mapping. Saturation was achieved after a total of 109 hours of work shadowing, 503 social interactions and 30 audio recorded interviews totalling 834 minutes.

Results:
Four Key themes emerged from the data (1) Difference, (2) Status, power and equity, (3) Routine, ritual and roles, and (4) Competence, communication and collaboration.

Discussion
How individuals from different professional groups interacted in the workplace to develop the knowledge and skills required to provide safe and effective health care will be discussed. The meaning that developed and how space and time influenced the different perceptions and enactments of spontaneous IPL in the acute health care setting will be shared.

Conclusions:
A pluralistic and pragmatic approach using the micro-sociological theory of Erving Goffman got to the core of what was a multi-dimensional complex phenomenon. A map of what is an unwieldy territory provides a dexterous yet pliable avenue that uncovered patterns of everyday occurrences to inform the current IPL body of knowledge

Digital Interprofessional Learning Client Documentation (D-IPL Client Docs) development

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1School of Allied Health Sciences, Health Group, Griffith University
2Menzies Health Institute Queensland, Griffith University

Introduction/Background:
Communication, collaboration and reflective practice are key competencies of health practitioners. Written communication skills are particularly important, as health practitioners must document their assessment findings, implemented management strategies and client outcomes. Managing client
records is a key skill that entry-level health practitioner students must reach competency in prior to graduation to improve employment outcomes.

**Aim/Objectives:**
The overarching aim of the ‘D-IPL Client Docs’ project is to enhance student competencies and preparedness for interprofessional collaboration in managing digital client records in contemporary health practice.

**Methods:**
An interprofessional group of allied health teaching academics collaboratively developed a series of tasks and assessments to facilitate the development of students’ skills in objective client documentation, articulation of discipline specific scope of practice, and interprofessional competence. This collaboration was extended to allied health practitioners, First Peoples Health educators, and experts in electronic medical records platforms.

**Results:**
An interprofessional resources, tasks and assessment package was developed on an interactive learning management system for students across six health disciplines to simulate file documentation and interprofessional case conferencing activities, as well as to assess reflection activities.

**Conclusion:**
‘D-IPL Client Docs’ is continuing to be developed to enhance resources and activities for more authentic learning experiences; expand resources and participating disciplines; and explore opportunities for links with platforms being utilised in practice, as well as links with disciplines beyond health. In its current form, ‘D-IPL Client Docs’ addresses a simulated interprofessional learning need for several allied health disciplines.

**Sustainable IPE for students in the workplace: investigating the value of informal interprofessional activities**

Sharon Glass, Jade Courtney, Jo Thorpe, Gillian Nisbet, Fiona Kent

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**Introduction:**
Interprofessional education (IPE) has been proposed as one model to teach collaborative practice however formal education programs remain dependent on dedicated educator time and alignment of student timetables. Informal interprofessional activities have been proposed as a more sustainable solution to the broader uptake of interprofessional learning and warrant investigation (Nisbet, Lincoln et al 2013).

**Aim:**
To explore the educational value of single informal interprofessional observation sessions for pre-registration students.

**Method:**
A grounded theory qualitative research design was used to explore the education process within informal IPE interactions. Students from a range of professions were invited to observe other professions at work and complete a standardised reflective observation tool with prompt questions regarding what was observed, the patient interaction, the roles of others and what was learnt. Reflections were analysed inductively by at least two researchers, themes were determined within and across contexts and the educational process and outcomes described.

**Results:**
80 students participated in an interprofessional observation from five professions. Students gained an understanding of other professions roles, how other roles related to patients’ needs, and the need for collaboration in order to provide high quality patient care. Student observation of some professional groups generated consistent learnings.
Discussion:
Students enhanced their knowledge of other health professional roles through single informal interprofessional observations. Informal activities offer a more flexible and sustainable approach for clinical settings with large cohorts of students from a range of professions.

Short duration clinically-based interprofessional activities prepare health professional students for the workforce: A systematic review

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Introduction/background:
Interprofessional education is important in preparing a health professional workforce that is collaborative and practice-ready.

Aim/objectives:
The aim of this review was to examine the benefits of participation in short duration clinically-based interprofessional activities for health care professional students.

Methods
Eight electronic databases (MEDLINE, CINAHL, PUBMED, EMBASE, PsychINFO, PEDRO, ERIC, OT Seeker) were searched from inception to June 2017. Full-text English-language studies reporting outcomes of short duration clinically-based interprofessional activities involving health professional students from at least two disciplines were included. Studies were excluded if they evaluated longer duration, iterative or simulation-based interprofessional activities. Data were analysed descriptively and using content analysis with a mixed deductive and inductive approach based on the Interprofessional Collaboration Competency Domain framework.

Results:
Of 521 identified articles, 13 were included that assessed two types of interprofessional activities (shadowing and patient reviews) completed by students from medicine, pharmacy, nursing and allied health. All students reported a positive experience of interprofessional education. Student perceived that shadowing activities over 2–10 hours during in their first and second year improved their understanding across all domains of the IPEC Interprofessional Collaboration Competency Domain framework. Students who completed patient review activities completed over 2.5–4 hours during the third to fifth years of training also perceived they developed clinical skills in addition to improving their understanding of roles and responsibilities and teamwork.

Conclusions:
Preliminary evidence suggests short duration clinically-based interprofessional activities can help prepare health professional students to be collaborative members of the future workforce.

Supporting clinical educators in interprofessional placements. Lessons from an international experience

Kay Skinner\textsuperscript{1}, Kristy Robson\textsuperscript{2}

\textsuperscript{1}Charles Sturt University, Orange NSW, Australia, \textsuperscript{2}Charles Sturt University, Albury NSW, Australia

Introduction/background:
Establishing skills in collaborative health practice is seen as critical to developing allied health (AH) professionals who are able to practice within patient centred models of care. Embedding interprofessional (IP) experiences within clinical placements enables AH students to develop authentic collaborative skills. IP placements, however, add challenges for Clinical Educators (CEs) around aspects such as managing students’ perceptions; limited guidance on assessing students from other
professions; and need for increased collaboration between staff. One method of supporting CEs can be the use of a well-designed, IP supervisory and assessment model which addresses these issues.

**Aim/objectives:**
The aim of this research was to analyse the strengths and challenges of an IP approach to supervising and assessing undergraduate AH students on their clinical placement in Vietnam.

**Discussion:**
Four AH professions were involved in developing, trialling and refining over a period of 4 years, a core skills IP assessment approach and tool for a final year IP placement in Vietnam for AH students. All CE’s who had participated in the program were invited to attend a focus group session to evaluate the strengths and challenges of this innovated approach.

**Issues for exploration:**
This paper explores those aspects of the shared supervisory and assessment approach which supported the CE’s confidence and skills in assessing students from other disciplines, including: complete collaboration at all levels; joint IP assessment using a tool which they had been involved in developing; articulated key priorities; focus on the student learning journey; program leadership; and ongoing reflective practice.

**Building IPL sustainability through placement informal learning**
Gillian Nisbet1, Tina Barclay1, Inam Haq1, Matthew Jennings2, Delyse Leadbeatter1, Michelle Maw1, Madelyn Nicole1, Jacqueline Raymond1, Lorraine Smith1, Wendy Stuart-Smith1, Frances Barraclough3.

Origin: 1University of Sydney, Sydney, Australia, 2South Western Sydney Local Health District, NSW, Australia, 3University Centre for Rural Health, North Coast.

**Introduction/background:**
The placement setting is ideal for healthcare students to develop interprofessional (IPL) competencies through relevant, authentic and engaging IPL experiences. Structured IPL programs are often labour intensive, logistically difficult to timetable and difficult to sustain. A practical, scalable and sustainable approach to promoting IPL is through integrating individual IPL activities into discipline-specific placements. This approach capitalizes on the informal IPL opportunities within the workplace that are currently under-utilized.

We have developed a publicly available interactive website containing IPL activities designed for the placement setting and relevant to students and educators. Student learning data can be captured via https://health-ipl.sydney.edu.au/.

**Purpose/objectives:**
This PeArL plans to:
1. Introduce participants to the concept of informal IPL and a website supporting this approach to IPL
2. Utilize the expertise within the PeArL to create additional opportunistic learning activities
3. Establish a community of scholars interested in developing a research framework to investigate the site’s impact on student IPL competency attainment.

**Issues/questions for exploration/ideas for discussion:**
This PeArL will ask:
How can educators utilize the website to promote informal IPL within the placement setting?
What additional activities could be included on the website?
How could we use the website’s analytic data to determine student IPL competency?
Future agenda for Interprofessional Learning: individual and health system sustainability. Lessons learnt from Inspiring Health™

Susan Gordon, Nicky Baker, Christopher Lind, Karinna Hall, David Lim.

Flinders University, South Australia

Introduction/background:
Graduate attributes (GA) underpin employability, and include attainment of the transferable interprofessional skills of collaborative practice, professional behaviour, and effective communication. Work Integrated Learning (WIL)-placements that build these attributes during authentic, experiential learning are increasingly challenging to source.

Aim/objectives:
To describe the outcomes for students from eight health disciplines arising from participation in Inspiring Health™, a new interprofessional community-based health screening WIL-placement. Consider the alignment of the students’ learning and practice to GA and Interprofessional Learning Competencies (IPLC) in the context of the sustainability of the individual health professional and the health system.

Discussion:
Forty-nine students submitted written reflections about their development based on the eight IPLCs. Four reviewers independently conducted a thematic analysis of the participants’ reflections. Themes were identified through consensus.

The majority of students’ comments described learning processes related to doing, talking and watching, which resulted in attitudinal and behavioural outcomes directly aligned to GA and IPLC. Students also directly linked these outcomes to their sustainability as clinicians and productive contributors in the health system.

Utilisation of a range of interprofessional learning methods and tools during the Inspiring Health™ program resulted in new community health based activities which support attainment of GA and IPLC, and ultimately, sustainable health practice.

Issues/questions for exploration or ideas for discussion:
The role of the triple helix of business, community and universities to deliver interprofessional experiences for work ready graduates able to deliver better health outcomes.

3C Specialist Training 1

Identifying the enacted curriculum of our Medical Imaging workplace

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2Unitec – Institute of Technology, Auckland, New Zealand

Introduction/background:
This project is a partnership between an education provider and two health district health boards who between them provide placements for over half of the Auckland regions medical imaging students. This case study implements and tests a process to map the Medical Imaging (MI) workplace experience in order to inform the redesigning of a clinical placement curriculum in a MI programme. Billett reminds us that each workplace has its own context specific curriculum - the "enacted" curriculum. However, this is often tacit knowledge, so to “uncover” that knowledge the work based researchers undertook targeted observation and reflection on practice to identify and document the experience offered across each area within the placement. This data is providing the information the
Unitec MIT curriculum team needs to design the clinical placements as the foundation of a flipped curriculum model.

**Aim/objectives: The presentation will:**
Share the method we have developed to map the workplace curriculum and record the data we have collected.
Discuss the impact of this process on placement design

**Discussion:**
The collaboration is enhancing our understanding of provider environments as well as providing evidence for accreditation and developing emerging researchers in practice environments. It has captured the attention of the leading vocational educators (G Scott and S Billett) whose work is the theoretical foundation of the project and both are engaged in an advisory capacity. This project is providing a case study example of the application of workplace learning theory that is described in the literature but less operationalised in practice.

**Issues/questions for exploration or ideas for discussion:**
How sustainable is this resource intensive curriculum development activity?
What are the divers and the barriers?
Is a “flipped curriculum” a realistic goal?

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**Facilitating Occupational Therapy students to coach teachers to teach pupils with engagement difficulties: The Orion OT Program**

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**Introduction/background:**
This paper describes the Orion Occupational Therapy service, a student placement delivered in partnership with the Department of Education and Child Development, the Department of State Development and the University of South Australia. The service is provided to multiple school and kindergarten sites in the northern suburbs of Adelaide, an area of socioeconomic disadvantage and lack of wellbeing.

**Aim/objectives:**
Final year occupational therapy students provide services to support pupil engagement and wellbeing. Strategies include coaching and collaborating to support the teachers in extending their skills, and individual, group or classroom based therapy. A toolkit of supervision methods is used to mentor students whilst providing a viable service to the sites. Multiple student placements are provided throughout the school year.

**Discussion:**
Student practitioners participate actively in the educational context, aided by the supervisors, and contribute to developing teachers’ capacity to address the complex needs of children. The inherent tensions within a service learning model impact on program sustainability, especially when balancing student capacity and customer (teacher) knowledge and expectations of the service. Program support and resourcing also impacts on the nature of supervision and the service provided.

**Issues/questions for exploration or ideas for discussion:**
Is a student provided service a sustainable way to provide a) an effective clinical placement experience and b) enduring and clinically effective services to schools?
Paramedic education: a systematic review of best practice paramedic curriculum in Australia and New Zealand

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¹CQUniversity Australia, School of Health, Medical and Applied Sciences, ²CQUniversity Australia, School of Education and the Arts

Introduction/background:
Paramedic education has undergone a directional move away from vocational education into higher education. Even with the progress of paramedic education and alignment of paramedic curricula against accreditation guidelines, programs of study are diverse amongst the many Universities.

Aim/objectives:
A systematic review was undertaken to determine current best practices in paramedic curricula across Australian and New Zealand universities.

Methods
The PRISMA method of systematic reviews was undertaken searching EBSCO, Medline, CINAHL, ScienceDirect, ProQuest and PubMed databases for articles published between January 1994 and 2016. Grey literature was also searched using the same key words. A second search was undertaken using the same key words in nursing and medical education.

Results:
One-hundred and thirty publications were identified, 116 were excluded as irrelevant. A further 14 were excluded after reviewing the full text article. One article reviewed paramedic curriculum in Australian and New Zealand Higher Education. The second search conducted resulted in 395 articles being identified. Three hundred and eighty-five articles were excluded, ten articles were identified that had a focus on curricula development and were examined in detail.

Conclusions:
The purpose of this research was to identify and review the literature relating to a best practice paramedic curriculum framework. Due to the limited research found in paramedicine, the review then explored and drew from medicine and nursing curriculum design and development. The articles show that there was a clear association with best practice curriculum frameworks and standardised curriculums. This could easily be applied to paramedicine curriculum development.

Supervisors’ assessment of operative competence of urology trainees: A framework of factors and behaviours influencing decisions.

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Introduction/background:
Traditionally, trainee performance in the operating theatre has been assessed by supervision and feedback but these methods have been criticised for being too subjective and not being representative of true levels of skill.

Aim/objectives:
We explored the factors and behaviours supervisors consider in making competency decisions about urology trainees’ performance in the operating theatre.

Methods:
The research question was addressed using an epistemological stance of inductive thematic analysis.
Semi-structured individual interviews were conducted with consultant urologists and a focus group enlisted from the Victorian Urology Training, Assessment and Examination committee.

**Results:**
Competency judgements are based on multiple factors; surgeon preparation, cognition of patient and team related factors, inter-professional, self-awareness and technical skills and complexity of the procedure.
There is substantive variation in trainees' performance at the completion of training and there is concern about graduate trainees' skill levels.
There are challenges in assessment with "on-the job" learning for assessors and a lack of declared expectations of operative competencies.

**Discussion:**
Operative competence extends well beyond technical performance reflecting the complexity of the environment. These factors need to be considered in developing a competency judgement framework.

Competency assessments are underpinned by concerns about assessor training, uncertainty about the benchmarks of operative competence and concerns about graduate trainees' skill levels.

**Conclusion:**
Assessment of operative competence by urology trainees is multifactorial and these considerations must be acknowledged in an assessment framework.

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**Assessing gender effects in Surgical Education Training applicant outcomes**

Michael Rasmussen

Royal Australasian College of Surgeons

**Introduction/background:**
In Australia and New Zealand, selection into surgical training sees more than twice as many male applicants than female applicants, however, female trainees withdraw from training at a greater rate than males. Given that this imbalance it is appropriate to investigate the selection process into surgical training for any evidence of gender bias, such that any issues relating to the equitable intake of female trainees is addressed and evidence of gender-based discrimination in the SET selection process is minimised.

**Methods**
Raw selection performance and applicant outcome data from the selection review datasets of the nine surgical specialties were analysed (2007-2014). Mixed effects regression was used to determine whether a candidate’s gender had an effect on performance on the CV, RR or interview for each specialty.

**Results:**
Controlling for several covariates, female candidates did not appear to have an improved or reduced chance of receiving offers into SET. The CV appears to disadvantage female candidates over males on their first attempt at selection. However, female candidates tend to outperform their male counterparts in the rate of improved performance on the CV selection tool. Consecutive attempts at selection resulted in an average 23% reduced chance of receiving an offer into SET for both sexes.

**Discussion**
No gender specific advantage/bias was detected for the selection tools except for the CV, which showed that on the first attempt to selection women were at a disadvantage. However, overall, the estimated probability of receiving an offer was not associated with being male or female.
Conclusions:
There was no substantial evidence for gender effects in the selection of candidates for surgical training.

A missed training opportunity? Exploring specialty trainees' perceptions of a take-home laparoscopic simulation-training program

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Background:
Limited surgical training opportunities for gynaecology trainees inspired a laparoscopic simulation program that provided portable box trainers. Despite intending to overcome known barriers of time and access to equipment, engagement with the program was suboptimal.

Aim:
To investigate trainee perceptions of the simulation program and identify previously unrecognised barriers and enablers to training.

Discussion:
Trainees at a tertiary hospital in Australia who participated in a simulation program in 2016 were invited to participate in a follow-up survey and interview. Of the 16 participants in laparoscopic training program, 14 completed a survey and 10 participated in an interview. Most participants reported their use of the laparoscopic trainer was less than weekly. Despite availability at home being the highest rated feature of the program, less than half the participants felt they had enough time to complete the training. Factors identified in the subsequent interview impacting on trainee engagement with the program will be discussed in this presentation. Prioritisation of time for training compared to other life tasks, the perceived value of this training and equipment utilisation issues were explored by trainees. Trainees gave valuable insights into their perception of the role of simulation, the impact of supervision on their motivation to train and their willingness for mandatory simulation training.

Issues for discussion:
Despite attempting to overcome known barriers to training, we revealed limited use of the take-home laparoscopic trainers. Subsequent analysis identified further specific obstacles to engagement. This is valuable to discuss and consider for program design.

Laparoscopic surgical skills in gynaecology trainees: Does a simulation program allowing self-directed training at home improve performance?

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Introduction:
Simulation training can provide an adjunctive means of surgical training for gynaecology trainees, yet a lack of time and access to equipment are recognised barriers.
**Aim:**
To evaluate the impact of a simulation-training program utilising take-home box trainers on the laparoscopic skills of trainees.

**Methods:**
A cohort study was undertaken at a tertiary hospital in Brisbane. Participants (N=17 in 2015, N=16 in 2016) were supplied with a box trainer, associated equipment and instructions on self-directed training. Half of the participants were randomly allocated a mentor. Assessment of laparoscopic skills was performed in box trainer and virtual reality simulator tasks pre- and post-training. Participants were supplied with logbooks and practice time was reviewed, including analysis by mentor allocation.

**Results:**
In 2015, trainees demonstrated an improvement in the median time to complete a virtual reality laparoscopic tubal ligation task (baseline 124 seconds versus post-training 91 seconds, P=0.041). In 2016, trainees demonstrated improvement in tubal ligation time (251 versus 71 seconds, P=0.021) and virtual reality bilateral oophorectomy time (891 seconds versus 504, P=0.025). There was no significant difference in other outcome measures or when groups were compared by mentor allocation.

**Discussion**
Not all trainees completed assessments and few participants returned completed logbooks, possibly indicating suboptimal program engagement. Mentor allocation appeared to have no influence on program engagement or performance outcomes.

**Conclusions:**
In two years of a take-home box trainer simulation-training program, improvements were observed in laparoscopic skills. Suboptimal program engagement was surprising given the program was designed to overcome barriers to training.

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**Improving the surgical learning environment: Feeding back to the teachers**

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¹The University of Auckland, Auckland, New Zealand; ²Centre for Medical and Health Sciences Education, Auckland, New Zealand.

**Introduction:** During clinical training medical students are attached to clinical teams within teaching hospitals and immersed in their clinical environment. This clinical learning environment (CLE) is highly variable and unpredictable, particularly in surgical rotations.

**Aim:** To evaluate the CLE during medical students’ general surgery rotation and whether providing feedback could improve this perception.

**Methods:** Over the course of 18 months, 4th year medical students at the University of Auckland were surveyed during their General Surgery rotation. The survey used was adapted from a previously validated 25-item learning environment questionnaire. After obtaining data every 6 months, a feedback document was prepared and returned to surgical consultants at one teaching hospital while other clinical sites were used as controls.

**Results:** 316 students completed the questionnaire (response rate of 96%). The overall Cronbach α for the questionnaire was 0.94. There were no significant differences following provision of the feedback documents to consultant surgeons. Students reported spending much of their time with the registrar and while spending a lot of time in operating theatre, seeing patients acutely was the learning opportunity they found most useful. Themes that arose from qualitative comments also include teams not being aware of student objectives, the significant role of the registrar and the importance of student inclusion within the team environment.
**Conclusion:** Providing surgeons with student feedback does not necessarily translate to improved perceptions of the surgical CLE. Registrars appear to play a critical role in the CLE of students during their surgical rotation.

**3D Sustainability - Workforce**

**Are lecture recordings sustainable for students and staff?**

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**Introduction/background:**
We investigated the effects of lecture recordings on students and teachers, and especially the implications for quality of learning and academic life. We gathered information by a review of the literature, online surveys of staff and students in the Faculty of Medical and Health Sciences, and intensive discussions with small groups. Recordings are popular with students but not with staff. In theory recordings complement attendance and participation in lectures but in practice, recordings commonly substitute for attendance. Recordings provide students with more choices, greater flexibility to choose how to use their time and learner autonomy. It is not clear whether access to recordings improves academic performance overall, or detracts. But we note significant unintended consequences of the technology, which include students spending less time at university, avoiding the class-room except where assessment requires their presence, and taking on heavy loads with overlapping course schedules and part-time paid-work. We found that staff continue to lecture as before with few exceptions.

**Purpose/objectives:**
The purpose of the PeArLs is to share our learnings with other tertiary institutions and to learn from other institutions about their experience with lecture recordings.

**Issues/ questions for exploration or ideas for discussion:**
How can the positive features of lecture recordings be retained, while managing the risks, especially for vulnerable students, and improving the quality of teaching and learning?
Are lecture recordings adding to (enabling), or detracting from, sustainable health professional education?
Do the purpose and content of the university lecture require a fundamental re-think?

**Building an agile and sustainable disability allied health workforce**

Megan Carnegie - Brown, Brooke Workman and Lisa Carnegie

The Benevolent Society, Sydney, NSW, Australia

**Introduction/background:**
Clinical placements are one of the most important factors when influencing career choice for allied health professionals. The introduction of the National Disability Insurance Scheme (NDIS) has brought up new challenges for student supervisors and organisations in providing quality clinical placements. Without a focus on strategies to overcome these challenges, we are likely to see a potential shortage in the future allied health workforce. A disability skilled workforce is crucial to meet the needs and aspirations of people with a disability.

**Aim/objectives:**
To discuss lessons learned about operating with students in an NDIS environment.
Share the strategies we are implementing to support student placements effectively across the disability sector.
**Discussion:**
Since the introduction of the NDIS, we know anecdotally there has been a decline in the number of student placements being offered within the disability sector. This is due to a range of reasons including the challenges of navigating the new systems and processes that the NDIS brings. It is also due to a lack of resources and information available to student supervisors to assist them in determining how supervising students fits within the NDIS model. Student supervisors need support to find new ways to manage student placements more effectively within this model.

**Issues/questions for exploration or ideas for discussion:**
What potential strategies can be suggested to provide quality placements across the disability sector to assist in building a future sustainable disability ready workforce?

What can we do to increase student interest in working in the disability sector upon graduation?

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**Burden or bonus? The impact of medical student placements on health services**

Elizabeth Molloy, Robyn Woodward-Kron, Jo-anne Hughson, Clare Delany, Stephen Lew, Agnes Dodds, Mark Lavercombe.

The University of Melbourne, Melbourne, Australia

**Introduction**
Workplace learning plays a key role in developing work-ready medical graduates. The literature has focussed on how students learn in these complex settings with little research exploring the costs and benefits of student placements for different stakeholders.

**Aim**
This study identified the perceived costs and benefits of medical student clinical placements for multiple stakeholders in the healthcare system.

**Methods**
The study, funded by the Medical Deans of Australia and New Zealand, was conducted at a large outer metropolitan healthcare service. Data collection included observation of students, activity profiling, focus groups, and interviews with a range of stakeholders. Quantitative data were analysed using descriptive statistics and qualitative data were thematically analysed.

**Results**
Multiple data sets identified the time cost in hosting medical students including briefing and debriefing with students, questioning/explanation, and more formalised teaching such as tutorials. Benefits identified included students contributing to clinical work, increasing reflective practice of clinicians, workforce recruitment, and improving patient experience through education. The extent of student contribution depended on clinical domain, student proactivity and level of experience.

**Discussion**
The degree to which medical students contribute to healthcare depends on the characteristics of the clinical context, as well as the experience and engagement of learner and supervisor. Further research across programs and contexts is warranted, including extended ethnographic approaches to capture the less visible contributions.

**Conclusions**
This multi-phased study identified that students do more than complete ‘busy tasks’ on clinical placements. Their presence as observers was reported to heighten clinicians’ reflective practice.
The Teaching Technology Toolkit: an initiative for sustainable medical education innovation

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Introduction/background:
The thoughtful integration of teaching technology into practice requires aligning pedagogy and design, with technology and tools to enhance learning. This can be a daunting task for new as well as experienced course designers, and is complicated by the many ways in which technology and face-to-face learning can be blended. While learning technologies are widely adopted, they are often deployed by individuals, without visibility to other academics.

Aim/objectives:
The study aimed to survey medical education practitioners on the use of technology and learning strategies in teaching, and to develop a toolkit to inform practitioners and cultivate a community of practice that enables strategic and effective use of technology in teaching.

Methods
A survey tool was developed to collect data on teaching practice, which was analysed to correlate technology with teaching and learning strategies and to develop a platform to support staff capacity building.

Results:
Of the 108 participants (professor to lecturer levels) who completed the survey, 64% indicated that they would find a decision tree to select tools useful. The 93 digital tools used for teaching was classified into 13 categories. A step-by-step decision tool to aid the selection of teaching technology was developed (http://www.teachingtools.med.unsw.edu.au) to include a repository that showcases implementation and evaluation of technology in current teaching practice.

Discussion:
The toolkit is a sustainable method of collecting and disseminating teaching innovation. The usefulness of exemplars and practice champions for technology has increased discussion around embedding technology into teaching.

Conclusions:
The toolkit has wide uptake internationally and proven useful for developing practice and community.

Sharing skills for sustainable curriculum quality

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Introduction:
Health graduates are required to enter the workforce with competencies relevant to their field. To achieve this, academics are required to develop curriculum and assessment to enable development of these competencies. After completing one full iteration of the occupational therapy degree, academics engaged an educational expert to review learning outcomes and assessments. A focus on assessment was prioritised as this is one aspect that matters to students. Constructive alignment between assessment and learning outcomes assists students to understand how assessments relate to their future professional practice.
Aims:
This collaborative partnership had two aims: to review the occupational therapy program to ensure constructive alignment; and increase the assessment literacy of academic staff.

Discussion:
Meetings were held with course convenors to discuss the alignment of learning outcomes and assessments for each course. Assessment stimuli were revised to ensure explicit alignment between learning outcomes and assessment instructions. Marking criteria for each assessment were rewritten to ensure the learning intentions of each assessment were reflected in the rubric. Academic staff expressed an increased understanding of constructive alignment and felt more equipped to ensure congruence between assessment practices and learning outcomes. Staff perceived that skills gained from working with the curriculum expert would enable them to independently complete future course reviews where assessments may need to be modified.

Ideas for discussion:
This presentation will benefit academic staff who want to understand how improving the assessment literacy of academics can improve constructive alignment leading to sustainable work practices and course delivery.

Transitioning to a sustainable AH staff education program

Tameka Robertson, Molly Galea, Drew Aras, Peter Brack

Northern Health, Epping, Australia

Introduction/background:
Northern Health is a hospital in Melbourne’s outer north, with the busiest emergency department in Victoria. The Allied Health Education team faces a number of challenges common to hospital-based educational sustainability: busy staff, crisis-driven priorities, difficulty demonstrating impact.

The allied health education program is delivered to more than 10 professional groups, with a focus on non-technical skills to facilitate capability and quality. Attendees range from new graduates to senior practitioners and managers.

A sustainable model of delivering professional education was needed to address the challenges. The education team used co-design to increase ownership of and participation in the education program, incorporating input from all staff levels within the hospital. We used focus groups, a needs analysis, consultation with senior executive, participation in planning, and ongoing feedback through the year.

Aim/objectives:
The education team set out to develop a sustainable education program that was valuable and engaging for practitioners, supported by management, and demonstrated value for the organisation.

This presentation will discuss the stages of transformation of the education program, achievements, demonstration of impact, challenges and difficulties, and opportunities for further improvement, with an emphasis on information that is transferable to other contexts.

We will conclude with an emphasis on transferable takeaways.

Questions for discussion:
How do you listen to your organisation to ensure your education program is responsive to all the stakeholders involved? How do you engage people in the change process? What makes a program sustainable in your organisation?
Preparing medical graduates for the health effects of climate change – Medical Deans of Australia and New Zealand respond

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Introduction/background:
Climate change already affects the health of millions of people around the world. This is extensively described in the 2017 annual report of The Lancet Countdown: Tracking Progress on Health and Climate Change. The need to build the capacity of the health workforce to adapt and mitigate is well recognised. Despite this, medical schools in Australia and New Zealand, and in other parts of the world, have been slow to respond and prepare graduates for the health challenges posed by climate change. The Medical Deans of Australia and New Zealand has recently formed a working group, representing medical schools and medical student associations across both countries, to work collaboratively to address the health and climate change within primary medical programs.

Aim/objectives:
The presentation will describe progress of the work of the collaboration after six months.

Discussion:
To the best of our knowledge, this is the only collaboration of its kind in the world. By pooling resources, it maximises the opportunity for Australasian medical schools to integrate climate change and health into curriculum and represents a systematic approach to a global threat. It has great potential to influence health professions education

Issues/questions for exploration or ideas for discussion:
Given the serious threat, why have so few health professional curriculum included climate change and health?
Are collaborations such as this part of the solution?
What indicators could be used to measure success?
How do educators contribute to rapidly transitioning the health system in a low carbon economy?

An investigation of sustainable online options to support rural and remote work-integrated learning supervisors

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Introduction/background:
In remote and rural contexts, supervising work-integrated learning (WIL) placements presents challenges because the health professional workforce is younger, less experienced and has high turnover. Access to support and resources to develop skills as a supervisor is limited. Social media or web-based platforms might provide a sustainable avenue to facilitate a virtual community of practice for geographically dispersed WIL supervisors.

Aim/objectives:
This project investigated the options for developing an online-support strategy for remotely-located WIL supervisors.

Methods
A literature review informed the construction of a decision matrix to evaluate web-based and social media options. A survey drawing on this evidence was then designed and delivered to “test the waters” with our rural and remote clinical supervisors. Questions aimed to determine their perceptions about possible use and acceptability of a range of social media platforms for providing online-support.
Results:
The decision matrix provided a framework for the project team to evaluate thirteen web-based platforms along dimensions including the purpose, ease of use, interaction options, privacy and security, networking potential, mobile apps and versatility. Results from the survey of clinical supervisors (n=39) demonstrated a desire to access just-in-time expert tips and strategies and structured professional development opportunities. Surprisingly participants indicated preference for less interactive participation in an anonymous and private platform.

Discussion and Conclusions:
This research highlights the mismatch between the notions of automatic engagement using social media compared with the desire of users to merely access information. This underlines the importance of undertaking evidence-based contextual analyses prior to developing educational interventions.

3E Learning Culture – Professionalism
Sustaining the dream – the development of a medical identity in undergraduate medical education

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Background:
Medical students often enter the medical profession with aspirations about providing care and ‘helping people’. Over time their perception of the ‘identity’ that constitutes a medical professional is influenced by their own ideals and stereotypes, their academic teachers and clinical supervisors, and encounters with other physicians and patients. The physician that students ultimately ‘become’ is the result of a gradual process of learning and shaping.

Objectives:
This study sought to investigate the perceptions of medical identity among students in the first and final years of an undergraduate medical program.

Methods
We used a polarity profile, rating individual’s perceptions of themselves, ideal physicians, and real physicians, on constructs such as aptitude, trustworthiness, reliability, friendliness, confidence, thoroughness and congeniality. Students in first year were invited to complete the online survey on the first day of classes, and those in their final year were invited to complete the same survey in the last weeks of their program.

Results:
123 students completed the survey on day one of their first year and 46 completed it in the final weeks of year five. Differences between perceptions of themselves, the ideal, and the real doctor were observed at and between time points.

Discussion
Even from the beginning of their program, medical students have a perception that the reality of medical practitioner behaviour differs from what is ideal. It seems that students generally seek to become physicians that more closely resemble the ‘ideal’, but accept that their own reality may differ from this to some extent.
Teddy Bear Hospital: the experience of medical students in a paediatric curriculum

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Introduction/background:
The Teddy Bear Hospital is a strategy used to help reduce children’s fears of the healthcare system and teach them about health-related issues. It involves mock consultations where medical students play a ‘teddy doctor’ and children act as the carer of soft toys, requiring consultation. This provides medical students the opportunity to interact with children and develop communication skills, while children are introduced to the medical consultation process.

Aim/objectives:
To evaluate the medical student experience of a Teddy Bear Hospital as part of a paediatric curriculum.

Methods
We conducted a qualitative observational study using observations and focus group interviews with third-year postgraduate medical students. Strategies for engaging children and medical student behaviours were observed. In focus groups, students discussed their experience and perceived benefits of involvement. Inductive content analysis was performed on focus group transcripts and field notes to identify themes.

Results:
Three major themes were identified. Student discomfort was experienced by having to approach families and by disclosure of medical information. Despite this students described an enjoyable learning experience which taught them to adapt communication to the child. Students also recognised greater challenges in a hospital-based event, compared to those in the community.

Conclusions:
Participation in the Teddy Bear Hospital appears to be a valuable component of the paediatric curriculum for medical students. Through fun experiential learning, students are describe developing important communication skills with children. While they experience discomfort in the process, this has a potential to deepen their learning.

Promoting professionalism: Using simulation to develop critical reflection

Andrew Stuart Lane, Chris Roberts

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Introduction/background:
Many junior doctors take part in open disclosure without any formal training or experience. Simulation is a training method in which learners practice tasks in life-like circumstances, with feedback from observers.

Aim/objectives:
We aimed to illuminate how participants of simulation make sense of, and utilise, their educational experience?

Methods:
We conducted a Phenomenological study utilising simulation exploring open disclosure. Eight medical students underwent four immersive mannequin simulations followed by focus-group discussion, with
subsequent interviews during their intern year. The data was coded and analysed using Interpretative Phenomenological Analysis.

Results:
The superordinate theme labelled ‘Reflecting on simulation’, described how the medical students reflected on the session. The theme ‘Learning of value’ described their reflection at the time. The debrief reflection was metacognitive in nature, and was aligned with clinical reasoning. The theme ‘Reflection of value’ described their current reflection. It highlighted the need to go beyond the descriptive, aligning with Jarvis’s theory. The theme ‘Professionalism’ described their future reflection. Participants needed to align reflection with future practice, with a need for ‘belongingness’.

Discussion
Medical students and junior doctors possess defects in their cognitive frames that lead them to make incorrect actions. Their actions are often rationalised, therefore avoiding the learning experience they require to avoid repeating mistakes. As learners become aware of their unconscious incompetence with expert facilitation they become inspired to attain reflective competence, hence develop their professionalism.

Conclusions:
Utilisation of the competency matrix during simulation gives educators a powerful tool to promote critical reflection, cognitive resilience, and the development of professionalism in learners.

Encouraging creativity and reflective practice in medical education

Jill Yielder,1 Sharyn Esteves1

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Introduction/background:
Developing a culture of critical reflection and acknowledging the importance of creativity in the traditionally positivist culture of medical education is difficult, yet is becoming increasingly important in the contemporary health environment. To practice effectively in a multi-cultural and complex context in a sustainable way, students need understand the relevance of critical reflection to lifelong learning and practice. This requires a more humanistic and rounded view of what they bring to medicine rather than the traditional emphasis on knowledge and skills. This presentation will discuss an innovative approach to valuing personal and professional skills within a medical curriculum and illustrate the high quality creative and reflective responses generated by students.

Aim/objectives:
This presentation aims to present and discuss an innovative approach to assessing the Personal and Profession Skills domain of the MBChB programme at the University of Auckland.

Discussion:
We will discuss the implementation of a new domain of learning in the MBChB programme, how the domain is assessed, what we are aiming to achieve with the introduction of this domain, and will illustrate critical reflective practice and creativity within the programme with examples.

Issues/questions for exploration or ideas for discussion:
How to change a traditional culture of medical education to embed a new approach
How to encourage a more humanistic approach to medicine
How to deal with the sustainability of assessing personal and professional skills by portfolio

Preparing the medical teachers of tomorrow: a prospective study

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1The University of Notre Dame Australia, School of Medicine Sydney, Darlinghurst, New South Wales, Australia.
Introduction/background:
Although teaching in medicine constitutes a core clinical competency by the Australian Medical Council, only 58% of Australian medical schools have an official teaching-skills program. In addition, more than 50% of the programs in place require 11 or more face-to-face hours, which may prove to be a financial deterrent for other institutions. At the University of Notre Dame (Sydney), a near-peer tutor preparation program for anatomy teaching with less than five face-to-face hours was initiated.

Aim/objectives:
The aim of this study was to evaluate the efficacy of this preparation program in improving students’ confidence and ability to teach.

Methods
Near-peer tutor preparation involved the distribution of a manual outlining the core principles of teaching, a one-hour workshop delivered by senior faculty members, and supervision of their initial teaching sessions by a senior faculty member with immediate constructive feedback. The near-peer tutors completed forms evaluating the preparation program and overall experience of teaching. Multiple choice question quiz scores of students taught by near-peer tutors and those taught by faculty tutors were compared.

Results:
Near-peer tutors reported feeling well supported during the teaching period, that the program improved their confidence in teaching, and all would strongly recommend the program to their peers. Students taught by near-peer tutors scored similarly to those taught by faculty in a summative quiz (NPT: 72.7%, Faculty: 73.8%, p>0.05).

Conclusions:
A student-as-teacher preparation programme with minimal contact hours can be initiated with positive outcomes for near-peer tutors and may improve their ability to teach as doctors.

Exploring practitioner and student experiences of workplace dignity during work-integrated learning (WIL): A narrative interview study across six different professions

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Introduction/background
University students undertake work-integrated learning (WIL) in order to develop their applied knowledge, but sometimes experience violations of their dignity despite existing regulations. While healthcare research has begun to document students’ dignity, limited research exists focusing on practitioners and different professions.

Aim/objectives
This study answers four research questions: (1) What are student and practitioner understandings of workplace dignity? (2) What are their experiences of dignity during WIL? (3) What are their
suggestions for improving dignity? (4) What similarities/differences/strengths/weaknesses exist across participant types?

Methods
Seven group and thirty-nine individual interviews have so far been conducted with 39 students and 17 practitioners across six professions (medicine, nursing, law, business, education and counselling). Data are being analysed using Framework Analysis.

Results
Six themes have been identified for RQ1-3 so far: (1) conceptualisations of workplace dignity, (2) context of dignity experiences, (3) nature of dignity experiences, (4) factors contributing to experiences, (5) consequences of experiences, and (6) recommendations for improving dignity. We have yet to explore differences across participant types (RQ4).

Discussion
While some struggled to articulate workplace dignity, a wide range of understandings were identified, and a broad array of workplace dignity experiences were narrated that impact on students' learning and student and practitioners' wellbeing with respect to WIL.

Conclusions
Our preliminary findings provide insights into workplace dignity during WIL by exploring both student and practitioner experiences across six different professions. Our study will offer policy and practice implications for Universities partnering with industry to support and inculcate workplace dignity during WIL.

Identifying clinical educators’ learning during culturally and linguistically diverse students’ health professional placements

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Introduction/background:
Clinical educators (CEs) have identified that culturally and linguistically diverse (CALD) students are complex and time-intensive to supervise in placements. Preliminary evidence suggests that CEs’ can develop intercultural skills and knowledge through supervising CALD student placements, which may offset these perceptions. However, the nature of this learning, and the events prompting learning, are currently unknown.

Aim/objectives:
This study aims to describe: (1) the cultural and linguistic backgrounds of students in health professional programs at one Australian university and (2) events prompting CEs’ learning during CALD student placements, the skills and knowledge that CEs develop, and CEs’ perceptions of the future applicability of their learning.

Methods:
Students from five health professional programs completed a survey regarding their cultural and linguistic background. Placement details were obtained for students who identified as CALD. Their CEs then completed: (1) a questionnaire regarding their professional experience, and (2) a minimum of two structured, written reflections about their learning at the beginning, middle, and/or end of the student’s placement. Critical Incident Theory was used to code these reflections for events which prompted learning and outcomes.

Results & Discussion:
The student survey results and a taxonomy of the CEs’ learning during placements will be reported. Ongoing data is being gathered and analysed concurrently, with the events and learning identified by CEs interpreted using Lave and Wenger’s (1991) theory of Legitimate Peripheral Participation as a conceptual framework. Findings about placement education for CALD students that relate to opportunities for intercultural skills development will be reported.
University students’ resilience: Outcomes of a scoping review

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Introduction/background:
Resilience has been shown to reduce psychological distress, assist with managing academic demands, and enhance learning outcomes. Resilience is also critical in the workplace where change is constant and the demands on health professions high.

Aim/objectives:
A literature review was conducted to address three questions: (1) how is resilience conceptualised within the higher education literature?, (2) how do researchers view the role of resilience within higher education and employability?, and (3) what is the extent and nature of the research on interventions targeting student resilience within higher education?

Methods
A scoping review was undertaken of peer reviewed papers published in the past decade using three large databases.

Results:
Seventy three papers were reviewed. While the number of publications focused on student resilience had risen in recent years the term lacked clarity with many papers failing to provide a theoretical or working definition. Researchers called for resilience to be a focus of student education and an array of strategies to enhance resilience were proposed. The number of interventions studies, however, was limited.

Discussion:
There is a diverse range of suggested strategies and an emerging body of research testing these out. The majority of research to date has focussed on developing student intrapersonal resources with much less attention based on testing interventions that build intrapersonal resources or interventions that address contextual factors.

Conclusion:
Future research directions would benefit from interventions informed by theory and based on rigours research methodology to ensure a growing evidenced based approach to developing resilience

3F Simulation 1

Simulation-based Learning in Higher Education – an Investigation into Social Return on Investment

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Introduction/background:
In view of the current economic climate in higher education, rising costs of student fieldwork and popularity of simulation in health courses, it is imperative to explore the return on investment for simulation-based learning. Although there is no consensus on the optimal approach, one such methodology - social return on investment (SROI) - focusses on analysis from stakeholders and provides a holistic consideration of the diverse facets of impact.
Aim/objectives:
This project utilised SROI methodology for assessing outcomes and cost effectiveness of simulation-based learning (SBL) in the health domain.

Methods:
A pilot was conducted to clarify the process and provide data for analysis. Principally, this involved identifying and interviewing key stakeholders. Audio recordings were transcribed and analysed in the context of a primary model and SROI methodology.

Results:
The opinions from a diverse stakeholder group facilitated a greater understanding of the impact of SBL. Many concepts from the primary model were confirmed, others were added; resulting in version 2 of the model.

Discussion:
Early findings confirm the complexity of ascertaining social return on investment, particularly at the junction of health, education and economics. The results amplified the understanding of the extra-financial impacts of SBE, including benefits to relationships with external partners, marketing, retention and work readiness.

Conclusions:
We aim to share the findings from our study in order to suggest our framework as a model for gauging SROI for simulation in the context of health education and to seek input for further enhancement of our framework.

Practicing what we preach: the use of structure to create a shared mental model for the delivery of simulation based teaching

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Introduction/background:
Delivering high quality simulation based teaching sessions within a high throughput program can be fraught with logistical and technological challenges. Overcoming such challenges requires effective interprofessional teamwork, the sustainability of which is aided by a systematic and structured approach that can be used by all staff.

Aim/objectives:
We present an approach currently in use at Adelaide Health Simulation, the objective of which is to create a shared mental model for academic and technical staff designed to optimise team work, improve consistency of performance and maximise the quality of the educational experience for students.

Discussion:
We created the STAR model: a four stage model that includes checklists to prompt the team to complete key steps as the teaching session progresses through four key stages. The model starts with Setup before progressing to a Test and Talk phase designed to test and troubleshoot the scenario and equipment before the students arrive. The third stage is Activation of the simulation and the final stage is Reset in preparation for the next scenario. During each stage team members have specific tasks and roles assigned as well as timescales for completion designed to ensure the smooth running of the session. Flexibility is inbuilt so the model is adaptable to the type of simulation being run.

Issues/questions for exploration or ideas for discussion:
How else can we create shared mental models among staff for the delivery of simulation based teaching?
What other methods can we use to create sustainability in good practice within education teams?
Volunteer Simulated Patients – A sustainable resource for patient simulation in a medical curriculum

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¹Grampians Clinical School, Deakin University, Burwood, Australia

Introduction/background:
The Grampians Clinical School (GCS) is affiliated with a regional hospital to provide education for medical students. The hospital enlists volunteers from the community to support patient care. The GCS has accessed this pool of volunteers to create a sustainable source of Volunteer Simulated Patients (VSPs) to enhance the simulation component of the curricula.

A literature review confirms the benefits of incorporating simulated patients in clinical education. These benefits include a higher degree of fidelity, and enhancing non-technical skill acquisition such as communication skills.

Aim/objectives:
To evaluate the sustainability and effectiveness of a program that incorporates hospital volunteers into clinical skills sessions.

Discussion:
This presentation will focus on the planning, implementation and interim evaluation findings of the VSP program. We will outline the challenges and benefits experienced in each phase of program development and lessons learned to support future sustainable, collaborative programs. As a part of our evaluation, written feedback was collected from VSPs and students.

Issues/questions for exploration or ideas for discussion:
The GCS has been able to access a valuable, sustainable resource of committed volunteers to enhance clinical teaching.

In reviewing the program, we uncovered several issues that can impact on sustainability. These included ongoing financial costs, setting guidelines for VSPs, engaging VSPs in appropriate sessions, and the maintenance of partnerships with VSPs, the hospital and the community.

Case based learning and emergency medicine simulation: a symbiotic answer to increase student engagement?

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The University of Wollongong, Wollongong, Australia

Introduction/background:
Case Based learning (CBL) is a core element for the first 18 months of the UOW MD curriculum. Students open each case as a cohort, facilitated by a scientist-clinician team. A clinician models history-taking from a simulated patient in real-time and the team facilitates students’ critical reasoning and identification of learning objectives. Our research shows that students are positive about the educational value of this format, which lends itself well to exploring subacute and chronic medical presentations.

Purpose/objectives:
UOW proposes to integrate elements of emergency medicine simulation into some CBL introduction sessions and evaluate effectiveness. An acute emergency presentation will be modelled in real-time using realistically attired clinicians, a simulated patient and simulation equipment. Strategically scheduled “time-outs” will allow for CBL facilitation and student participation. Students have exposure to simulation during clinical skills lessons and it is hoped that further direct integration with CBL pedagogy will have a symbiotic effect on engagement and complex learning.
Making a fully-immersive fully-simulated clinical placement for physiotherapy students sustainable

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¹School of Physiotherapy and Exercise Science, Curtin University, Bentley, Australia

Background
During 2014, 60 Curtin University physiotherapy students undertook a new model of preparatory clinical placement using immersive simulation as part of a nationwide government-funded study. Compared to traditional hospital-based placements, student outcomes from the simulated student group were equivalent, or slightly better. Following these findings, the University committed to continue to deliver the placement so long as it was streamlined to maximise sustainability, and in 2015 a new structure was developed and implemented. The aim of this study was to describe this framework, compare relative supervisory and actor costs across both models and compare student outcomes for both periods to ensure ongoing quality.

Methods
The new structure involved a higher student to supervisor ratio and better utility of actor time. The same number of scenarios were undertaken, and students completed self-directed tasks related to these scenarios when they were not directly involved in a simulation activity. All students provided written informed consent to participate in the study and on completion of the placement, had their clinical competence assessed using the Assessment of Physiotherapy Practice (APP) tool.

Results
Data were collected from 244 students. Compared to 2014, substantial savings were demonstrated in two targeted areas during 2015-2016, with both supervisor and actor costs/student reduced by approximately half. Total APP scores demonstrated no significant difference between 2014 and 2015-2016 student cohorts (p=0.11).

Conclusions
The new 2015-2016 timetable including the introduction of student self-directed activities enabled staff to supervise more students, and improve the utilisation of actors without compromising student clinical performance.

Medical student’s participation in a Pre-Internship Simulation Module (PRISM)

Jenny Bryce¹, Nick Simpson²

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Introduction/background:
Transition from medical student to intern can be stressful. Participation in clinical scenario simulation provides an opportunity to assist with this transition. This study evaluates a novel final year medical student simulated education program - PRISM.
Aim/objectives:
Deakin University School of Medicine developed PRISM to assist final year medical students prepare for clinical internship, with student confidence in core clinical and communication skills evaluated before and after participation.

Methods:
Ethics approval was obtained by Deakin University Human Research Ethics Committee. The intervention was a single site nine-hour simulation-based education program undertaken during pre-internship in a simulated clinical environment at a tertiary medical school. Students participated in PRISM with exposure to commonly encountered scenarios in a virtual ward environment. Assessment of confidence was performed by structured survey using Likert scales.

Results:
After the intervention, student confidence was significantly improved across four domains; Communication; clinical skills; investigation interpretation and teamwork. Gains were statistically significant (p<0.01) across all domains.

Discussion:
Research suggests transition to internship is stressful for medical students. Deliberate practice in a simulated environment with expert feedback may improve student confidence. Our research showed improvements in confidence in multiple domains relevant to intern practice.

Conclusions:
Participation in the PRISM program significantly improved multiple domains of confidence. These findings have implications for medical training prior to internship. Further investigation of knowledge and skill retention would add to these findings.

A comparison of the clinical and simulation-based learning environments in physiotherapy education

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Introduction/background:
There is a presumption that simulation-based learning environments replicate clinical environments, and therefore simulation serves an ideal learning tool to develop clinical skills. Yet there was no research to date that compared, in physiotherapy education, the learner stress, assessment tool validity and performance of learners between these two environments in physiotherapy education.

Aim/objectives:
The overall aim of this series of studies was to compare the simulation-based and clinical learning environments from multiple perspectives to give insights on the similarities and differences of these environments to better inform the design and implementation of simulation-based learning programs.

Methods:
1. The stress levels of participants were compared in simulation and hospital-based settings using heart rate, saliva cortisol and self-reported stress visual analogue scales (VAS).
2. The validity of the Assessment of Physiotherapy Practice (APP) tool for use in simulation was investigated using Rasch analysis.
3. The association between the performances of students in simulation and clinical practice were explored using Pearson's correlation coefficient. Multiple regression with backward elimination determined if simulation performance could predict future clinical performance.

Results:
1. Participants’ self-reported stress in simulation was elevated compared to clinical practice [VAS 45mm (22) simulation; 31mm (21) hospital p=0.03], whilst physiological stress markers were not different between settings.
2. The APP was found to be a valid measure of student performance in simulation when used to measure student longitudinal performance.
3. Student performance in simulation was moderately correlated with clinical performance. Two domains of practice in the APP in simulation were found to be predictive of future clinical performance.

Discussion and conclusion:
Psychological stress may be heightened in simulation, and health professional educators need to consider the impact of this on early learners. The APP tool, when used in longitudinal assessments, performed comparably in simulation to clinical practice and is a valid assessment in both settings. The association between student physiotherapist performance in simulation and clinical practice adds support for the utility of the simulation assessments as a predictor of subsequent clinical practice performance.

Exploring graduate physiotherapy students’ experiences of learning intimate pelvic examinations using peers

Debra Virtue, Louisa Remedios, Christine Fairbank, Margaret Sherburn

The University of Melbourne, Australia

Introduction/background:
Learning to perform intimate pelvic examinations (IPE) is integral to women’s health practice. Unlike other health professional training programs, pelvic floor/women’s health physiotherapists are taught to perform IPE using peers. To date there is no published data as to the experience or acceptability of physiotherapists learning these important skills.

Aim/objectives:
The aim of this study is to explore graduate physiotherapists’ experiences and acceptability of learning to perform intimate pelvic examinations using peers.

Discussion
Participants enrolled in two Australian postgraduate pelvic floor physiotherapy programs were asked to complete two questionnaires about their experiences in learning to perform IPE on their peers and on being the ‘patient’ for their peers to learn. The first questionnaire was completed prior to the first IPE practical session and the second questionnaire approximately ten days after the first IPE session. De-identified results of the questionnaires were independently reviewed by two researchers and thematically analysed. Results of this study will inform the teaching of intimate pelvic examinations in Australian Physiotherapy programs and has implications for the teaching of IPE in physiotherapy programs globally.

3G Learning Outcomes – Students
Aligning training and development to a structured framework for extending scope of practice

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Introduction/background:
Australian Pharmacist education and training has historically comprised of a formal academic degree and one-year internship program. The lack of structured post-registration training results in ad-hoc career development, and limits the development of pharmacist’s roles and responsibilities.
**Aim/objectives:**
To describe the establishment of a structured framework for extended scope of practice to support practitioner development and advanced practice roles.

**Discussion:**
In 2016, the Alfred Health Pharmacy Department established the Scope of Practice Committee to oversee the development and implementation of expanded scope of practice activities across the department. Practitioners submit proposals which are assessed for appropriateness, impact and sustainability. The committee oversees education and credentialing, ensuring individuals are appropriately trained to perform the activity, and makes recommendations for further credentialing required. Practitioners are supported to develop any required training, implement and monitor its use. The committee also actively monitors environmental and professional changes to identify opportunities and implications for local scope of practice.

**Issues/questions for exploration or ideas for discussion:**
Across all disciplines and at all levels, healthcare is becoming more complex and health professionals are required to do more. This, in combination with the increasing drive to specialise, has led to opportunities to extend scope of practice across many professions. The lack of a structured framework may present a barrier to extending scope of practice for many health professionals, including pharmacists. The facilitation of role expansion via a structured process could lead to improved development and consequently, improved outcomes.

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**The acquisition of Primary Health Care & General Practice relevant clinical skills in the senior years of a medical degree**

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University of Otago, Wellington, New Zealand

**Introduction/background:**
During their undergraduate training, medical students are exposed to clinical situations, both actual and simulated during which they are expected to learn a number of clinical skills.

**Aim/objectives:**

- To understand
  1. How medical students perceive what they have achieved in respect of the mastery of clinical skills relevant to the General Practice setting
  2. How any perceived or actual deficits in the self-reported acquisition of selected clinical skills may be addressed

**Methods:**
This project explored the confidence and self-reported competence expressed by students in the execution of a number of clinical skills deemed essential; and able to be most easily obtained in the primary care setting. This data was collected in the final year of the degree program at the completion of the General Practice module.

**Discussion:**
This paper will present the results of the complete data set for the project. The skills with the lowest mean scores will be further discussed with an exploration of how these gaps may be addressed. As well, the students’ self-perception of their ability to teach the clinical skills to junior colleagues will be reviewed. Development of this teaching skill may assist in sustainability of educational attainment for students.

**Conclusions:**
Changes in the teaching of clinical skills may be needed to ensure that graduands have gained the skills deemed necessary to progress to professional practice. Further explorations of sustainable
educational approaches such as near peer teaching may assist students in achieving mastery of clinical skills in the undergraduate degree.

**Developing and evaluating a state-wide supervision program for health and human services workers in Victoria**

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**Introduction/background:**
Supervision has important educative, supportive and managerial functions in the workplace. Effective supervision is beneficial across all levels of an organisation and supervision training is key. As part of Victoria’s Ice Action Plan, we have been funded to develop a state-wide supervision training program for both the health and human services (HHS) workforce.

**Aim/objectives:**
To develop, deliver and evaluate a high-quality state-wide supervision program (2017-2020) for 7900 frontline HHS workers contextualised to working with clients struggling with methamphetamine and/or other drug use problems.

**Discussion:**
The scale and scope of this program created unique challenges which were taken into account when designing the program. First, the material was to be appropriate for the supervision needs and expectations of the HHS workforce in metropolitan and rural settings, as well as being tailored to a methamphetamine context. Second, the facilitator team were involved in content development, team training, facilitator buddying and maintaining ongoing communication enabling a consistent approach to the quality of workshop delivery. Finally, early evaluation of workshop participants (questionnaire surveys before, immediately after and 3 months after the training) and facilitator reflections have identified high satisfaction, whilst reinforcing a need for further evaluation to determine the longer-term impact of this training on supervisory skills and capacity.

**Issues/questions for exploration or ideas for discussion:**
We would like to discuss the challenges and opportunities of developing, delivering and evaluating a state-wide supervision program, alongside presenting early evaluation data to further develop the supervision program for the HHS workforce.

**What predicts an interest in General Practice? Preliminary insights from a longitudinal tracking project**

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Introduction/background:
The shortage of General Practitioners in New Zealand is well-documented, and has been the topic of much recent national debate. However, we have little recent knowledge about what factors might influence or predict an interest in a GP career.

Aim/objectives:
To identify influential or predictive factors associated with an interest in GP career for doctors three years post-graduation, using data from the New Zealand arm of the Medical Student Outcome Database longitudinal tracking study.

Discussion:
Key results from analysis of linked cohort data will be presented and discussed. Specifically, how the patterns of GP career interest and background factors, personal characteristics, medical school experiences and experiences working as a doctor predict a medical graduate’s interest in and intentions to pursue a career in the specialty of General Practice. Knowing more about the factors that predict an interest in a GP career may help guide the various stakeholders in addressing GP shortages. Analysis of data at PGY3 was chosen because graduates are likely to be confirming specialty choices; however, response rates are lower than at earlier time points.

Issues/questions for exploration or ideas for discussion:
Using longitudinal survey data has challenges, what are some of the lessons others have learned from using data of this kind? What factors should be explored that influence career decisions? What models are known that explain the career decision-making process? What is known about when medical career decisions are made? How should medical schools respond knowing what influences an intent to practice as a GP?

Influence of student debt on health career location and specialty

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Introduction/background:
The sustainability of a health system depends on having health professionals in rural areas and in primary care. Little is known about how student debt affects career choice.

Aim/objectives:
To examine the association of student debt levels of health professional students with:
(1) Preferred location of practice, specifically urban vs. rural;
(2) Preferred career specialty, specifically an interest in primary health care.

Methods:
Medical, nursing, pharmacy and optometry students from one NZ institution completed a questionnaire at graduation. There were questions on levels of Government Student Loan debt and preferences regarding location of practice and career specialty. In another survey, medical students were asked to self-rate the influence of financial factors on their career choices.
Results:
From 2006 to 2016, over 3,000 students reported their student debt level which varied across programmes. Medical and pharmacy students with high debt were significantly more likely than those with low debt to prefer rural practice over urban practice (P = 0.003 and < 0.0001 respectively). There was no difference in interest in a primary care specialty by debt level for any of the programmes. Medical students reported little influence of debt on career choice; those with high debt levels were less concerned regarding career financial prospects than those with lower levels of debt.

Discussion:
Somewhat surprisingly, higher levels of debt at the time of graduation were associated with greater rural practice intentions for medical and pharmacy students. There are several possible explanations for this.

Conclusions:
Current levels of student debt do not deter students from rural or primary care.

Gathering evidence for medical students’ contribution to health services: A communities of practice informed methodology

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University of Melbourne

Introduction:
Immersion in clinical environments is key to developing work-ready graduates. Workplace learning literature has focused on the benefits of clinical placements for students and the burden for health services, such as the cost of supervisor time away from patient care. There has been little focus on mapping the benefits (obvious and hidden) of clinical placements to multiple stakeholders.

Aim:
To develop a methodology for capturing the benefits of clinical placements for multiple stakeholders.

Methods
Using ethnographic methods of observation and interviews, as well as surveys, and drawing from the concept of legitimate peripheral participation within a Community of Practice, we charted student activities on clinical placements at an outer metropolitan health service.

Results:
The multiple data collection methods helped to identify how students learn through work as their expertise develops. The activity logs, survey and interviews prior to the observation phase, helped sensitise researchers to the less visible student contributions. Students in their final year contributed like a junior team member: taking patient histories, completing discharge planning and taking on ‘busy jobs’ that freed up senior team members.

Discussion
The multiple data collection methods and variety of stakeholder participants allowed for triangulation of the findings, and the phased approach sharpened the focus for the student observations. Capturing the patient perspective presents challenges, as does taking into account differences in student year levels, and different levels of student engagement.

Conclusions:
A multi-phased, mixed methods approach can identify bi-directional benefits, mapping student contributions along a number of dimensions.
Training physiotherapy students to educate patients; a randomised controlled trial

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Introduction/background:
Patient education is an integral component of patient-centred care and a required competency for entry level physiotherapists and other health professionals. Understanding how training can enhance self-efficacy and skills of physiotherapy students to perform patient education is an important step in advancing professional practice in this area.

Aim/objectives:
The purpose of this study was to evaluate the effect of a patient education training program on physiotherapy students’ self-efficacy and skills in the area of patient education.

Methods:
164 final year physiotherapy students were randomised to an intervention group that received a training intervention, or to a control group (no training). The intervention group participated in a 3.5h training workshop about patient education that included video observation, practice with simulated patient actors and structured feedback. Self-efficacy was assessed immediately before and after the intervention or control; clinical performance was assessed by a blinded rater using video-recorded standardised clinical examinations.

Results:
There were no differences between groups at baseline. Only the intervention group improved significantly on the self-efficacy measure. The intervention group performed significantly better than the control group for nine of the eleven performance items, with significantly higher scores overall.

Discussion/Conclusion:
A patient education workshop embedded within the physiotherapy curriculum enhances physiotherapy student self-efficacy and skills in this important area of practice. Use of such focussed approaches is recommended for physiotherapy training to enhance student skills and outcomes related to patient care. The maintenance of effects of such training and the implications for clinical practice skills is warranted.

3H Assessment Feedback
Automated personalised video feedback on assessment

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Introduction:
Providing students with timely, meaningful feedback is effortful, particularly at scale, and automated approaches, including those that draw on the growing field of learning analytics, appear promising. Most automated feedback is ‘static’, utilising text or a combination of text and images. Video-based feedback is potentially more engaging and is often preferred to written forms when available. However, automation of video production is challenging, and to our knowledge, hasn't previously been used in post-test feedback.

Objectives:
We developed and trialed a process for creating personalised feedback videos after progress tests by leveraging an existing in-house system for generating and distributing PDF-based feedback reports.
Participants received both video and PDF-based feedback reports and we surveyed their perceptions and acceptance of the two approaches.

**Discussion:**
We successfully generated personalised feedback videos through a combination of bespoke software, text-to-speech conversion and commercial presentation software. The process appears reliable and scalable. Almost all (88.9%) survey participants agreed that the video feedback was easy to interpret and was effective at summarising their performance, while 66.7% agreed that it helped direct their learning.

**Ideas for discussion:**
The only issue with the video feedback consistently raised by participants was the quality of the (computer-generated) narration. We are currently exploring options to improve this. While limited, our trial suggest that the use of automated video feedback is feasible and effective and we will continue to test this through larger implementations during 2018.

**What can students learn from peer assessment of a formative OSCE?**

**Helen Rienits**, Ian Wilson,

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**Introduction/background:**
While studies have shown the limited reliability of using student peers as OSCE assessors, there is little in the literature related to what students can learn from the experience of being clinical assessors and how they feel about assessment by peers.

**Aim/objectives:**
This study aimed to investigate the experience of students placed in the role of being clinical assessors for their peers for a structured formative OSCE. With no clinician assessors available, this exercise was designed to provide students with a formative OSCE experience prior to their summative exam. What could the student learn from being on the other side of the mark sheet? What was it like to be an assessor? What was it like to be assessed by your peers?

**Methods:**
During the formative OSCEs in 2017, students in 2nd, 3rd, and 4th years in Graduate Medicine had the opportunity to sit four peer-assessed stations, and to assess four peers on another station. Following the OSCE, students were invited to complete an anonymous survey regarding the experience.

**Results:**
While appreciating that their peers were not clinicians, the students were very grateful for the experience, learning both from practising the OSCE process, and from seeing the assessment from the assessor’s viewpoint. The responses to questions regarding how competent they felt to assess their peers, and how competent their peers were to assess them, showed interesting diversity.

**Conclusions:**
Providing students with the opportunity to assess peers in a formative OSCE had a number of educational benefits in itself, in addition to what we can learn about difficulties in clinical assessment.

**Mastering feedback for learning**

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Introduction/background:
Formative assessment and feedback have been found to have a powerful influence on trainee performance. Feedback promotes learning by informing trainees of their progress or lack thereof; advising them about observed learning needs and resources available to facilitate their learning and motivating them to engage in appropriate learning activities. As much as possible feedback should be planned, enlightening, honest, and respectful, focussing on description rather than evaluation and behaviour rather than personality. Feedback is an essential component of any programmatic assessment training programme.

Despite evidence showing the importance of giving good feedback, many supervisors find it very difficult. To give feedback effectively, a supervisor needs to be aware of their own emotions, the appropriate role to play, tools to use, attitude they would like to portray and the desired outcome.

Aim/objectives:
The aim of this presentation is to help supervisors give effective feedback and use their teaching time efficiently.

Discussion:
Although there are many different ways to give feedback, there isn’t one “right” way which will fit all scenarios. In the same way a doctor will change their approach during a consult depending on what a patient says, supervisors need to have a repertoire of skills for different situations and to tailor these as needed.

Becoming an “expert” in giving feedback will allow supervisors to deliberately use a suite of feedback skills in the variety of contexts in which they will be supervising. As with any new skill, the theory needs to be practised so the supervisor can give feedback efficiently and effectively and the registrar become a safe practitioner and life-long learner.

Student perceptions of seeking and using feedback from patients and ward staff for competency development during hospital placements

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Introduction/background:
Competency-based assessment includes judgements from multiple viewpoints to facilitate holistic assessment for and of student learning. Feedback from key stakeholders such as patients and the broader health care team (external to a student’s profession) is emerging as valuable in supporting students’ progression towards competency.

Aim/objectives:
This pilot study explored perceptions of final year dietetics students regarding patient and health care team feedback collected opportunistically during final year hospital placements and the influence on competency development.

Methods
An eighteen item questionnaire investigated student perceptions of the value/benefit and utility of obtaining patient and healthcare team feedback with results analysed using descriptive statistics. Two focus groups investigated student perceptions in more depth and qualitatively analysed.

Results:
All students (n=24, 50% response rate) reported that feedback from patients and the broader healthcare team was important, supplementing that of their professional supervisors. Students found the predominantly positive patient feedback was sometimes useful. Obtaining feedback from stakeholders other than their professional supervisors was challenging but promoted communication and teamwork skills.
Discussion
Although getting feedback from patients and staff may be difficult, students supported multi-source feedback as evidence of overall competence. Ensuring students ask the right questions in a range of modalities to suit different patients and stakeholders may assist in improving its value.

Conclusions:
Providing students with guidance and practice on seeking feedback beyond traditional trainee-supervisor roles can foster student-led assessment. Students' continuous evaluation and reflection from various viewpoints may enhance patient-centred care and teamwork skills in both students and professionals working in healthcare.

Improving student centred feedback through self-assessment

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Introduction/background:
Student numbers are growing and the provision of meaningful feedback for assessment requires increasing resources. Many students have limited ability to critically reflect on their assessment performance and utilise feedback to enhance future assessment outcomes. The challenge is to ensure resources invested into feedback are: targeted, stimulate reflective and critical self-assessment, and increase learner engagement and accountability in the assessment-feedback process. In this project, a self-assessment process was introduced, which facilitated targeted, relevant feedback from academic staff. This was expected to increase relevance of feedback for students, whilst improving efficiency for marking.

Aim/objectives:
The aims of this research were to: increase learner engagement in the assessment process, explore the effect of self-assessment on student approaches to assessment and compare the self-assessment capabilities of first and third year undergraduate students.

Methods
Participants completed a self-assessment of their written paper, using a rubric to identify strengths and weaknesses. The same rubric was completed by assessors. Scores allocated by students and academic staff were compared using mean, standard deviations, and T-tests. Two focus groups were utilised to explore student experience with this assessment-feedback approach. Focus groups were audio-recorded and data transcribed verbatim prior to thematic analysis.

Results:
Seven themes have been identified from the qualitative data analysed so far. These themes are: the quality of the student-assessor relationship, the quality of the rubric and student motivations, clear purpose and self-assessment action, empowering students in the feedback process, getting the job done, taking a step back and student role reinterpretation.

Discussion
Data analysis so far indicates the relationship students have with their assessor influences their perceptions of their feedback and engagement with the process. Some students understood the task and their experience was meaningful, whereas others experienced role confusion, resulting in a tick box approach. Taking a step back and student role reinterpretation was a strong theme. Students felt empowered if their self-assessment aligned well with the assessors.

Conclusions:
Student self-assessment needs to be supported by a trusting relationship with their assessor for it to be utilised as a meaningful tool. Students need absolute clarity on the purpose of the self-assessment for it to be implemented successfully. Self-assessment can empower students in the feedback process and result in meaningful action.
“It could be used for … revenge”: Clinician tutors’ initial perceptions of virtual peer observation of teaching

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Background:
Peer observation of teaching (POT) is increasingly used for professional development and to foster collegiality. Several barriers to participation have been identified in the literature. Health professional education employs a significant number of casual clinicians, and these barriers may be even more substantial for these sessional staff, who identify primarily as clinicians rather than as academic medical educators. We have developed a supportive, confidential model of POT for case-based learning (CBL) tutors, using video of a tutorial, designed to better enable sessional clinicians to access this valuable activity.

Objectives:
Prior to encouraging wide implementation of the PIVOTAL (Partnerships in Virtual Observation of Teaching and Learning) model, we sought to assess tutors’ perceptions of POT using a virtual (video-based) model.

Methods:
Over 70 tutors were invited to complete a short survey about POT. Participants were asked to watch a brief (<2 minute) animation of the PIVOTAL process, and comment on their perceived benefits of the model and to highlight any concerns they had around participation.

Results:
While data collection and analysis is ongoing, initial results indicate that sessional clinician tutors’ perceptions of POT vary quite widely. Quantitative and qualitative results will be available for presentation by the time of the conference.

Discussion:
Some tutors perceive POT to be highly valuable and express a strong motivation to participate whilst others express significant reservations. Implementation of any POT program will need to address these concerns and barriers in order to be effective and sustainable.

What is the cost associated with using the mini-CLEX as a work-based assessment?

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Introduction/background:
The mini-clinical evaluation exercise (mini-CLEX) is commonly used as a work-based assessment to examine medical students’ clinical performance in ‘real-life’ settings. However, no research to date has examined the cost and value associated with implementing the mini-CLEX in practice.

Aim/objectives:
The aim of this study was to determine the cost effectiveness of a modified mini-CLEX as implemented in a medical program.

Methods
A modified cost-analysis was performed comparing costs associated with administering evaluation of student clinical skills via a modified mini-CLEX, against the predictive performance of the assessment.
Multiple and hierarchical linear regressions were used to examine student performance across six sequential modified mini-CEX assessments.

Results:
Data from 1319 students, all of who completed six modified mini-CEX assessments, was analysed. Use of data from 4 mini-CEXs was a significant predictor, accounting for 81% of variance (R=0.90, F(4,1315)=1390.66. Use of data from 5 mini-CEXs was a significant predictor, accounting for 93% of variance (R=0.96, F(5,1314)=3254.07. The total cost of implementing one modified mini-CEX was $86 (including fixed and variable costs). Reducing the number of assessments by one per student results in a cost saving of $48.

Discussion
This study provides novel evidence examining the nexus between cost and value in work integrated clinical assessment. Cost of assessment should not be focused solely on monetary value, but should also encompass the predictive validity of the assessment, staff and organisational resourcing issues.

Conclusions:
Educators should consider the value from an academic and cost perspective when blueprinting assessments in the clinical setting.

4A Symposium – 5

Developing sustainability and synergy in health professional education research (HPER) through setting priorities

Charlotte Rees¹, Lynn Monrouxe², Claire Palermo¹, Tim Wilkinson³

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Introduction/background:
Sustainability and synergy in health professional education research (HPER) matter: HPER is often under-funded, and research investment can be wasted on low priority research with suboptimal impact on educational policy or practice. Furthermore, with better coordination of research efforts we can build on (rather than duplicate) one another’s findings. While some privilege HPE researchers’ freedom to research whatever they want, others argue that we need to identify HPER priorities to develop sustainability and synergy through a strategic approach. Numerous priority-setting exercises (PSEs) have now been conducted in various countries including multiple stakeholders.

Aim/objectives:
This symposium aims to discuss: (1) the findings of HPER PSEs across different countries and professions; (2) the outcomes from PSEs in terms of developing research strategy; (3) the different ways of conducting PSEs; and (4) other strategies to enhance the sustainability and synergy of HPER.

List of Presentations:
Tim Wilkinson, Priorities for medical education research (MER) in New Zealand
In this paper, I present the results of a modified Delphi among key medical education researchers. The seven crucial areas fitted under a general theme of growing a professional workforce.

Charlotte Rees, Developing a national agenda for dental education research (DER) in Scotland
In this paper, I present the results of a national PSE involving two online surveys for DER in Scotland as a first step towards developing a national DER strategy.

Claire Palermo, Setting priorities for HPER at Monash University
In this paper, I present the results of a 3-phase mixed methods study involving twelve healthcare professions and four health sciences stakeholders to explore the HPER priorities at Monash University. I explain how these findings are helping to develop our HPER strategy and infrastructure.

Lynn Monrouxe, Setting priorities for MER in Taiwan
In this paper, I present the latest results from our PSE drawing on empirical environmental scanning through four phases: Phases 1 & 2, a scoping review of the literature in Taiwan (2016-2016) and group interviews; Phase 3, a Q-method study drawing on prior results; and Phase 4, a modified Delphi.

Discussion:
• What are the similarities/differences in HPER priorities across different countries and professions?
• What are the outcomes from PSEs in terms of developing strategy?
• How might we conduct PSEs differently?
• How else might we develop sustainability and synergy in HPER?

4B PeArLs – 5

“Reasonable accommodations” in medical student’s assessments, is the twin sister of “inherent requirements” for studying medicine in Australia and New Zealand. One without the other is not sustainable. What are the different “reasonable accommodations” we are making in our clinical skills assessments and what is our rationale?

Liz Fitzmaurice, Dinesh Palipana
Griffith University School of Medicine, Gold Coast, Australia

Introduction:
In 2015 Griffith University School of Medicine re-admitted a student with a C5/6 Spinal injury in Year 3, of a four-year MD programme. Eighteen months later this student graduated with his cohort, being only the second doctor to graduate from an Australian medical school in a wheelchair, progressing to successfully complete his Intern year at Gold Coast University Hospital. He is now on track for a career in radiology.

Review of the literature found few details relating to the designs of assessments, within Medical Schools for students with significant disabilities. Therefore, the School was innovative in its design and delivery of equitable clinical skills assessments for the student. “Reasonable accommodations” were designed for all clinical skills assessments, in collaboration with the student, disability services and an external expert from another University.

The aim of this PEaRL is to discuss participant’s different experiences in implementing “reasonable accommodations” in assessment tasks. We will then explore the enablers and barriers to making sustainable, fair and equitable assessments for students with disabilities and how to make these considerations “business as usual”, when designing assessments.

Applicants behaving badly: what do they do and do we care?

Ruth Sladek¹, Lyndal Parker-Newlyn²

¹ Prideaux Centre for Research in Health Professions Education & Academic Lead (Admissions), College of Medicine and Public Health, Flinders University, South Australia
² Academic Leader: Admissions, School of Medicine, University of Wollongong, New South Wales, Australia
Introduction/background:
Poor applicant behaviours are often observed during medical student and trainee application cycles: arriving late without an apology, incessant or demanding emails, turning on mobile phones when asked not to do so, dismissive treatment of administration staff and placing defamatory comments about staff and universities on social media sites, to name a few. The extent to which these are (or can be) formally included in determining selection scores is unknown, but presumed to be limited. It is possible that medical programmes are missing out on valuable insights into applicants’ personal qualities by ignoring the inclusion of some of these behaviours in their student assessment processes.

Purpose/objectives:
The purpose of this PeArLs is to draw upon the audience’s selection experiences in relation to medical education. We are interested in auditing the range, extent and perceived importance of poor behaviours observed across the application life cycle for medical students and trainees. The discussion and insights gained will be used by the researchers to further develop their understanding of professionalism in relation to selection activities and may inform a future research project.

Issues/questions for exploration or ideas for discussion:
What poor applicant behaviours have you witnessed?
To what extent do you think these behaviours are important enough to be included in formal assessment and why?
What sort of consequence is befitting the behaviour in the context of high stakes selection?
What methods could be used to include these behaviours as part of applicants’ overall performance?

4C PeArLs - 6

Addressing the challenge of sustaining faculty development for clinical teachers: a multifaceted approach

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¹University of Otago, Christchurch, New Zealand ²University of Otago, Dunedin, New Zealand ³University of Otago, Wellington , New Zealand ⁴University of Otago, Wellington , New Zealand

Introduction/background:
Supervision by experienced clinicians in workplace settings is an important component of undergraduate health professional learning. Educational institutions have a responsibility to offer faculty development and support opportunities for clinicians in their role as teachers. However, accessing traditional forms of support can be challenging for busy clinicians.

To make faculty development opportunities more accessible, a series of peripatetic teaching support activities was introduced. This initiative was evaluated and then expanded to include small group seminars, individual consultation sessions, large group lectures, peer observations of teaching, printed information sheets, and online learning resources.

This multifaceted approach to providing faculty development and support is time consuming, complex, and costly. Additionally, and perhaps most importantly, it is difficult to measure the impact that the support activities have on the quality of the learning environment for students.

Purpose/objectives:
The purpose is to: describe our multifaceted approach to faculty development provided by the Education Units at University of Otago Medical School, New Zealand; outline the progress we have made towards improving the teaching by clinicians and learning of our students and for other participants to share their experiences in the provision of staff support .

Issues/questions for exploration or ideas for discussion:
How can faculty development and support become a sustainable activity with educational impact?
What strategies work the best for other health professional degrees?
What constitutes successful staff development?
Sustainable paperless hospitals – How do we prepare our students for the demise of the end of bed chart?

Susan Clarey¹, Fiona Miller², Margo Lane¹

¹School of Medicine, Griffith University, Gold Coast, Australia  ²School of Pharmacy, Griffith University, Gold Coast, Australia

Introduction/background:
Digital hospitals are with us now around the world and are currently being rolled out within Queensland Health, with a variety of prescribing software systems being used. Electronic medication management at all stages of the medication use process has been shown to reduce some errors but can introduce others. Local and national strategies for teaching safe prescribing have been developed in Australia for use in undergraduate and practitioner settings, such as the National Standard Medication Charts online module. However, these strategies were largely developed in response to paper-based prescribing practices, and to support correct use of standardised national paper charts.

Purpose:
Despite the advantages of new technologies, an important limitation in hospitals and a frequent complaint amongst health professionals is the lack of integration between computer applications. The roll-out of different electronic resources makes preparing students for safe practice challenging. This PeARLS is designed to discuss the potential problems and pitfalls of introducing integrated electronic medical records and collectively share experiences to better prepare all health profession students.

Ideas for discussion:
How are educators teaching safe prescribing in the evolving digital environment?
How should safe prescribing be scaffolded through the pre-clinical and clinical years?
Who is best placed to train potential prescribers (including non-medical prescribers)?
At what point do we consider paper-based training obsolete?

4D Interprofessional Education – Sustainability 2

Lets Play Nicely in the Interprofessional Sandpit

Judith Broadhurst¹, Narelle Henwood¹, Leonie Lorien¹, Sarah Blunden².

¹Central Queensland University, Rockhampton, Australia. ²Central Queensland University, Adelaide, Australia.

Introduction/background:
Interprofessional competency is increasingly required as an allied health entry-level attribute, however there are many potential barriers to the effective development of interprofessional practice throughout the curriculum. As a result, pre-entry level education programs are often constrained in the ability to provide interprofessional learning experiences for students in an authentic curriculum and practice context at different developmental stages throughout the curriculum.

Three courses at CQUniversity (occupational therapy, speech pathology and clinical psychology) have collaborated to develop interprofessional learning experiences at different stages through each course. The first stage of implementation commenced in 2017, with shared learning around two authentic case studies. Students from each discipline were allocated to an interprofessional group to develop an assessment and treatment plan relevant to each simulated case study. It is anticipated that future implementation of experiences at multiple stages in the curriculum will provide students with learning opportunities at all three stages of the learning process: exposure, immersion and entry-level mastery.
Purpose/objectives:
Gather perspectives from participants regarding their experiences imbedding interprofessional learning experiences at multiple points in the curriculum.
Disseminate feedback to the whole group.
Expand networks between participants with similar objectives in interprofessional education.

Issues/questions for exploration or ideas for discussion:
Discuss the barriers and solutions to imbedding the development of interprofessional competency throughout the curriculum for pre-entry level allied health students.

Identify how to imbed and measure interprofessional competency at different levels in the curriculum in order to provide sustainable and realistic learning experiences for all students.

Sustaining interprofessionality, from classroom to workplace and beyond

Josephine Thomas¹

¹University of Adelaide, SA 5000

Introduction/background
In a changing landscape of clinical care we need to prepare medical practitioners for the reality of future practice. The complexity of modern clinical care demands adaptability and collaboration, between professions and between disciplines. Yet our medical education system remains rooted in traditional silos of specialty disciplines and the transfer of medical knowledge. Despite decades of effort, demarcations between professions remain more apparent than interprofessional collaborations.

Aim/objectives:
We need to create a sustainable model of education and training for the changing landscape of clinical practice.

Discussion:
A sustainable model of education would be interprofessional and collaborative from undergraduate to postgraduate and beyond licensure. To flourish, this needs to be supported by collaborative interprofessional models of clinical practice. A seamless integration of the model across the continuum is needed. Despite adoption of different models for learning, our openness to reform has been limited. Current enablers remain fragile and person dependent. To achieve cultural shift we need to let go of knowledge acquisition as the main goal of education and move to placing greater value on the co-creation of knowledge across professions.

Issues/questions for exploration or ideas for discussion:
1. Why has nothing changed after so many years of interprofessional endeavour and research?
2. How do we move from interprofessional education as part of our delivery model to a truly interprofessional model of education and practice?

Towards a sustainable model of clinical placement integrated interprofessional education for healthcare students

Peter Brack¹, Stacey Baldac²

¹,² Northern Health, Epping, Australia

Introduction/background:
Interprofessional education (IPE) is important in preparing a health professional workforce that is collaborative and practice-ready. IPE with health professional students has been an area of expertise for Northern Health for over a decade. Despite successfully implementing a range of IPE programs, from classroom based programs to an immersive training ward, sustaining these activities has been
challenging. As a result Northern Health is working towards a model for IPE that can be sustained in the clinical setting.

**Aim/objectives:**
The aim of this presentation is to identify and describe the challenges to sustaining IPE occurring during clinical placements at Northern Health. Enablers that address challenges to sustainable IPE will be shared as well as a model for IPE that incorporates our previous learnings.

**Discussion:**
Discussion will include identifying commonly experienced barriers and exploring sustainable solutions for implementing IPE programs for healthcare students in the clinical setting. The roles of higher education and placement providers in the development of students’ interprofessional capabilities will also be explored with the goal of providing increased role clarity and identifying opportunities for integration.

**Issues/questions for exploration or ideas for discussion:**
Issues for exploration will include the pros and cons of staff-led and learner-led IPE frameworks, considerations relating to classroom and clinically-based models, delineation of roles in IPE of higher education and placement providers, and governance / resource requirements.

**How can a state-wide Learning and Development Framework promote and support interprofessional best practice now and into the future?**

Sharyn Bayliss¹, Kate Colmer¹, Janiene Deverix¹, Heather Dunnachie², Kylie Eddy², Kirsty Lowe¹, Alison Russell², Alice Steeb¹, Robyn Smith², Nina Ticca¹

¹Child and Family Health Service, Women’s and Children’s Health Network, Adelaide, South Australia, ²Centre of Education, Women’s and Children’s Health Network, Adelaide, South Australia

**Introduction/background:**
The Child and Family Health Service (CaFHS) is a critical part of South Australia’s (SA) early childhood health and development system, delivering universal and targeted services aiming to improve health and development outcomes for children. CaFHS recently redesigned its service model to ensure they are contemporary, evidence-informed, consumer focused and effective. The Model of Care (MoC) requires a greater emphasis and utilisation of an interprofessional team.

The need to move the culture from professional silos towards a collaborative interprofessional team was a key driver for the development of the CaFHS Learning and Development Framework. The Framework is designed to build the capacity of staff to learn and work interprofessionally from the commencement of employment or placement. ‘Focus areas’ for practice have been identified from the MoC and informed by relevant literature each having their own attitude, knowledge and skill sets which provide the basis for all learning and development activities.

**Aim/objectives:**
To describe the development and implementation of an interprofessional Learning and Development Framework that will promote the embedding and sustainability of the MoC.

**Discussion:**
The Framework has 5 interrelated components; core orientation and induction; supporting transition to specific practice areas, enabling and fostering Aboriginal cultural learning, developing capability of individuals and teams, leadership and management development. Developing these 5 components alongside the development of a MoC enables CaFHS to systematically and strategically promote and support interprofessional practice across all aspects of its service.
**Issues/questions for exploration or ideas for discussion:**
What are the enablers and challenges in developing and implementing an interprofessional learning and development framework?

**Collaboration to support a model of sustainable education on a health precinct**

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**Introduction:**
Population growth in Western Sydney presents challenges for the sustainable provision of health care. The NSW government and The University of Sydney are investing in building significant infrastructure in the expanding Westmead Health Precinct, consisting of several hospitals, research institutes and tertiary education facilities. A collaborative partnership in education, the Westmead Precinct Education Hub, has been formed to share knowledge, expertise and facilities in learning and teaching and education research across multidisciplinary groups. The Hub aims to enhance educational expertise across all stakeholders and develop an expert health care workforce for Western Sydney.

**Aim:**
We will present an overview of the Westmead Precinct Education Hub and the process involved in establishing it (including benefits, challenges and lessons learned), and explore participants’ experiences in other health precincts.

**Discussion:**
The Westmead Precinct provides an exciting opportunity to develop educational expertise across multidisciplinary groups. Collaborative partnerships with key stakeholders to build learning organisation and culture is key to the Hub’s success. The overview will focus on the model that has been developed for the Westmead Precinct Education Hub and how it was established, including achievements, challenges and future plans.

**Ideas for discussion:**
With participants, we will discuss alternative models for developing education hubs within health precincts to provide enhanced, sustainable education. Topics for discussion will include: identifying education needs of multidisciplinary groups across multiple health and education facilities; planning education interventions; evaluation strategies; developing education research expertise; promoting education standards; supporting clinical staff; and leadership in education.

**Elements of success for Faculty-wide IPL**

Phillippa Poole, Barbara O’Connor, Rhys Jones, John Shaw, Craig Webster

University of Auckland, New Zealand

**Introduction/ background**
The Faculty of Medical and Health Sciences at the University of Auckland evolved from a School of Medicine to a multidisciplinary health faculty from 2000 onwards. This allowed the development of interprofessional student learning (IPL). Beginning in 2002, six formal IPL activities have enabled health professional students to learn together at various stages of their programmes, with each activity having a different focus (e.g. Māori Health, patient safety, urgent patient care, older patient experience, pharmacoeconomic cost-effectiveness).
A total of about 6,500 Faculty students have engaged in this learning, with participation from medicine, nursing and pharmacy and, more recently, optometry students. In 2017 over 150 students from other institutions participated.

**Aims/ objectives**
The presentation will describe the activities and how these evolved. Using this review we identified common characteristics associated with success as well as challenges and barriers that needed to be overcome.

**Discussion**
The key elements of success at this institution are selection of appropriate topic areas, having champions and expert practitioners, institutional support, strong governance, and authentic and well-accepted learning experiences. The reasons behind project failures will also be explored. Among these are resource-intensity, complexity and difficulty with timetabling.

**Questions for exploration**
- How to maintain momentum and expand IPL opportunities, especially in professional programmes?
- Active student engagement
- How can we measure the long-term benefits of IPL undertaken at undergraduate level?

**4E Learning Culture – Cultural Alignment**

"Do you identify as Aboriginal or Torres Strait Islander?": Grappling with supporting Aboriginal students during clinical placements in rural areas

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¹University of Newcastle, Department of Rural Health, Tamworth, Australia

**Introduction/background:**
Increased enrolment and graduation of Aboriginal health-professional students is an important aim of educational institutions. However Aboriginal health-professional students on clinical placements are often off-country and surrounded by non-Aboriginal ways of knowing, learning and interacting. While our Aboriginal Research Academic (Simon) offers familiar cultural points of contact for Aboriginal students, we wondered if there was scope for other (non-Aboriginal) staff to develop their supportive capabilities.

**Aim/objectives:**
We sought to develop and sustain educators’ and non-academic staff’s practice for supporting Aboriginal health-professional students on rural clinical placements.

**Methods:**
Phase 1, using philosophical hermeneutics, investigated six Aboriginal health-professional students’ and twelve non-Aboriginal staff’s experiences and perceptions of meaningful support for rural clinical placements. Yarning-style interviews were undertaken by Simon and Lorrelle, an Aboriginal research assistant. In Phase 2, participants were invited to become co-researchers to explore implications for their own educational practice through collaborative dialogical inquiry using yarning-style focus groups.

**Findings:**
Beyond the question: "Do you identify as Aboriginal or Torres Strait Islander?" is a rich dialogical space. People can connect through genuine curiosity about: Where are you from? What does that mean for you here? Where are you heading? How can we help get you there?. Yarning-style conversations can facilitate sharing, trust and depths of understanding.
Proceedings of the Australian & New Zealand Association for Health Professional Educators 2018 Conference

Discussion:
Unfolding understandings about Aboriginal ways of knowing, learning and interacting provided a strong basis for exploring and changing own practice.

Conclusions:
Beyond policy support for increased enrolment and graduation of Aboriginal health-professional students, is scope to address sustainability through interest in, and broad ownership of, supportive practices.

Are health professional learners fit to practice with Australian Aboriginal people?

Petah Atkinson¹

¹Monash University Clayton, Australia,

Introduction/background:
In Australia, Aboriginal peoples’ sustained a sophisticated relationship with the land and each other, with this including, a sophisticated health system. Colonisation excluded Aboriginal peoples’ from western medical practice with the first Aboriginal Doctor graduating in 1985.

A culturally capable health workforce is an important part of closing the health gap between Indigenous and other Australians. However, although the belief that improving practitioner skills, knowledge and attitudes will lead to improvement in health outcomes, there is little evidence of impact on patient outcomes. There is a need to know if medical graduates can deliver health care that Aboriginal patients need.

Aim/objectives:
This study will hear from Aboriginal community members about their understanding of the five domains of the Aboriginal and Torres Strait Islander Health Curriculum Framework. In particular what is considered good and poor practice.

Method:
Indigenous methodology of Yarning Circles will be used to explore what fitness to practice is through understanding real life health services experiences of Aboriginal people. Yarning is an ancient Indigenous cultural way of communicating that improves cultural safety and therefore data quality in research.

Discussion:
Analysis of data will assist and inform assessment material to measure graduate fitness to practice in Aboriginal health.

Issues/questions for exploration or ideas for discussion:
What is important/not important for Aboriginal people in health care received?
Does engagement with the ATSIHC Framework Curriculum improve Junior Doctors fitness to practice with Aboriginal people?

‘I can tell people now that I know where they’re from and it really helps me do the job’: Perceived post-graduation impacts of a community-based, non-clinical rural and remote area medical student placement program

Donna B Mak¹, Daniel Vujcich¹, Sandy Toussaint¹

¹School of Medicine, University of Notre Dame, Fremantle
Introduction/background:
Non-metropolitan Australians have poorer health than metropolitan residents, but less access to healthcare. To address this, all first and second year medical students at the University of Notre Dame Australia, Fremantle (UNDAF) undertake week-long placements living and working with rural families and organisations in non-clinical settings to learn about the social determinants of health.

Aim/objectives:
The purpose was to investigate whether these compulsory, short-term, non-clinical placements (1) encouraged graduates to seek employment in rural settings; (2) improved graduates’ ability to meet the needs of rural patients in urban settings; and (3) could be sustained over time.

Methods
This qualitative, descriptive study was based on data collected from semi-structured, in-depth, ethnographic interviews with a purposeful sample of 28 graduates (1 to 8 years post-graduation) and 15 rural hosts. Data were coded inductively according to the research question to which they related and sub-themes

Results:
The placements encouraged consideration of rural practice and informed career choices. Graduates applied knowledge/skills gained during the placements when caring for rural patients in rural and urban settings. Hosts unanimously supported and valued the opportunity to educate future doctors.

Discussion
Short-term placements have the potential to achieve desired outcomes in terms of improving medical care for rural people with lower levels of financial investment than other interventions that have been described in the literature. The placement’s influence of graduates’ urban clinical practice was unexpected. Social-desirability response bias should be minimal as a researcher (ST) not affiliated with the placements collected the data.

Conclusions:
Short-term rural community-based rural undergraduate placements can influence graduates to pursue a career in rural medicine, and improve the ability of doctors to address rural patients’ needs in urban contexts. There is sufficient goodwill to sustain the placements.

Fostering culturally responsive practice in physiotherapy: A curriculum survey of Australian and New Zealand Entry-level physiotherapy programs

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Introduction/background:
The integration of culturally-related content in entry-level physiotherapy programs has been recognised as vital to foster culturally responsive practice. Currently, published literature provides little information regarding the status, and teaching approaches used to foster culturally responsive practice among students in entry-level physiotherapy programs in Australia and New Zealand.

Aim/objectives:
To assess how learning and teaching is delivered in entry-level physiotherapy programs in Australia and New Zealand to foster culturally responsive practice.

Methods
A cross sectional telephone survey, with closed and open-ended questions, was conducted on 18 participants representing 24 entry-level physiotherapy programs in Australia and New Zealand (83 per cent response rate) between May and September 2017.
Results:
There was variability in content, and teaching approaches used across all programs. Despite the variability, didactic teaching approaches were used predominantly along with implicit rather than explicit assessment practices. Challenges integrating content to foster culturally responsive practice included perceptions of unimportance, an over-crowded curriculum, and difficulties accessing or using resources.

Discussion
While most programs integrated content to foster cultural responsiveness, teaching approaches tended to focus on didactic rather than experiential methods, and assessed outcomes using theory based methods and implicit assessments. Methods to facilitate deeper learning or having greater focus on explicitly assessing performance may be a way to ensure graduates are culturally responsive, aware, and safe.

Conclusions:
The variable yet predominately didactic approaches reported by most programs suggest there may be opportunities for further development to consider best strategies to foster culturally responsive practice among physiotherapy students.

Embedding Indigenous Knowledges Collaboratively across the Science Medicine and Health Curricula

Teresa Treweek, Graduate Medicine, Science Medicine & Health, University of Wollongong

University of Wollongong Team Members: Mr J Kennedy, Dr T Kuit, A/P D Skropeta, A/P C Murphy; A/P L Chisholm, Dr S Hamylton, A/P E Beck, Dr A McMahon, A/P K Walton, Dr S Winch, Dr T Treweek, Dr P Burns, Ms S Gray.

Respectful, reciprocal relationships with the custodians of Aboriginal knowledge are fundamental to the successful integration of this knowledge into health science curricula. This project is collaboration between Schools of Medicine, Chemistry, Biology, Nutrition & Dietetics, Earth & Environmental Science and aims to build on existing relationships to shift the University of Wollongong approach from learning about Aboriginal culture to learning and valuing Aboriginal knowledge and culture. We aim to re-orientate Science Medicine and Health students’ viewpoint from a deficit model, to a knowledge exchange model, where knowledge is exchanged between students, the Aboriginal community and UOW academics. Aims: (i) develop student understanding of how local social, cultural, and economic factors have influenced Aboriginal communities of the Illawarra and their values, beliefs, and behaviours in both historical and contemporary urban contexts (ii) demonstrate that Aboriginal knowledges have intrinsic value and should be understood alongside, not as an alternative to, or in opposition to, ‘Western’ scientific knowledge (iii) create culturally safe and relevant curricula to enhance retention of Aboriginal students at UOW. Appreciation of Australia’s first people through meaningful engagement with local Aboriginal communities will build in students an authentic regard for Aboriginal values and ecologically sound scientific principles, rather than viewing Aboriginal culture as a set of fixed cultural properties outside of and irrelevant to, the dominant culture.

Promoting professional sustainability through strategies to support Culturally and Linguistically Diverse (CALD) health students in clinical practice

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4Menzies Health Institute, Queensland, Australia
**Introduction/background:**
Clinical learning environments are challenging for CALD students who often face cultural barriers that can impact on their learning. Lack of effective strategies to facilitate clinical learning can be challenging for students and clinical educators. With increasing CALD student numbers in health professional education programs, a greater understanding of the issues that CALD students face on placement is needed to ensure efficient and sustainable teaching practices.

**Aim/objectives:**
To explore the issues impacting on clinical learning and suggest strategies to improve effectiveness of the clinical placement experience from the perspectives of physiotherapy CALD students and their clinical educators.

**Methods**
Four focus groups each were held for CALD students and clinical educators. Content analysis was applied to the transcribed data.

**Results:**
Three themes were identified: 'mismatch in placement expectations', 'communication and language barriers' and 'cultural barriers'. Differences in understanding of roles, learning needs and expected behaviours between CALD students and clinical educators were perceived as barriers to effective learning outcomes.

**Discussion:**
The findings highlight the importance of clinical educators building effective relationships with CALD students. Recommendations include clinical educators: engage in early and open dialogue with CALD students about communication, teaching and learning styles to mitigate mismatched placement expectations; strive to develop a trust-based relationship with CALD students where cultural and language differences can be openly discussed and sensitively managed. We recommend that both clinical educators and CALD students receive formal communication and cultural awareness training to optimise the clinical placement experience and promote sustainability of the workforce.

**4F Learning Culture – Professionalism and Ethics**

**Sustaining ethical practise: challenges faced by medical students**

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¹University of Auckland, Auckland, New Zealand

**Introduction/background:**
Medical students learning to become doctors are expected to carry out sensitive examinations on patients after they have received appropriate education and training, yet there is evidence that best practice is not always followed. Given the deeply personal nature of sensitive examinations, it is unsurprising that such practices can pose ethical challenges for medical students.

**Aim/objectives:**
The research question we set out to explore was, *what ethical challenges do medical students identify when asked to perform or observe a sensitive examination?*

**Methods**
Thematic analysis was used to examine 21 self-reported written disclosures of senior University of Auckland medical students’ experiences of observing and performing sensitive examinations within the clinical environment.

**Results:**
Three core themes emerged from the research question: systemic constraints on getting consent; internal conflicts of interest; issues of power and hierarchy. Results revealed that a number of senior
medical students at our institution disclosed observing or performing sensitive examinations on patients without the patients’ knowledge or consent.

Discussion
The ethical challenges facing medical students in this context are personal, complex and multifaceted. They encompass students’ loyalties both to their role model seniors, peers, and the patients they interact with, alongside the internal conflicts that can arise from the informal lessons learned from the hidden curriculum.

Conclusions:
The contradictory formal and informal learning experiences faced by medical students observing and performing sensitive examinations on patients pose challenges for health professional educators. In light of these challenges what is needed to effect change? We propose some recommendations in this discussion.

Asking for help in general practice training: GP registrar-initiated oversight, support and advice

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Introduction/background:
GP registrars manage patient consultations independently from the beginning of their training, supervised by other GPs working in the practice. Effective clinical supervision is important in ensuring patient safety and registrar learning.

Aim/objectives:
Little is known about registrar decisions and strategies in terms of seeking help from supervisors to manage consultations with patients.

Methods
Seven focus groups with GP registrars were undertaken, exploring their help-seeking decisions, strategies and experiences. Transcripts were analysed iteratively for emerging themes, and these were confirmed by a member checking process.

Results:
Participants reported asking questions frequently in their first few weeks, to ensure patient safety, and having concerns about the impact of this help-seeking on patient and supervisor impressions of their competence. Registrars reported developing confidence in their clinical decisions as the term progressed, but some worried about continuing to ask for help too much. Participants avoided seeking help from GPs who seemed disinterested in teaching, or whose advice they distrusted. Several types of clinical decisions, including whether to refer patients to emergency departments and how to manage patient expectations based on previous treatment by colleagues, were discussed relatively frequently.

Discussion:
Registrars are often overwhelmed initially by the unfamiliar world of general practice, and are aware of the time, workload and financial pressures involved. They develop strategies to avoid interrupting their supervisors, and to spread the supervisory load among selected practice staff.

Conclusions:
Training registrars in help-seeking decisions and strategies may improve the quality of clinical supervision, registrar learning and patient safety.
Geographical relocation to study medicine in Australia: a tale of 10 schools

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¹Flinders University, South Australia; ²The University of Western Australia, Perth, Australia

Introduction/background:
A stressor for medical students may be interstate relocation, a ‘systems artefact’ of how students are selected in Australia. Places are federally funded and universities cannot preference students based on their residential state. While applicants can apply for multiple medical programmes, many will need to relocate. As part of a parent study examining student wellbeing, we undertook a descriptive analysis of relocation patterns.

Aim/objectives:
To describe potential and eventual interstate relocation of applicants for graduate medical programmes in Australia for 2017 commencement.

Methods:
This retrospective descriptive study utilised de-identified details of applicants wishing to commence in a graduate medical programme in 2017 at one of 10 Australian universities. Socio-demographic, school preference and place acceptance data held by Graduate Entry Medical Admissions System (GEMSAS) or Flinders University were analysed to determine the extent of geographic relocation. Residential postcodes were used to calculate ‘distances to’ preferred universities (all applicants), and eventual universities (successful applicants).

Results:
There was widespread relocation evident between states, with higher preferences commonly comprising universities within an applicant’s own state. Lower preferences were ordered according to distance from an applicant's postcode. Further detail will be provided during the presentation.

Discussion
The potential short and long-term implications of relocation will be explored from a student and systems’ perspective.

Conclusions:
The practice of federally funding medical school places may be leading to widespread geographical reshuffling of students. It is important that the consequences of such a system are fully understood so that any unintended negative consequences are mitigated.

Tomorrow is a new day RIP: professional social media usage and health sciences students

Cominos Nayia, Crouch Rosanne, and Hayley Timms

University of South Australia, Adelaide, Australia

Introduction/background:
Social media platforms, such as twitter and Facebook have changed professional medical and health communication through their immediacy, flexibility of delivery, and global sharing of information. In health education, students are increasingly required to participate in shared online activities, often involving the use of social media for group study.

While there are professional and academic guidelines for social media use, there are few specific resources offered to students to guide them in the use of social media as future health professionals.
Yet, the stakes are high, as errors can compromise client confidentiality and institutional reputation, and result in failure or course exclusion.

**Aim/objectives:**
We present the initial findings of a multidisciplinary social media intervention offered to health science students at UniSA. A stand-alone, online module using real-life scenarios was created as a complement to in-course teaching, with three objectives: to give students an ‘entry level’ awareness of an understanding of the use of social media in professional contexts, gather information regarding students’ perceptions and use of social media, and determine to what extent this type of intervention can produce measurable change.

**Discussion:**
The management of social media is an essential element of health communication, but it is often either assumed or addressed when an issue arises. We argue that students need explicit instruction with concrete examples in clinical settings, to assist them in making better choices, and facilitate the transition to a professional public persona.

**Issues/questions for exploration or ideas for discussion:**
Axes of improvement in measurement and outcomes
Generalisability

**Suppressing natural instincts or maintaining strong ties: the development of medical professional identities in older medical students**

Rachel Matthews¹, Kelby Smith-Han¹, Helen Nicholson¹

¹Department of Anatomy, University of Otago, New Zealand

**Introduction/background:**
The (re)formation of professional identity in transforming medical students into medical professionals is considered a core component of medical education. Medical students come from many different cultural, social and experiential backgrounds, particularly evident in the sub-population of students who enter medical school later in life. This sub-population of students may have already developed, or started to develop, a professional identity in prior employment, which may impact on their ability to develop a medical professional identity.

**Aim/objectives:**
This presentation aims to examine the unique challenges this older sub-population of medical students’ experiences as they progress in developing their medical professional identity.

**Methods**
Qualitative interviews were conducted with medical students who entered a New Zealand medical school via an admission pathway that took into consideration prior experiences and occupational background, as well as scholastic aptitude. A narrative analysis was undertaken with the interview transcripts, combining thematic and structural perspectives, while using linguistics and positioning theory as further interpretive tools.

**Results:**
Three overarching themes were identified: holding back aspects of the old self; foregrounding aspects of the old self; and developing new aspects towards forming a ‘new’ self. Each student’s experience was highly individual within these themes, including developing their own ways of negotiating through these different aspects of professional identity formation.
Conclusions:
This older subpopulation of medical students experiences unique challenges when developing their individual medical identities. Increased awareness of these challenges will allow medical educators and clinical teachers to better assist these students as they develop into future doctors.

Development of a program targeting staff-student engagement and management of underperforming students within the clinical environment

Margo Brewer, Kate Duncanson, Nigel Gribble, Alan Reubenson, Jessica Colliver, Brooke Sanderson

Curtin University, Perth, Australia.

Introduction/background:
A recent review of the health professional literature indicated gaps in two areas that impact our ability to optimise clinical education experiences for students. Firstly, while the student-supervisor relationship has been shown to be critical, research on how to prepare students to actively engage in these relationships is limited. Secondly, research on effective approaches for supporting, and when necessary failing, students who are performing below the expected standard is also lacking.

Aim/objectives:
To address these issues an interdisciplinary team of academics are developing three resources to enhance clinical education. The first is a guide for students outlining the benefit of, and strategies for, building relationships with their supervisors. Video exemplars demonstrating effective student-supervisor interactions will also be developed. The second resource is a half-day workshop designed to enhance clinical educators' management of underperforming students. The final resource is a guide to assist with the early identification and remediation of underperforming students. This guide will target both academic and clinical staff. Research will be conducted on the value and impact of all three resources.

Discussion:
This research will determine students' and staffs' perception of the value of the guidelines designed for them, clinical educators reactions to the half day workshop, and the impact of this workshop on the supervision provided to students during subsequent placements.

Issues/questions for exploration or ideas for discussion:
During this presentations the audience will be invited to explore the reasons for the perceived “failure to fail” in health professional education and the potential impact of this.

4G Learning Outcomes – Workforce

Rural ‘persisters’ vs. ‘switchers’: the interaction of background and programme

Matt Kent,¹,² Phillippa Poole,¹ Tim Wilkinson,² Warwick Bagg,¹ Antonia Verstappen,¹ Joy Rudland,³ Fiona Hyland.⁴

¹University of Auckland, Auckland, ²University of Otago, Christchurch, ³University of Otago, Wellington, ⁴University of Otago, Dunedin, New Zealand

Introduction/background:
Shortages of rural doctors are a threat to health care delivery.
Aim/objectives:
To compare factors associated with a rural career choice at both entry and exit from medical school (‘persisters’), with ‘switchers’ who had an initial rural choice but urban at exit.

Methods
Prospective study conducted by the NZ MSOD project group. Survey data were collected from students from both NZ schools each year from 2006-2016.

Results:
Linked entry and exit data were obtained for 1114 students. Compared with ‘switchers’ (N=135, 12%), rural ‘persisters’ (N=238, 21%) were more likely to have a rural background (P < 0.0001); be female, a member of a Rural Club, identify with ethnicities other than NZ European (all P < 0.01); or have GP career intentions (P< 0.05). Significant influencing factors for rural ‘persisters’ compared with ‘switchers’ were: work culture, medical school experiences, self-appraisal of own skills and domestic circumstances. Influencing factors for ‘switchers’ compared with ‘persisters’ were research and teaching opportunities, costs of medical school and vocational training, financial prospects, parents, and years of training.

Discussion
The two groups differed in significant ways. Some factors were demographic (e.g. rural background, gender, domestic circumstances), and some related to the nature of work (e.g. work culture, financial prospects). New findings point to ways medical schools may help sustain the rural workforce, including provision of rurally-conducive experiences for certain student groups, and on building academic capacity in rural areas.

Conclusions:
While rural background is the most important predictor of a persistent rural career choice, it is possible to identify other factors which impact upon this choice.


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Sydney Medical School, University of Sydney, Australia.

Introduction:
Little is known about the impact of medical school on career choices and future decisions of graduates in Australia. The Australian Medical Council (AMC) recognises the need for medical schools to assess the short and long term outcomes of medical programs.

Aim:
The short-term impact of medical school was investigated for graduates of the Sydney Medical Program between 2011 and 2015, inclusively.

Methods
The survey was distributed through the University of Sydney Alumni program via an email invitation. Participation was voluntary and all responses were anonymous. The survey will be distributed in early February 2018.

Results:
The target response rate is 30%. Opinions of graduates will be sought about teaching provided during the program, particularly with respect to preparedness for practice. Ratings will be compared for these cohorts during and after medical school.

Discussion:
Many of the findings will have relevance to other health professional programs. Will the opinions of students of their medical program improve or decline? Will there be an association over time, such
that the longer a student has been out of medical school, their opinions are less positive? The outcomes of this research will have direct input into the current re-design of the curriculum for the Sydney Medical School.

**Conclusions:**
This survey is part on an ongoing follow up of the outcomes of medical school training. In future years, graduates will be followed up at 1, 5 and 10 year intervals. The impending connection with medical registrations will enable this to be conducted more effectively to allow future research to examine the full impact of medical programs.

**Internationally Qualified Health Practitioners – Education, Migration and Workforce Expectation in Australia**

Melissa Cooper

The University of Adelaide, South Australia

**Introduction/background:**
The National Health and Hospital Reform Commission estimated that numbers of health professionals would need to almost treble over the next few years to ensure adequate health services to the Australian public (2009)\(^1\). However, the Rural Workforce Agency argued (2011) that the complexity of the current regulatory and administrative application and approval processes at multiple stages delayed or impeded the recruitment of IQHP (Hawthorne 2012)\(^2\).

In 2012, Health Workforce Australia (HWA) raised concerns regarding the governance of skilled migration for IQHP and cautioned against a reliance on poorly coordinated policies to meet essential workforce requirements. HWA’s concern is reflected in the decision by the Council of Australian Governments to include a review of the governance of skilled migration and registration of IQHP within 3 broader reviews of the National Registration and Accreditation Scheme for health professionals. The most recent due for completion in late 2017, by an independent reviewer appointed by the Australian Health Minister’s Advisory Council, is seeking substantive reform of the processes for assessing IQHP for skilled migration and registration\(^3\).

**Aim/objectives:**
The mixed method qualitative and quantitative research focuses on the areas of: education of IQHP; experiences of IQHP; regulation/assessment of IQHP and expectations of workforce employers of IQHP.

**Discussion:**
A significant phase of the research, planned throughout 2018, will include approximately 30 semi-structured interviews conducted with IQHP seeking to live and work in Australia, regulators/assessors for skilled migration and workforce employers.

**Issues/questions for exploration or ideas for discussion:**
- What are the experiences and expectations of:
  - Regulators and assessors determining suitability of IQHPs?
  - IQHPs when navigating through the application processes for skilled migration and registration in Australia?
  - Australian healthcare service providers engaging with and employing IQHP?

What Paediatric training do GPs want in Victoria? - a needs analysis of learning preferences

Helen Enright and Beth Shingles

1University of Melbourne, Melbourne, Australia 2Royal Children’s Hospital, Melbourne, Australia

Introduction/background:
General Practitioners (GPs) have to master great breadth of medical knowledge to provide excellent care for patients across a wide range of age groups. Paediatrics is one area where increasingly complex cases and new developments in medical research require doctors to constantly update their skills and knowledge. The Royal Children’s Hospital, Melbourne (RCH), is a paediatric tertiary care hospital experiencing huge numbers of referrals and Emergency Department presentations which arguably may be better managed by general practitioners in the community. As a leading paediatric tertiary care hospital, RCH provides extensive paediatric education in Australia. The Department of Paediatrics, University of Melbourne situated within RCH has recently become an RACGP accredited provider and is working with RCH stakeholders to deliver an educational paediatric program for GPs.

Aim/objectives:
We aimed to understand what the perceived learning needs were for Victorian General Practitioners. We conducted a Victoria wide needs analysis to identify which areas of paediatric education would be considered most useful for this cohort.

Discussion:
This paper will outline the subjective learning needs as identified by GPs. Topic content, modes of delivery and a range of other study data will be discussed. A blended educational framework to address these needs will be outlined.

Issues/questions for exploration or ideas for discussion:
Issues relating to stakeholder engagement and program design and delivery will be discussed. This paper may also be of interest to others involved in the delivery of GP education programs.

Reflections on the development of a sustainable and responsive workforce learning and development culture within a large state-wide health network in South Australia. What have been the benefits for workforce, universities and consumers?

Kylie Eddy, Alison Russell

1Centre of Education, Women’s and Children’s Health Network, Adelaide, South Australia

Introduction/background:
The Centre for Education and Training (CET) is responsible for the planning, delivery and governance of work integrated teaching and learning within the Women’s and Children’s Health Network (WCHN) based in South Australia. The WCHN is an iconic complex tertiary and community paediatric and maternity health teaching institution in South Australia. Over the past ten years, the CET team has lead and driven the agenda for the WCHN to become a responsive and adaptive learning organisation.

Aim/objectives:
To outline the range of strategies aimed at facilitating a comprehensive and systematic approach to interprofessional workforce learning and development across the WCHN and reflect on what has worked/not worked and reasons why.
To discuss the implications and benefits of identified successful strategies for internal and external stakeholders.
Discussion:
A range of methods and strategies have been utilised to facilitate cultural change in response to the internal needs and external demands of the WCHN.

Issues/questions for exploration or ideas for discussion:
What are the reflections and learnings from the CET in its attempts to guide the transformation of the WCHN into a learning organisation? What have been the outcomes and benefits for staffs, consumers and universities?

Growing our own in Gippsland: Selecting and educating medical specialists

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1Monash Rural Health Latrobe Valley and West Gippsland, Australia

The maldistribution of medical practitioners in Australia with under-servicing of rural regions is recognised. There are 19 rural clinical schools providing undergraduate medical education with many linked to intern training programs outside metropolitan areas. However, two to four years post-graduation junior doctors wanting to specialise typically move to the major cities to progress their careers. This disruption can sever developing/ed ties to the rural community, and the attrition of qualified healthcare professionals contributes to the difficulty in accessing appropriate services in regional parts.

The Gippsland Regional Training hub is one of 26 new centres aiming to reverse this trend by providing clinical training with the major educational component being located in a rural area, supplemented by a term in a tertiary healthcare facility. This is a major reversal equating to a “flip out” as compared to a “flip in”, and one that has the potential to nurture doctors’ links to the rural community within which their professional identity has been grounded.

Focusing on the evidence in the literature, the philosophy of the emergent Gippsland hub is to “grow its own”, recognising the particular health needs of the community, linking to existing teaching programs, and working with the relevant colleges to develop sustaining and sustainable specialist training. The quality of training, well-being of trainees, and support of supervisors/assessors is central to the structure of the programs under development. This paper reports the progress of the Gippsland hub in establishing specialist training to address the healthcare needs of its community.

4H Learning Environment – Community

Evaluation of a modified team-based learning program in anatomy in a graduate medical school course

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1Faculty of Medicine, Department of Anatomy, University of Notre Dame Australia, Sydney, Australia

Introduction/background:
Anatomy knowledge remains the core of safe clinical practice. The ideal method for the teaching and learning of anatomy to medical students remains controversial and elusive. When expanding curricula is combined with a simultaneous reduction of financial and human resources, teaching faculties need to consider more cost-effective methods of teaching. Team-based learning (TBL) has gained wide acceptance due to its promotion of deep learning with efficient use of limited resources. At the University of Notre Dame Australia, Sydney, we introduced a modified TBL program without sacrificing the basic tenets of TBL.

Aim/objectives:
To evaluate the effectiveness of our modified TBL program towards improving students’ learning of anatomy.
Methods:
In 2017, we designed 16 one-hour sessions on clinical anatomy themes utilising a modified TBL approach, including: preparation, individual readiness assurance test, team application of critical thinking to solve clinical problems and tutor review. The entire second year cohort was divided into four large groups, and further subdivided into five small groups, representing a mix of high and low scoring students in anatomy based on examination in the previous year. The evaluation of this study included both qualitative and semi-quantitative data to assess student attitudes, perceptions and a comparison of mean scores of final examination results with previous years.

Results:
While the outcome is being analysed, a preliminary review of the results has revealed encouraging and positive responses.

Conclusions:
We believe that final analysis of the data will demonstrate that our program is effective and sustainable in the delivery of anatomy teaching to medical students.

Millennial Students in Fieldwork: How do we align divergent perspectives and expectations?

Michelle Quail¹, Alan Reubenson¹ Brooke Sanderson¹

¹Curtin University, Perth, Australia

Introduction/background:
The success and sustainability of fieldwork is reliant on students and staff having a shared understanding, and healthy respect for each other. The majority of students now attending university are considered ‘Millennials’ or ‘Generation Y’ (born 1981-2000). Whilst attempts have been made to provide guidelines for educators working with millennial students, little is known about the needs of millennial health professional students in a fieldwork context.

Aim/objectives:
This project aimed to explore the expectations millennial students and clinical educators have of fieldwork, and generate recommendations to facilitate fieldwork success for both stakeholders. Millennial students from seven health sciences disciplines were recruited as project co-leads to ensure the work best reflected and appealed to this student cohort.

Methods
A scoping review of the literature was performed across 9 databases, with 263 articles included for screening and four articles meeting inclusion criteria. Four student (n=11) and three clinical educator (n=13) focus groups were conducted, transcribed and analysed thematically. Participants were from the disciplines of nursing, physiotherapy, radiation therapy and speech pathology.

Results:
This paper will present findings of the scoping review and focus groups, comparing experiences and perspectives across the participant groups. Findings will be explored to reveal divergent student and clinical educator perspectives and expectations of fieldwork.

Discussion
Key themes will be explored and recommendations made as to how to facilitate student success in fieldwork.

Conclusions:
This research adds a valuable perspective to the literature and practical considerations for clinical educators and University staff supporting millennial health professional students.
Impact of the learning context on undergraduate students’ Evidence-Based Practice confidence and attitudes

Kylie Murphy¹, Cate Thomas², Yann Guisard³, Michael Curtin¹, Jessica Biles¹, Ruth Crawford⁴

¹Charles Sturt University, Albury, Australia; ²Charles Sturt University, Wagga Wagga, Australia; ³Charles Sturt University, Orange, Australia; ⁴Charles Sturt University, Wangaratta, Australia

Introduction:
Evidence-based practice (EBP) involves a range of skills underpinning defensible, client-centred and sustainable healthcare.

Aim:
To investigate the impact of different learning contexts on undergraduate students’ EBP confidence and attitudes.

Methods:
Within a broader project, 231 final-year students in 20 undergraduate health degrees in one Australian university completed an online survey. Students were asked to indicate the contexts in which they could remember learning EBP skills (a research-focused subject, a non-research subject, and during workplace learning); their frequency of exposure to research articles in the past year, in various contexts; and their levels of EBP confidence and other attitudinal target variables. Relationships between these variables were examined.

Results:
There was no association between learning EBP skills in a research subject and any target variable. Learning EBP skills in a non-research subject was associated with higher levels of EBP confidence and perceived impact of research (p<.05). Learning EBP skills during workplace learning was associated with higher levels of EBP confidence, perceived research impact, and EBP professional identity (p<.05). In addition, there was a positive relationship between exposure to research articles and EBP confidence (p<.001), found to be strongest when exposure to the research occurred during a workplace learning experience (rho=.42, p<.001).

Conclusion:
The curricular context in which EBP skills are taught impacts on students’ EBP confidence and attitudes. Teaching EBP skills in research-focused subjects appears to be insufficient for promoting positive EBP attitudes and confidence. This finding is helpful to course designers working towards more sustainable ways of teaching EBP.

Beyond hands-on and hands-off: A model of supervisory approaches on the inpatient ward

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¹University of British Columbia, Vancouver, Canada  ²University of Alberta, Edmonton, Canada ³University of British Columbia, Victoria, Canada ⁴University of Northern British Columbia, Prince George, Canada ⁵Dalhousie University, Fredericton

Introduction/background:
The concept of entrustment has garnered significant attention in medical specialties, revealing variability in supervision styles and entrustment decisions. There is a need to further study the enactment of supervision on inpatient wards to inform competency-based assessment design.

Aim/objectives:
To examine supervisors’ ‘in-the-moment’ enactments of supervision on the inpatient medical ward.
Methods
Attending physicians on clinical teaching inpatient wards were invited to describe a recent moment of enacting supervision with an internal medicine resident. Constructivist grounded theory methodology guided data collection and analysis. Interview transcripts were analysed in iterative cycles to inform data collection. Constant comparison was used to build a theory of supervision from the emerging themes.

Results:
In 2016-17, 23 supervisors from 2 Canadian universities participated in 28 semi-structured interviews. Supervisors contend with the competing roles of clinical teacher and care provider. Simultaneously, supervisors may feel personal responsibility for the ward (resulting in hands-on approaches) or shared responsibility for the ward (resulting in hands-off approaches). We have developed an Approaches to Clinical Supervision model that begins to explain variability in supervision by making those tensions explicit and depicting how they contribute to four representative approaches to supervision.

Discussion
An individual supervisor’s approach to supervision changes in response to competing tensions around patient care versus teaching and personal versus shared responsibility for activities on the ward.

Conclusions:
For inpatient medical specialties, competency-based assessment approaches will need to contend with entrustment decisions being based on more than a uni-dimensional judgment of a trainee’s competence.

Deepening the student experience with both ways learning: evaluating immersion from a student and community perspective

Jola Stewart-Bugg
University of Wollongong, Australia

Our approach to teaching Indigenous Health includes early clinical exposure for students in community and primary health care settings, including Aboriginal Organisations and Community placements within their first three weeks of study. Our aim is to build in students an authentic regard for local Aboriginal values and health perspectives through meaningful engagement with local Aboriginal communities where the community are the educators. With this immersion approach students avoid viewing Aboriginal culture as a set of fixed cultural properties outside of and irrelevant to, the dominant culture.

Here we present findings from our evaluation of the innovation utilising a mixed methods approach. We will present data from focus groups conducted with the Aboriginal community members who gave their time and knowledge so generously to our students to help them learn. We will also present findings from focus groups aimed to evaluate the student perspective of learning from, and within community. Quantitative results collected via a student evaluation tool from before and after the teaching year will be compared and presented. Whether students have begun to develop respectful and empathetic attitudes will be discussed in the context of both the qualitative and quantitative results.

We have aimed to deliver an Indigenous health curriculum with early clinical and cultural exposure that will result in culturally competent medical students who have a comprehensive understanding of Indigenous Health.
Community engagement with real world problem solving in a Teaching Hospital Laboratory.

Amanda Charlton¹, Irene Low¹, Colin Gover².

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²E-Learning Teacher, Marina View School, West Harbour, Auckland, New Zealand

Introduction/background:
The problem of disciplinary silos is addressed, at least partially, by the healthcare multidisciplinary team, and interprofessional education. But take a step back further, look beyond healthcare, and our whole community comes into view. This community includes us, the healthcare professionals and teachers, our families, children, schools. How might we engage with our community, to show the value and relevance of some unseen facets of healthcare? In this example, we showcase a successful informal partnership between a hospital pathology laboratory and a primary school.

Aim/objectives:
To create opportunities for mutually beneficial partnerships between healthcare workplaces and our community.

Methods:
Together, we developed a project to create a customised test tube rack for the laboratory, which primary school students designed and 3D printed. We used the Design Thinking process, a human centred, iterative process for creating the best ideas and solutions, and embedded 21st century learning skills.

Result:
Our teaching hospital laboratory community experienced and learned new digital and collaborative processes, accessed innovative technology, improved our digital literacy and discovered the creative benefits of engaging the diversity of ideas from a different age group and sector. The school community was excited by authentic problem solving, and discovered the hidden world of pathology. We created prize winning, customised test tube racks, which we use in daily in the laboratory.

Discussion questions:
What opportunities and partnerships could your institution create for community engagement?
What other problems might you apply Design Thinking?
How can you embed 21st century learning skills into your projects?

5A Symposium – 6

Making education in medical sciences sustainable for health professions: organized by the International Association of Medical Science Educators

Diann S. Eley¹, Vaughan Kippers¹, Cathleen C. Pettepher², and Neil Osheroff²

¹University of Queensland, Brisbane, QLD, Australia, ²Vanderbilt University School of Medicine, Nashville, TN, USA

Introduction/background:
Rates of burnout amongst health professionals are alarming. There is a recognized need amongst educators in the health professions to realign the current culture to one that nurtures wellbeing and resilience in students and faculty. A possible contributor to burnout is the recent shift in higher education to a consumer model that has created a trend toward feelings of entitlement among students, and frequently, unreasonable expectations for faculty. This trend has increased the pressure on faculty to satisfy student demands, while often lacking available resources to deliver those demands. It also reinforces a cultural shift of students away from intrinsic goals associated with
commitment to and striving for achievements. This symposium will describe approaches that have been used successfully to increase sustainability of both learners and educators.

**Aim/objectives:**
The aim of this symposium is to generate a dialogue regarding sustainability in the learning environment and to present models that improve sustainability among learners and faculty.

**List of Presentations:**

- **Diann S. Eley**
  "How can educators and students create sustainable learning environments that nurture resilience and wellbeing?"
  This talk will expand on a model of education that is three-fold in nurturing responsibility, resilience, and resolve among students and faculty to promote wellbeing. It will propose actions to create a learning environment that aligns with the graduate attributes necessary to be a competent health practitioner, where the overarching ethos is to nurture personal growth and resilience.

- **Vaughan Kippers**
  "Sustainability of anatomy teaching in health professional education"
  Students often perceive learning anatomy to be a “low yield activity” because of the large time commitment relative to the number of examination questions covering this discipline. This talk will describe a new model that affords enhanced learning and greater sustainability in the anatomical sciences.

- **Cathleen C. Pettepher**
  "Designing novel competency-based assessment strategies to enhance the sustainability of medical students"
  This talk will describe how student sustainability can be enhanced by using competency-based assessment to monitor and coach the professional growth and development of pre-clerkship medical trainees.

- **Neil Osheroff**
  "Integrating foundational and clinical sciences in the medical curriculum to provide for better sustainability of medical training"
  This talk will describe the development of a novel curriculum that integrates foundational and clinical sciences across the medical training continuum and how this integration has increased student sustainability.

**Discussion: Issues/questions for exploration or ideas for discussion:**
Issues for exploration include the underlying causes of burnout and how novel educational approaches can enhance sustainability among students and faculty.

**5B Symposium – 7**

**Case-based Learning: Sustaining deep learning in the increasingly crowded curriculum**

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**Introduction/Background:**
Case-based learning (CBL) is one of a number of inquiry-based learning (IBL) models used widely in health education programs. As part of the Doctor of Medicine (MD) program implemented at the University of Queensland (UQ) from 2015, a transition from a traditional problem-based learning (PBL) curriculum to a CBL curriculum has also occurred. The UQ MD program is the largest medical
program in Australia, with over 500 students per year level and over 50 CBL tutors. Our CBL model has been developed and refined over several years, based on student and tutor feedback. CBL, alongside other related IBL models, offers a space to promote deep, sustained learning, within the constraints of an increasingly crowded curriculum. CBL can be utilised in a range of settings, whether large or small programs, as a total curriculum design or within a single lecture. In an environment of increasingly restricted resources in higher education, CBL has been viewed as a resource-intense activity, but its varied iterations offer all educators a chance to promote deep learning even with limited resources.

Objectives:
To explore CBL (and related IBL models) considering the theory, practical implementation, benefits, pitfalls, and student experience. To present various iterations of CBL, encouraging participants to consider possibilities for implementation in their own setting, and provide practical input regarding the design and writing of cases.

List of Presentations:
All presenters come from the team who design and deliver the large CBL program within the UQ MD. They have a combined experience of over fifty years as CBL (or PBL) tutors and case-designers and have all been heavily involved in the transition to the new CBL curriculum. The following topics will be presented.

What's in a name? What is CBL, why do we use it, and how is it related to PBL and other IBL pedagogies.
Are we there yet? The CBL model in the University of Queensland MD program and its evolution from PBL.
"Helpful for deepening my understanding": The student experience of CBL.
CBL on a Shoestring: Can the benefits of CBL be achieved without resource-intense, small-group delivery?
Assessment drives learning: Strategies to assess participation in CBL.
Where do I start? Practical tips for designing and writing CBL cases.

Discussion:
Presentations will be followed by a panel discussion, encouraging active input from the audience. This symposium offers a significant opportunity to bring together practitioners of CBL to share their insights.

5C PeArLs – 7

Escape Room: Effective inter-professional education or entertainment?

Narelle Campbell¹, Leigh Moore¹

¹Flinders University, Darwin, Australia

Introduction/background:
The Northern Territory (NT) hosts healthcare students on placement from many disciplines and universities. Flinders NT supports these placements in a range of ways. The challenge we face is developing flexible, inter-professional sessions with the potential to reduce the supervisory load on clinicians and to also meet the educational needs of a variety of professions, placement lengths, universities and an ever-changing group of students. As non-assessable sessions, the appeal factor needs to be high.
Escape rooms are a purposeful physical adventure game requiring a team to ‘escape’ by solving a series of puzzles through clues and strategy. Inspired by the team-building and problem-solving involved in escape rooms we are exploring the possibilities of this platform as a novel, inter-professional, educational resource for students.
Purpose/objectives:
To share our experience thus far, further develop scenarios with input from other health professional educators, refine learning objectives and gain inspiration from the expertise and suggestions of others.

Issues/questions for exploration or ideas for discussion:
Does the escape room hold merit as a quality inter-professional activity benefitting universities, clinical supervisors and students?
Exploration of potential scenarios
Which common learning objectives could/should be addressed?
What are the key areas for each profession that should be included?
How this activity, or others, might be developed further to reduce supervisory loads and allow sites to provide sustainable placement programs that meet increasing student numbers and calls for inter-professional practice.

Me, myself and us: Unpacking the origins of our own interprofessional perspectives to facilitate collaborative patient-centred care

Jane Ferns¹, Alexandra Little², Anne Croker²

¹University of Newcastle Department of Rural Health, Taree, Australia ²University of Newcastle Department of Rural Health, Tamworth, Australia

Introduction/background:
Collaborative patient-centred practice is a capability required of health professional graduates. Yet, how do students develop this complex practice, when traditional silo-based education contexts typically teach these skills through a uni-professional lens? Despite an ever-increasing focus on interprofessional education (IPE), little attention is given to rapport between educators of different professions in relation to the delivery of IPE strategies and how rapport is role-modelled to students.

Purpose/objectives:
This interactive session explores an overlooked aspect of IPE practice; namely, relationships between educators of different professions. We begin with an overview of our well-received workshops for educators. In discussing their evolution and future directions we describe our ‘rapport-building model’ and the research behind its development. During the session participants will reflect on the origins of their perceptions of other professions and what this may mean to their educational practice. Creative activities will facilitate reflection and sharing of insights. Understandings gained from these activities will amplify awareness of own interprofessional rapport and implications for authentically educating students for collaborative patient-centred practice.

Issues/questions for exploration or ideas for discussion:
Issues for grappling with will be highlighted and reflective questions posed. Questions for reflection will focus on: the formation of perceptions relating to other professions; the implications for building interprofessional rapport between educators; the implicit nature of interprofessional role-modelling; and the value of unpacking influences on educators’ behaviours for helping students learn to work with other professions. The role of our ‘rapport-building model’ as a framework for developing educators’ interprofessional practice will be discussed.
5D PeArLs – 8

How to ensure sustainability of programs designed and delivered by clinicians to enhance self-care, “soft skills” and professionalism, despite systemic challenges.

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Introduction/background:
Who cares for the carers? Organisational cultures may not prioritise workers wellbeing effectively. Whilst Qatar is implementing national mental health and occupational health strategies, clinicians are developing their own initiatives, born of need. The Ambulance Service in Qatar employs about 2000 staff with over 60 nationalities; characterised by varying levels of English language ability; with paramedics, doctors and nurses who are almost all expatriates. Clinicians recognised the need for supporting staff, for example after critical incidents or work related injuries. When a program was developed iteratively by an inter-professional group of experienced and interested clinician educators, the results were extremely encouraging despite the barriers. Feedback suggests that the workshops were effective in improving insight about stress, self-care, empathy and professionalism; enhancing “soft skills”.

Purpose/objectives:
To share the experiences of diverse clinician educators in working together to improve staff health as the primary aim; in addition mental health awareness and stigma could be reduced. There are lessons in designing inter-professional, inter-cultural, interactive workshops that build on and respect participants’ prior experiences, while gently challenging perceptions and beliefs, and encouraging development in soft skills and professionalism.

Issues/ questions for exploration or ideas for discussion:
How does organisational change come about when led by clinical educators? How do we as clinical educators develop leadership and political skills, and build sustainability? Is this an effective way to teach professionalism and communication skills and how do we measure it? How have others addressed similar challenges in andragogy across cultures both professional, societal and organisational?

Exploring the potential of Virtual Reality to increase self-efficacy in medical students

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Introduction/background:
Self-efficacy is a measure of one’s belief in their ability to perform a task, which is associated with performance in a number of contexts. Previous research has established a link between self-efficacy, anxiety, preparation, and performance in clinical settings. Exposure to clinical environments supports the development of self-efficacy in clinical practice, but this is not always practical or safe for students.

Virtual Reality (VR) offers opportunities to simulate first-person immersive experiences. VR is being used to prepare patients for stressful medical procedures by exposing them to a realistic virtual simulation of the procedure they are about to experience. VR might also offer opportunities to simulate clinical experiences where students could practice skills and procedures under stressful conditions without risk to themselves or patients. Developing experiences in this modality is becoming increasingly practical and accessible as the cost of commercial offerings decrease, but the practical considerations and effectiveness of this approach need to be explored.
Purpose/objectives:
To explore how VR can be used to improve self-efficacy in medical students.
To identify potential benefits, risks and constraints of this approach.
To contrast VR with traditional simulation-based approaches to clinical teaching.

Issues/questions for exploration or ideas for discussion:
What opportunities does VR present for clinical education?
What do we know about designing effective experiences in this modality?
How might we create VR experiences that support self-efficacy?
What measures of performance and ability should we explore in this environment?
What are the practical considerations when developing VR experiences for education?

## 5E Nursing

### Intimate Human Care and First Year Nursing Students

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**Background**
Beginning nursing students are often tasked with providing intimate care for patients on their first clinical placement. Challenges exist in creating learning experiences to prepare students for this. Mask-Ed is a simulation approach whereby the educator dons full body silicone props to transform into another person with a history that enables them to be a platform for learning and teaching.

**Purpose**
The aim of this study was to identify if Mask-Ed Simulation enhances students learning of intimate human body care.

**Participants**
Twenty nine first year nursing student participants were recruited for this study.

**Methods**
Participants were invited to provide intimate care to a Mask-Ed character. Following the intervention five focus groups were conducted. Data was recorded and transcribed verbatim. Thematic analysis was used to analyse the data.

**Results**
Data revealed that students experienced a journey of discovery. Five themes were identified including the realism of the Mask-Ed character, seeing the body a whole, becoming safe, becoming socialized into nursing and gaining confidence.

**Discussion**
The thought of providing intimate care can evoke fear and anxiety for students. Preparation is vital, however challenges exist for nurse educators to create intimate body care experiences through traditional modalities of simulation. Mask-Ed is a simulation modality that can prepare students for the provision of intimate care prior to their clinical placement.

**Conclusion**
The simulation modality of Mask-Ed enhanced the learning experience for students in providing them with an opportunity to experience intimate human care.
The development of the Patient Safety Competency Framework for nursing students: A Delphi Study

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Introduction/background:
Competency denotes an expected standard of performance that reflects what a person knows and is able to do in a particular circumstance [1]. The knowledge and skills nursing students develop during their undergraduate studies have a direct impact on patient safety [2]. However, in Australia, the absence of a clearly articulated set of patient safety competencies presented a challenge to curriculum development, teaching and student assessment in nursing programs.

Aim/objectives:
The aim of this project was to seek consensus on develop the Patient Safety Competency Framework (PSCF) for nursing students using a collaborative and inclusive process.

Methods
An expert panel consisting of 32 nursing academics representing nursing schools from across Australia and nine content experts participated in a three-round Delphi study.

Results:
Nine competency statements related to the following patient safety domains were consensually agreed upon by the expert panel:

1. Person-centred care
2. Therapeutic communication
3. Cultural Competence
4. Teamwork and collaborative practice
5. Clinical Reasoning
6. Evidenced-based practice
7. Preventing, minimising and responding to adverse events
8. Infection prevention and control
9. Medication safety

Discussion
Overall, a very high degree of consensus was achieved in regards to the competency statements, with the majority of the panel members’ feedback related to clarity of terminology and repetition within some of the statements. Each of the competency statements is supported by a discrete set of knowledge and skill statements

Conclusions:
The PSCF provides a clearly articulated and mutually agreed upon set on competency statements, knowledge and skills sets that can be used in curricula development and nursing student assessment.

References
Using visualisation technologies and 3D immersion to teach anatomy, physiology, pathophysiology and pharmacology in Nursing and Midwifery

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Introduction/background:
The growing interest in 3D virtual and augmented reality and game-based simulation in healthcare education acknowledges the opportunities technology affords learners. The sense of being able to “touch” what is not there coupled with allowing students to move about and view images from different perspectives, creates a learning environment that is very different to traditional approaches.

Aim/objectives:
To share new practices and teaching innovations using 3D immersion and discuss pedagogical approaches and factors influencing learning

Discussion:
In this presentation, a series of case studies will be used to illustrate how leading-edge 3D technology including Cave2™ and HoloLens™ are being used at an Australian University to teach anatomy and physiology and pharmacology in Nursing and Midwifery. This will highlight the pedagogical approach, challenges of using new technology, lessons learnt and recommendations for future development. The presentation will be of interest to academics seeking to incorporate advanced simulation and visualisation teaching methods in curricula. The content of this presentation is transferable to other disciplines

Issues/questions for exploration or ideas for discussion:
Challenges and strategies for successful implementation of advanced technology in simulation

Exploring the paradox: Academic misconduct among Australian nursing students

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Introduction/background:
In the wake of the technological revolution and the grey economy of essay writing services, ensuring academic integrity is becoming an increasingly difficult task for universities.

Aim/objectives:
This study aimed to describe the nature and extent of academic dishonesty among undergraduate nursing students across Australia.

Methods
An online survey was employed to collect data from students enrolled in nursing degree programs nationally. Data was collected on academic dishonesty, professional dishonesty and social desirability bias. Data were analysed to identify the prevalence of dishonesty, relationships between individual characteristics and dishonesty, and the association between academic and professional dishonesty. The impact of deterrents to dishonest behaviour were also examined.

Results:
The final sample consisted of 361 students. A relatively high proportion of students reported engaging in at least one form of academic misconduct, the likelihood of which was higher among younger age groups. Plagiarism was the most frequently reported form of academic misconduct. A correlation was found between academic and professional misconduct.
Discussion
Although nursing is often identified as the most honourable of professions, nursing students are subject to the same pressures to succeed as students of other disciplines. This study raises concerns about how these pressures may manifest in the form of disreputable academic and professional behaviour.

Conclusions:
In health professional education, there is a tendency to assume that the nobility of these disciplines will result in a lower incidence of academic misconduct amongst students. The findings of this study support existing literature that refutes this assumption.

‘What’s Their Story?’ The first rotation Graduate Registered Nurse’s educational and learning journey in the Neonatal Intensive Care Unit

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Introduction/background:
The purpose of this research project is to explore the learning and emotional experiences of graduate nurses during their first rotation (first employment as a registered nurse) as participants of the Sir Charles Gairdner Hospital (SCGH) graduate nurses program. In Australia, the need for clinical placements on graduate nurse programs are becoming more in demand, leading to the acceptance of staff in graduate registered nurses (RNs) programs in neonatal and other intensive care units. These nurses have commonly not, or received limited education, instruction or teaching, regarding specialised neonatal nursing in their undergraduate programs. After a comprehensive review of the published literature, it was found that there is limited research that focuses on the first rotation graduate registered nurse’s learning and educational experiences during a rotation through the Neonatal Intensive Care Unit (NICU).

Aim/objectives:
To explore the experiences of graduate registered nurses during their first rotation in the NICU, during the SCGH graduate nurse program.

Discussion:
An interpretative narrative inquiry approach was used in order to interpret the RNs’ narratives. A semi-structured interview was conducted on completion of the six-month rotation through the NICU.

Issues/questions for exploration or ideas for discussion:
How do graduate nurses perceive their preparedness for working within the highly specialised clinical setting of the NICU? What are the graduate registered nurses’ perceptions of the graduate training program and the support they received during their time in the NICU? What can be done to enhance the graduate nurses program to support graduate nurses through their NICU rotations?

The usefulness of mindfulness for newly registered nurses: A pilot study

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Background
Nursing graduates commonly find their transition to practice stressful; this can impact their decision to stay in nursing. It is unclear how to support novice nurses, but mindfulness is one potential mechanism.

Aim
To explore the usefulness of mindfulness, as a strategy, to assist newly registered nurses’ transition to practice.

Methods
Participants (n=20) were newly registered Division 1 nurses. A mixed methods design with repeated measures (pretest–posttest) was used. The intervention was a two-hour mindfulness workshop. Quantitative self-assessments of mindfulness (Mindful Attention Awareness Scale) and stress (Perceived Stress Scale) were collected. Qualitative data on implementing mindfulness was collected from a one-hour focus group. Quantitative data was analysed using the Wilcoxon Signed-rank Test and Spearman Rank Correlation Coefficient Test. Qualitative data was analysed using thematic analysis.

Results
Findings showed high levels of stress (M=19.63) pre-intervention (n=20) and a non-significant decrease (M=17.00) post-intervention (n=11). Qualitative data revealed five dominant themes: the graduate nurse experience, varied understanding of mindfulness, uptake of mindfulness, value of mindfulness and recommendations for future mindfulness education.

Conclusions
Newly registered nurses reported high levels of stress in their transition to practice. The greatest sources of stress were the busyness of their workload, responsibilities of the job, lack of feedback and support. One session of mindfulness education introduced them to the notion of self-care but was insufficient to acquire the skills required for mindfulness practice, for those new to mindfulness. Mindfulness education has potential, as part of a larger program of support, for newly registered nurses commencing employment.

5F Learning Culture – Resilience and Leadership
Health Advocacy, finding a home within undergraduate medical education
Nick Towle
University of Tasmania, Tasmania, Australia

Introduction/background:
Health advocacy is mandated as a core competency for medical graduates nationally and internationally and aligned to the growing expectation of medical schools to become more socially accountable. However, curriculum development in this domain has been slow; definitions of health advocacy remain contested, with divergence in approaches to teaching and assessment.

Aim/objectives:
This study sought to investigate the attitudes and experiences of Australian medical academics around health advocacy curriculum.

Methods:
A questionnaire containing quantitative and qualitative items was circulated to University of Tasmania medical academics.

Results:
The majority of participants rated the development of health advocacy skills in medical graduates as important (38%) or very important (54%). Half were personally engaged in health advocacy, though many perceived it to be a difficult area to teach (40%) and difficult or very difficult to assess (70%).
This study identified considerable divergence in the ways academics conceptualised health advocacy and what they considered to be important curriculum content.

Discussion:
This study adds an Australian perspective to the international literature. Many key challenges to developing and embedding health advocacy curriculum within medical education were reinforced. Among these were definitional haziness, lack of standardised competencies, uncertainties around how best to teach and assess and concerns around the authenticity of enacted curriculum.

Conclusions:
Identifying strategies to develop and embed authentic health advocacy curricula will be vital if Australian and New Zealand medical schools are to make a meaningful contribution to the health of local and global populations during this century.

Mentoring – a multi modal approach to a sustainable model

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Introduction/background:
Mentoring is integral to the development of doctors in complex, pressured, work-based environments. At the Royal Children's Hospital (RCH), mentoring has been anecdotally successful in an informal sense but a formalised program has not been as effective. Drawing from corporate, and medical literature, focus groups, and surveys data from our junior and senior trainee cohorts, we designed a multi-tiered medical Mentor program which utilises dyads, peer on peer and seminar cohort delivery modes.

Aim/objectives:
This presentation will focus on the JRMO mentoring experience. A self-selected dyad model utilising mentor videos and eLearning resources housed on the RCH Learning Management System to maximise flexibility, sustainability and accessibility. A brokering methodology has been applied to support the mentor relationship.

Discussion:
Our findings highlighted the complexity of implementing a hospital based mentor program. It stressed the importance of a needs analysis, self-selection, mentoring support and flexibility in program design and delivery to ensure access and sustainability. Curriculum design, methodology, and technology are integral to the successful outcomes. Mentee's identified that needs and organisational constraints must be acknowledged to ensure success and sustainability. A multi-modal learning approach is required to meet the complexities of flexible program delivery. Ongoing evaluation is essential to review practice and refine the curriculum process.

Issues/questions for exploration or ideas for discussion:
Self-selection the key to the multimodal approach.

Educational strategies in occupational health to sustain health professionals’ wellbeing

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Introduction/background:
It is increasingly recognised that the sustainability of health systems is at risk when the wellbeing of health professionals (HP) is compromised, measured by absenteeism or presentism, high staff turnover and poorer patient outcomes. High rates of burnout, suicide, substance abuse and other
mental health disorders in HP lead to significant harm and may lead to the abandonment of careers. Strategies to reduce harm need systemic and cultural changes; there is also a need to target individual HP and managers.

**Aim/objectives:**
To share the andragogic design and iterative delivery of small group workshops within a continuing professional development framework. The context used the “Trojan horse” of occupational health in a large, multicultural national Ambulance Service in Qatar.

**Discussion:**
HP wellbeing can be safely framed by exploring all potential hazards in the workplace. Harnessing the HP’ lived experiences and prior knowledge, and sharing inter-professionally, appears to enhance empathy, insight, professionalism, communication and inter-cultural understanding. There is opportunity to discuss stigma and enhance knowledge of common mental health disorders. The information gathered can be utilised to prioritise further education as well inform system changes to keep our HP safe at work. This methodology can be adapted for use in any workplace.

**Issues/questions for exploration or ideas for discussion:**
Cultures in health services; empathy and compassion fatigue; psychosocial hazards, adult learning; inter-professional education; mental health stigma; stress in the workplace; paramedicine

**Aspects of leadership best learnt at medical school and how these relate to Australian Medical Council graduate outcomes**

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**Introduction/background:**
Leadership is a core competency of doctors. However, specific learning outcomes for leadership are not well defined in medical school curricula in New Zealand.

**Aim/objectives:**
1. Define learning outcomes (LOs) for leadership in pre-qualification medical curricula
2. Evaluate the extent to which Australian Medical Council (AMC) standards meet LOs for medical leadership

**Methods:**
After conducting a literature search the UK’s Medical Leadership Competency Framework (MLCF) was selected as the “gold standard” framework. Each author assessed whether relevant AMC standards sufficiently aligned to each MLCF domain, and consensus was achieved.

**Results:**
1. No clear 1:1 relationship between AMC and MLCF LOs. Many standards were too general or too specific. Significant interpretation of LO intent was required.
2. Many existing AMC outcomes fit within the leadership framework. These could be more explicit.
3. Some key elements of leadership are not yet encapsulated by AMC LOs (e.g. tools for system improvement/audit).
4. Many MLCF competencies could be introduced into medical school curricula as foundations for further development after graduation.
5. Some MLCF competencies are more effectively learnt after graduation.
Discussion:
Leadership is multidimensional. Some dimensions may be more appropriately learnt after medical school. There are however significant gaps in current curricula as defined by the AMC, which could be met more effectively using the MLCF guidance.

Conclusions:
MLCF leadership domains are not yet sufficiently aligned to current AMC standards. This suggests further work is required to ensure medical curricula meet the leadership needs of our graduates.

Identifying excellence in professionalism

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Introduction/background:
Professionalism includes skills and attributes are vital to students’ identity formation as healthcare practitioners. Despite its multi-dimensional nature, the qualities of professionalism and unprofessionalism have been identified, however, the qualities of excellence in professionalism have not.

Aim/objectives:
The aim was to identify the characteristics that define excellence in professionalism demonstrated by undergraduate medical students at the University of Otago School of Medicine in New Zealand.

Methods
A mixed methods study design was used analyse assessment records of undergraduate medical students in their fourth-, fifth-, and sixth-year of study in 2010-2014. In the quantitative phase of the study, text parsing was used to analyse word and phrase frequencies in descriptions of professionalism in approximately n = 15000 assessment records. In the qualitative phase, a thematic analysis was conducted on a subset of assessment records (n = 130), teacher interview data (n = 5), and policy documents.

Results:
In addition to demonstrating basic competence in professionalism, three major indicators of excellence in professionalism were identified: improving oneself, helping other learn, and teamwork.

Discussion
Due to the nature of these attributes, students may require many learning opportunities to become aware, observe, and practice professional behaviours. Replication of this study in different professions and national contexts may be required to strengthen the findings.

Conclusions:
In 2018, teachers at the Otago Medical School will use the findings of this study to identify students’ demonstrations excellence professionalism. Next steps are to study the impact of different learning interventions on the development of professionalism.
5G Simulation 2

The relationship between the performances of physiotherapy students in simulation and clinical practice

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Introduction/background:
Simulation-based clinical education is often adopted prior to clinical practice to allow health professional students to practice in a safe environment. Ideally, the simulated environment should aim to replicate the clinical practice setting to create realistic physical and clinical situations; however, performance in these settings may be different.

Aim/objectives:
The aim of the study was to determine if there was an association between the performance of physiotherapy students in simulation and clinical practice and whether aspects of professional competency of students in simulation, as measured by the Assessment of Physiotherapy Practice tool, could predict subsequent clinical performance.

Methods:
The performance of 148 Graduate-Entry Master physiotherapy students was measured by clinical educators using the Assessment of Physiotherapy Practice tool (n=296) at the end of two weeks of simulation and subsequent three weeks of clinical practice. Data were analysed using Pearson correlation and multiple regression with backward elimination for exploring predictors of clinical performance.

Results:
Student performance in simulation was found to be moderately correlated with performance in clinical practice (r= 0.40, p<0.001). Two domains of the Assessment of Physiotherapy Practice (analysis and planning and risk assessment) in simulation, were predictive of student performance in subsequent clinical practice.

Discussion/Conclusion:
The association between student physiotherapist performance in simulation and clinical practice adds support for the utility of the simulation-based assessments as a predictor of subsequent clinical practice performance. Educators in simulation may consider focusing on learner development in the domains of practice of ‘analysis and planning’ and ‘risk assessment’ as a way of assisting physiotherapy student preparation for clinical practice and facilitating more effective implementation of simulation-based education practices.

Development of a Volunteer Simulated Patient Program to strengthen and sustain simulation education programs for students and staff.

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Introduction/background:
Health professional staff and students need to achieve competencies and develop confidence in a broad range of areas. There are no guarantees of seeing patients with particular problems during a
scheduled placement or work rotation. In addition, formal assessment of competence of students and staff requires a structure and consistency that is difficult to guarantee if relying solely on patients available on any given day. The literature discusses the benefits of using simulated or standardised patients to facilitate consistency and structured learning opportunities for education and assessment purposes. The use of simulated patients however can be costly and not sustainable if using paid actors and lack authenticity if using staff or students. To address these issues a Volunteer Simulated Patient Framework was developed, piloted and then implemented at Northern Health in collaboration with university and organisational partners.

**Aim/objectives:**
The aim of this presentation is to discuss how partnering with volunteers has resulted in growth, sustainability and diversity of simulation educational programs run by Northern Health and university partners.

**Discussion:**
Details of the Volunteer Simulated Patient Framework and how this was implemented will be presented including the governance, training, structure, organisational support, challenges and benefits. The discussion will also include information on how the program has increased the range of interprofessional educational opportunities for students and staff across allied health, medicine and nursing and the plans for the future.

**Issues/questions for exploration or ideas for discussion:**
The benefits, challenges, ethical issues and structures required to partner with volunteers in the delivery of education.

**Exploring university staff perceptions on implementation and sustainability of a simulation model in speech pathology**

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¹ Griffith University, ² The University of Queensland, ³ Speech Pathology Australia, ⁴ LaTrobe University ⁵ The University of Melbourne, ⁶ The University of Sydney, ⁷ The University of Newcastle

**Introduction/background:**
Simulation use in speech pathology curricula continues to grow. A recent randomised controlled trial (RCT) found that a mean of 20% of clinical placement time could be replaced with simulation without impact on student competency development. However, for simulation to be sustainable and embedded in programs more broadly, perceptions of university staff involved in the development and implementation of the RCT model warranted exploration.

**Aim/objectives:**
The aim was to explore perceptions of university staff involved in the development and implementation of the RCT model. Issues surrounding sustainability and embedding into curricula were explored.

**Methods**
Semi-structured interviews with university staff involved in development and implementation of the RCT at their university (n = 8) were conducted. Each interview lasted between 30-60 minutes. Interview data were transcribed verbatim and analysed using thematic analysis.

**Results:**
A number of themes emerged relating to the perceived value and practicalities of simulation. Participants reported simulation offered a quality clinical experience that may also assist placement shortage issues. Enhanced student learning through standardised, student-focussed, feedback-rich
simulations was perceived as a benefit. Participants voiced the need to consider aspects of simulation timing (within the academic calendar as well as the time intensive nature of the simulation model) and logistics including simulation space availability and staffing (faculty, supervision and simulated patients).

**Discussion and conclusions:**
Factors that enable sustainability of a simulation model have been identified and may assist to inform other health professional preparation programs about the key considerations needed before implementation and embedding can occur.

**Effect of a just-in-time simulated learning module on confidence and clinical placement performance of Physiotherapy students**

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**Introduction/background:**
Peak clinical placement capacity is approaching in Physiotherapy education in Australia. Simulation has been used successfully to replace some clinical placement hours. We suggest that simulation may also assist the sustainability of clinical placements by ensuring students are better prepared, thereby reducing supervisory demands and potentially reducing failure rates.

**Aim/objectives:**
To investigate the effect of a 20-hour simulated learning module immediately before student placements on student perceptions and clinical placement performance.

**Methods**
Twenty hours of targeted patient centred simulation were provided in the week immediately prior to students' musculoskeletal placement in place of other on-campus content. Students were surveyed pre-and post-simulation about their confidence in areas of practice and post-simulation about their perceived effectiveness of the program. Student marks on the Assessment of Physiotherapy Practice (APP) were compared with two previous cohorts who had not undertaken the simulation.

**Results:**
Student confidence increased in all 12 areas that were surveyed. Average confidence across a range of areas increased from 3.4/6 to 3.9/6 and 91% felt better prepared for placement. Clinical placement marks were higher in six out of the seven areas in the APP, but only reached statistical significance in Professional Behaviour, Communication, and Evidence based practice.

**Conclusions:**
Twenty hours of targeted simulation appears to increase student confidence and mid-placement performance, but it remains unclear whether these changes are sufficient to result in an increase in occasions of service or reduction in failure rates that would impact on the sustainability of the current model of clinical placements.

“Don’t underestimate what we do”: a focus group study from the perspectives of simulated patients

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**Introduction/background:**
Simulated patients (SPs) are individuals who are trained to portray patient roles for simulation interactions in health professional education. Increasing demands and adverse consequences of SP
role portrayal are documented, with recommendations emerging for educators to better support SPs in their practice.

**Aim/objectives:**
This study aimed to explore SPs’ perspectives of their practice, to inform program recommendations for educators.

**Methods:**
A qualitative focus groups design was adopted. Eighteen SPs from two university-based SP programs were recruited and assigned to three focus groups. A topic guide was used by expert facilitators to facilitate discussion. Independent thematic analysis was conducted by three researchers. Institutional ethical approval was obtained.

**Results:**
Four themes were identified that represent key elements of SP practice: being an SP, preparing for a role, performing a role, and concluding a role. SPs identify as educated specialists with unique responsibilities and attributes. Helpful and unhelpful activities to develop a character and learn a health complaint for role portrayal were identified. Performing a role is demanding and can have lasting impacts. SPs expressed strong desires to share perspectives on learners’ abilities after portraying a role, but feel limited by the restrictions and expectations of clinicians and learners.

**Discussion:**
Shared, standardized approaches to training are more likely to better support SPs. Consultation with SPs throughout all elements of their work may lead to greater support of SPs in their practice, and higher quality educational experiences for learners.

**Conclusions:**
Simulated patients consider four key elements to their practice, and identified ways in which educators might develop supportive and high-quality programs.

**Simulation training is associated with improved performance outcomes in acute stroke management**

*) Lauren Sanders¹², Ian Summers³⁴, Eva Windle¹, Julian Van Dijk⁴

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**Introduction/background:**
Clinical outcomes in acute stroke require rapid delivery of time-critical therapy. We introduced both off-site and *in situ* simulation based training to supplement existing stroke management education programme and to facilitate the development and introduction of a new “code stroke” protocol.

**Aim/objectives:**
To determine the effectiveness of simulation training in improving acute stroke performance.

**Methods**
We introduced off-site simulation based training for members of the stroke team. The simulation scenario was based on a real case (right middle cerebral artery occlusion) and included use of a simulated patient (SP). Using the same scenario and SP we conducted an *in situ* simulation to test and refine the newly developed “code stroke” protocol, prior to implementation. Data were prospectively collected for key clinical performance measure with the primary outcome of interest door-to-needle time (DTN).
Results:
From Jun16-Mar17, four off-site simulations were held. The new “code stroke” protocol was tested by a multidisciplinary team using in situ simulation (Mar17). During debriefing, immediately post-simulation, the protocol was collaboratively revised to address identified process issues. “Code stroke” went live in May 2017. DTN dropped from a median 105mins (Dec15-May16) to median 58mins (Nov16-Apr17). Declining DTN was observed both in-hours and out-of-hours, prior to “code stroke” going live. From May17-Sept17, 63% of patients have been treated under 60mins compared with 0% May16-Sept16.

Conclusions:
This is first report of simulation training directly translating to improved clinical performance for acute stroke. Further research is required to understand why simulation is effective and to determine optimal training intervals.

5H Selection

More than just conversation: MMI interviews predict clinical performance in senior medical student OSCEs

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Introduction/background:
Previous academic results predict future medical school performance and are widely respected admissions measures, despite weaker correlation with clinical aptitude. Predicting clinical performance, not just written exam performance, is a clear goal in medical school admissions.

Aim/objectives:
Investigating the role of MMI in predicting medical students’ clinical performance

Methods
Selection scores (GPA and MMI) from six cohorts of medical students (2007-2012) were correlated with performance data from all written and clinical assessments. In particular, the predictive validity of MMI interview scores versus OSCE performance by senior students was assessed (N=409).

Results:
GPA demonstrated positive correlation with academic performance in Yr1 written examinations (R^2=9.5%; P<0.0001; N=417). This significant correlation continued, but weakened, in subsequent written examinations (R^2=6.8%; P<0.0001). GPA didn't correlate with OSCEs. However, MMI predicted OSCE performance (R^2=9.2% Yr3 and 12% Yr4; P<0.0001).

Discussion
This analysis confirms the predictive correlation of GPA with academic performance in medical school written exams across all years, and its decrease over time. It also demonstrates MMI as a similarly useful predictor of clinical performance, especially in final year.

Conclusions:
Written medical school exams correlate with previous academic achievement, but this association weakens as the clinical education component takes priority in the senior years. OSCE performance in final year may be the most accurate simulation of future clinical practice and correlates with admissions MMI scores. A well-structured MMI interview aids selection of students by identifying students with strong communication skills and predicting those who will perform well in clinical assessments in the future.
Predictive utility of selection tools into Surgical Education Training (SET) in Australia and New Zealand

Michael Rasmussen, Zaita Oldfield
Royal Australasian College of Surgeons

Introduction/background:
Selection of surgical trainees is high stakes. The aim of selection is to admit those who are most likely to succeed in surgical training and beyond. The effectiveness of selection tools to admit applicants most suited to surgical training and reject applicants who are likely to be unsuccessful has implications for applicants, their families, colleagues, and patients.

Aim/objectives:
The aim of this study was to analyse the predictive validity of selection tools across training outcomes including candidates’ performance on exams, hospital rotations and overall training outcomes.

Methods
This study employed a retrospective, longitudinal analysis of selection and training data from 2008 to 2015. Trainee performance in a structured CV, structured referee reports, and multi-station interviews was compared to performance in examinations and work-based assessments and to withdrawal from training.

Results:
Multiple regression analyses showed that overall, the selection tools were marginally predictive of assessments and training outcomes. Higher scores on the CV were associated with a greater chance of failing clinical rotations and a greater chance of being dismissed or withdrawing from surgical training.

Discussion
We found minimal evidence for the predictive validity of selection tools. Based on these results selection committees could consider modifying or replacing the CV, and consider other methods of selection.

Conclusions:
The present repertoire of selection tools used to select applicants into surgical training lack predictive utility for training outcomes and suggestions for change have been recommended.

Video-based situational judgement tests (CASPer) can predict for national licensure scores

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Introduction/background:
Cognitive admissions screening measures (i.e. grades) correlate to knowledge outcomes on national licensure exams, including Canada’s National Licensure (MCCQE). The same is untrue for traditional non-academic measures. An online video-based situational judgment test (SJT) screening for non-academic characteristics was developed: CASPer (Computer-based Assessment for Sampling Personal characteristics).

Aim/objectives:
This study addresses a selection gap and look beyond reliability. What remains unknown is the correlation of CASPer with future performance of applicants, specifically their performance on the
MCCQE (Medical Council of Canada Qualifying Examination). The CLEO/PHELO have demonstrated correlation into clinical practice of good personal/professional qualities.

Methods:
277 medical school applicants who had taken CASPer were followed upon admissions to any Canadian medical school. CASPer scores were correlated against subsequent performance three-to-six years later on the MCCQE Parts I and/or II. MCCQE is unique in containing academic and non-academic outcomes.

Results:
CASPer video-based scenarios consistently demonstrated positive correlations with aspects of the MCCQE related to non-academic outcomes (CLEO and PHELO). Importantly, CASPer demonstrated no correlation with cognitive outcomes already predicted by existing cognitive screens, as scenarios are health care related.

Discussion:
CASPer research has demonstrated strong validity evidence (reliability, feasibility, and acceptability). The results demonstrate moderate predictive validity of CASPer for national licensure examination, as correlations were made three-to-six years into training.

Conclusions:
This research further provides evidence of the ability of an online test to screen applicants in a feasible, reliable test that has now demonstrated predictive validity for medical school training. With national licensure scores as a surrogate, CASPer can predict later personal/professional performance.

Exploring the key attributes and capabilities of novice physiotherapy clinical educators

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Introduction/background:
Clinical education is integral to the development of physiotherapy students’ professional competencies. To meet the demands of increasing physiotherapy student numbers, clinicians are being exposed to the educator role earlier in their professional careers and ‘on the job’ training is needed. Though the expert clinical educator has been widely researched, the key attributes and skills of a novice clinical educator, with less than two years experience, have yet to be established.

Aim/objectives:
This project aimed to identify the key attributes and capabilities of a novice clinical educator in physiotherapy, and explore any differences in attributes and capabilities required by physiotherapy clinical educators in core clinical streams (cardiorespiratory / neurosciences / musculoskeletal).

Methods:
Focus groups of physiotherapy clinical educators (novice and experienced) at a large teaching hospital were conducted by an independent facilitator. Participants were divided into one of three focus groups and a prepared ‘question route’ informed by current literature was used to explore the key attributes and capabilities required by a novice clinical educator in different core clinical streams. Focus group interviews were recorded, transcribed and analysed for themes by two independent researchers. Results of this analysis will be presented.

Discussion
Knowledge of the key attributes and capabilities of novice clinical educators will inform the development of workplace learning packages specifically tailored to support novice physiotherapy clinical educators. This project has the potential to inform education programs in other health disciplines and to improve the quality and efficacy of student teaching.
Supervision training interventions in healthcare: a realist synthesis

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Introduction/background:
Supervision training aims to develop supervisory capacity in the healthcare workforce. Despite extensive literature, including numerous reviews, the mechanisms through which supervision training interventions produce their effects, for whom and under what circumstances is not yet clearly delineated.

Aim/objectives:
What are the key mechanisms that influence supervision training outcomes? In what ways do training interventions enable or inhibit successful supervision, for whom and in what contexts?

Methods:
A realist synthesis of peer reviewed literature (databases including, Medline, Scopus, CINAHL & Embase) and grey literature, using a published peer-reviewed protocol. Pawson’s five stages of realist review: 1) clarifying scope, 2) searching for evidence, 3) assessment of quality, 4) data extraction, and 5) data synthesis.

Results:
Preliminary findings will include: (1) our PRISMA flow diagram for the selection of papers; (2) assessment of the relevance and rigour of papers; and (3) data extracted in terms of interventions, outcomes, contexts and mechanisms and key context-mechanism-outcome configurations that help to address the research questions.

Discussion:
The synthesised findings will refine our programme theory and demonstrate how ‘contradictory’ evidence can be used to test how training interventions ‘work’ across contexts. Recommendations will be drafted and tested with key stakeholders. This will facilitate the continuous quality improvement of supervision training interventions.

Conclusions:
The synthesis recommendations will focus on levers that can be used by policy-makers to support the development of evidence-based supervision training interventions and guide further supervision research in the healthcare professions.

6A Symposium – 8

How can health programmes sustain inter-professional learning and simulation activities?

Liz Fitzmaurice, Cherie Wells Elizabeth Elder, Matthew Molineux, Marie-Claire O'Shea, Melanie Roberts, Susan Clarey, Simone Howells, Benjamin Weeks, Nathan Reeves, Jennifer Witney, Shirley Morrissey, Gary Rogers

Introduction/background:
A key competency for graduates of all health professions is the ability to work effectively in interprofessional teams. Inter-professional learning (IPL) opportunities at university can assist students in obtaining necessary capabilities for inter-professional clinical practice. Clinical simulation can also provide meaningful safe learning experiences where students can practice interacting and working as part of an inter-professional team.

The sustainability of IPL and simulation activities, however, can be challenged by a range of factors, which can be difficult to manage and overcome.

**Aim/ objectives:**
The aims of this symposium are to discuss: Participant experiences of successful IPL and simulation activities along with Institutional enablers and barriers to sustaining IPL and simulation activities.

The opening presentation will highlight factors that have influenced the sustainability of IPL simulation activities, by drawing from experiences across 10 professions involved in Clinical Learning in Extended Immersion in Multi method Simulation (CLEIMS) at Griffith University.

This symposium will assist educators from different disciplines in enhancing sustainability in their own IPL and simulation activities.

**List of Presentations**
- CLEIMS overview, who what and when?
- Student participation and engagement: why it works and what makes it go wrong?
- Program commitment and flexibility: Be ready for the surprises
- Collegiality and friendship: Key even more so than funding
- Institutional support and resourcing: A top down passion to have IPE embedded into all health courses and a framework to do so.

**Discussion: Issues/questions for exploration or ideas for discussion:**
- What are the different types of IPL simulation activities that occur at your institution?
- What are the challenges in sustaining IPL simulation activities at your institution?
- What are the enablers to sustaining IPL simulation activities at your institution?

**6B Assessment – Theory**

**Continuing Professional Development: using practical assessment to meet the future needs of health students**

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**Introduction/background:**
Students want assessments that are meaningful and add to their knowledge and skill sets. Continuing Professional Development (CPD) requires Australian registered health practitioners to maintain, improve and broaden knowledge, expertise and competence, and develop the personal and professional qualities required throughout their professional lives. If CPD is not undertaken and documented correctly, registration can be suspended and even cancelled.

**Aim/objectives:**
This is a cornerstone academic assessment which provides an understanding of, and opportunity to practice, the registration requirement of CPD. Students complete CPD using a variety of educational sources chosen to provide insight into the health areas covered in particular undergraduate courses. This involves reading and demonstrating an understanding of their requirements of registration standards and completing 10 hours of CPD.

**Discussion:**
The success of this assessment is as both a formative and summative educational tool in terms of academic grading and acceptability for students. Student feedback is so far positives and includes statements such as: “This is the most relevant assessment in the entire degree.” and “I feel like I’ve learned a lot about the course content and also have gained an important life skill because I need to know how to do this to keep my registration.”

Conclusion
Written assessments are an important component of health degrees however many students do not see the relevance of these assessments to clinical practice. Assessment that reflects life skills such as CPD are considered to be relatable and useful by students.

Rating of physiotherapy student clinical performance in a paediatric setting: is it possible to gain assessor consistency?

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¹Lady Cîlento Children's Hospital, Brisbane, Australia ²Queen Elizabeth II Hospital, Brisbane, Australia ³Griffith University, Gold Coast, Australia ⁴Australian Catholic University, Brisbane, Australia

Introduction:
During workplace based clinical placements, best practice in assessment dictates that students should expect consistency between assessors rating their performance. To assist clinical educators (CEs) to provide a consistent assessment of physiotherapy student performance, nine paediatric vignettes depicting various standards of student performance as assessed by the Assessment of Physiotherapy Practice (APP) were developed.

Aim:
The project aimed to evaluate the consistency of physiotherapy educators assessing student competence in a paediatric setting using video vignettes alongside the APP.

Methods:
Thirty-six CEs, with minimum 3-years clinical experience and student supervision within the past year, were sent three videos at four-week intervals. Videos sent depicted the same clinical scenario, however student performance varied with each video. Consistency among raters was assessed using percentage agreement and Fleiss’ Kappa to establish the reliability of raters between groups.

Results:
The vignettes were assessed a combined total of 61 times. Across scenarios, percentage agreement at the not adequate level was 100%, and combining adequate or better, percentage agreement was >86%. Analysis of reliability using Fleiss’ Kappa, demonstrated overall substantial agreement (K=>0.60).

Discussion:
The study demonstrated strong consensus when comparing not adequate to adequate or better student performance. Importantly, no student performance scripted as not adequate was passed by any assessor.

Conclusions:
Experienced educators demonstrate consistency in identifying a not adequate from adequate or better performance when assessing a one-off student performance using the APP. These validated video vignettes will be a valuable training tool to improve educator consistency when assessing student performance in paediatric physiotherapy.
Using ShinyR to present post-exam IRT item analytics to medical educators and improve exam quality

Michael Rasmussen
Royal Australasian College of Surgeons

Introduction/background:
The exam cycle at the Royal Australasian College of Surgeons (RACS) is a recursive process, of creating, running and evaluating exams. Post-exam item analysis can detect exam items that are too easy, too difficult or lack discriminatory value. The use of ShinyR enhances communication of the results of this analysis to medical educators with limited experience or knowledge in psychometrics. ShinyR’s ability to present visually interesting and interactive dashboards may help medical educators to better appreciate psychometric evidence of exam items and make better decisions on whether to modify or discard items.

Aim/objectives:
RACS has prepared a ShinyR application in R Studio to present post-examination analytics to educators to make judgements about the effectiveness of items for a multiple-choice test.

Discussion:
The ShinyR web application enhances communication of psychometric information to educators. As an open-source technology it is likely to become more prominent in post-exam quality assurance. Psychometricians in the medical education community should be aware of its capacity to deliver visual displays of quantitative information and how this may enhance information exchange.

Issues/questions for exploration or ideas for discussion:
What psychometric information is the most pertinent for educators?
How might we use this technology to enable examinees to identify their weaknesses and strengths in order to improve their learning?
How do we strike the right balance between ensuring educators complete a thorough review of exam items and ‘overwhelming’ educators with psychometric information?

Assessment: The Chamber of Horrors

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Introduction/background:
A defensible assessment is the cornerstone of health professions education and requires a careful approach from all the stakeholders involved in designing and delivering the curriculum. Students are a major stakeholder as the outcome of assessment affects their careers in long run.

Aim/objectives:
What are the students’ past experiences of assessment?

Methods
Using storytelling technique students were asked to reflect on the most memorable experience of assessment that they have before enrolling in the Health Professions Education Courses.

Results:
Data from seventy three students was analysed to understand the nature of these experiences. Majority of these experiences were negative and that may be the reason that they have stayed in the students' mind. These experiences can be classified under three major themes, Communication, Orientation, Reliability, Validity, Standardisation and Feasibility and Learning itself

Discussion
The analysis supports the framework earlier proposed to design and implement an effective assessment which identifies four components of an effective assessment i.e. Communication, Orientation, Learning Experience and Evaluation of assessment.

Conclusions:
Assessment requires careful consideration when a unit is designed in order to enhance student’s experience.

Assessing if it is possible to create a sustainable clinical handover education and assessment process in pre-clinical medical students

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(1). Griffith University School of Medicine, Gold Coast, Australia.

Introduction/ Background
Accurate and timely clinical handover is known to be a crucial factor in the quality care of patients. Conversely, inadequate clinical handover is proven to be a significant cause of adverse patient events within the Hospital. In Queensland, Australia, communication failure was the leading contributing factor (27%) to death or permanent harm to a patient.

Therefore, it is essential that graduating medical students are competent in delivering a safe and effective clinical handover. However, there is minimal research considering the best timing for the introducing and assessing clinical handover in medical schools.

Aim/objectives:
To assess whether the skill of clinical handover can be taught and assessed in pre-clinical years of a medical programme and if so, whether this is best done in Year 1 or Year 2 of the curriculum?

Methods
A randomised controlled trial was undertaken involving first and second year MD students. Following the Pre-trial written ISBAR assessment, the Intervention group completed 4 further written ISBAR handovers, receiving comprehensive standardised, individualised feedback each time. Five weeks later, both groups of students undertook a Post-trial written ISBAR assessment.

Results
An improvement of 11.54% (P=0.001) and 25.75% (P=0.001) in mean ISBAR-style handover performance in Year 1 and 2 students respectively, was observed through the use of comprehensive, standardised, individualised feedback on formative ISBAR written handovers. Additionally, significantly improved proficiency was gained by the second formative assessment after the provision of comprehensive standardised individualised feedback on the first submission.

Discussion
Teaching of the ISBAR Clinical Handover tool can effectively be introduced into the Year 1 and reinforced in the Year 2 curriculum of a post graduate MD programme. This ensures medical students embark on their clinical years with enough competence in this skill to better participate in team-based provision of care.

Conclusion
Given that a sizeable improvement in Clinical Handover proficiency is possible following a single attempted submission and its corresponding feedback, then the introduction of Clinical Handover in pre-clinical year is both possible and sustainable from a curriculum planning and funding perspective.
6C Interprofessional Education – General

Sustainable practice: preparing students for collaborative practice

Isabel Paton, Narelle Patton, Joy Higgs

Charles Sturt University, New South Wales Australia

Introduction/background:
Global trends in demography, health and wellness, illness and disability, as well as changes in the way healthcare delivery is perceived have placed healthcare systems under growing pressure. Increasingly, inter-professional healthcare is being viewed as a silver bullet that can ensure sustainable delivery of high quality, client centred healthcare. Despite this centrality of collaboration to sustainable healthcare there remains a lack of clarity around the concept of collaboration and how collaborative capabilities are currently being or might best be developed in healthcare students in higher education.

Aim/objectives:
This presentation reports findings of doctoral research that explored the nature, value and process of preparing higher education students for collaborative practice in healthcare professions.

Methods:
This research is situated in the qualitative paradigm using a Gadamerian philosophical hermeneutic approach to guide text construction and interpretation. Text construction strategies included semi-structured and photo-elicitation interviews. Participants included speech pathology, podiatry, occupational therapy, physiotherapy and paramedic academics from two Australian universities.

Conclusions:
Collaborative health care practice is underpinned by a specific set of capabilities, qualities and transactions which will be explored in this presentation. Further, academics’ current practices and experiences of preparing healthcare students for collaborative practice will be examined. From the many practices described by academics, several approaches key to preparing students for collaborative practice including practice-based education will be discussed.

Given the centrality of collaboration to the sustainability of healthcare and education practices participants will be challenged to interrogate and expand their individual understanding of collaboration, and consider how this enhanced understanding could enrich their education and clinical practices with the aim of making those practices more sustainable.

Bridging Knowledge Translation Theory and Real-World Practice: The Development of an Interdisciplinary, Context-Bound Online Learning Module for Clinicians

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Introduction/background:
Knowledge Translation (KT) attempts to address the gap between what is known to work and what is done in practice. While clinicians are important stakeholders in KT for optimal patient care, KT’s complex theories and processes may present them with challenges. Clinicians interested in KT have indicated interest in free online learning modules.

Aim/objectives:
To identify existing high quality, free online KT training modules for clinicians. To develop a module if no resource meets our criteria.
Methods
We undertook a comprehensive review across four databases and the web (Google Advanced) using 9 KT synonyms. Resources were quality appraised (AACODs) if they proved interactive, educational in intent, and clinician-focused.

Results:
Of 971 unique websites retrieved, only one met all criteria. There were various online KT resources retrieved however, they required a certain level of prior knowledge or comprised links to non-integrated external resources. A learning module for palliative care clinicians was created based on the Knowledge-To-Action Cycle framework. This resource interprets and contextualises KT for real-world evidence implementation.

Discussion
Clinicians have few online opportunities to learn about KT. Existing resources assume prior knowledge, or fail to provide definitional clarity and instructional scaffolding. More resources are needed to bridge the gap between KT theory/research and the practical implementation of KT activities in healthcare settings.

Conclusions:
Clinicians require access to KT learning opportunities to learn skills necessary for driving patient care improvements. A free online learning module is now available that presents complex KT concepts and processes in a graduated, contextualised way.

Can point of view glasses build the bridge? Using technology to facilitate interprofessional learning


The University of Western Australia

Introduction/background:
This project piloted a clinical learning resource for medicine, pharmacy and podiatric medicine students that incorporated use of the "Point of view" glasses (POV) glasses to record their clinical interactions with simulated patients from an aged care setting.

Aim/objectives:
Evaluate the use of wearable technology for recording and facilitating playback analysis by students and how playback analysis process (self, by peer and simulated patient) influences students' understanding of interprofessional practice.

Methods
This qualitative study interviewed students and simulated patients to explore their experiences of using the POV glasses and the influence of the activity on students' understanding of interprofessional practice.

Results:
Six students and three simulated patients were interviewed following the recorded clinical interactions. Students and simulated patients found the technology inhibiting during the encounter, students highly valued the opportunity to reflect on their own clinical interactions during playback analysis, and valued observing the clinical interactions of other students, however their reflections on interprofessional practice were limited unless prompted. The simulated patients reflected an increased sense of collaboration in the learning experience and were more readily able to reflect on the profession specific communication styles displayed.

Discussion
The identified themes around reflective learning, collaboration and understanding of interprofessional approaches to clinical communication will be explored further at presentation.
Conclusions:
Wearable technologies can provide clinical learners with engaging opportunities to evaluate their own skill development and to guide reflection on interprofessional practice. However, using this video to develop a teaching resource for others presented many challenges.

Is it really about, from and with?

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Introduction/background:
The increasingly complex nature of healthcare requires collaborative practitioners, particularly in the domain of pharmaco-therapeutics where multi-morbid patients and polypharmacy are now commonplace. Interprofessional education (IPE) is one way to improve collaborative practice. In the formal IPE setting, students are brought together with the explicit purpose that they will learn about, from and with one another.

Aim/objectives:
The aim of the study was to explore medicine and pharmacy students’ experience of IPE with a particular focus on the ‘social’ dimensions of the process; including attitudes and behavior regarding learning about, from and with one another.

Methods:
Year 4 Medicine students at the University of Adelaide and Year 3 Pharmacy students at the University of South Australia, attended formal IPE workshops. Students’ reflective writing was used as a source of qualitative data.

Results:
Three main themes were identified. Students are accepting of contact with the other professional group. There is an enhanced understanding of professional roles, although professional stereotypes are largely reinforced. Knowledge is seen as a resource to be utilized.

Discussion:
Learning with another group is seen as positive, both groups learn about each other’s roles and this provides clarity of their own contribution to patient care and also what the other group might provide. However, learning from the other group is less apparent and appears unequal. Knowledge is seen and treated as a commodity, rather than a shared understanding; and students’ assumptions and values are unchanged.

Conclusion
Learning from one another in IPE requires the learners to co-construct and share new meanings, which does not occur.

Toward a Spirit of Interprofessional Practice; A Hermeneutic Phenomenological Study

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Introduction/background:
Interprofessional practice (IPP) is recognised as essential in the provision of patient centred, collaborative and high quality care, contributing to improvements in the patient experience and health outcomes. This way of working is expected within healthcare; however, understandings of how best to cultivate and sustain practitioners able to ‘be’ and ‘become’ interprofessional remain problematic.
**Aim/objectives:**
To advance that understanding, this study addressed the question: ‘What are health professionals’ experiences of working with people from other disciplines?’ In dwelling with, and gaining a deeper understanding of, the nature of events as experienced in everyday life, a more thoughtful approach to the development and sustainability of interprofessional learning is opened up.

**Methods:**
A hermeneutic phenomenological approach underpinned this study. In-depth, semi-structured interviews occurred with 12 health professionals from 7 professions, and their understandings and perspectives gathered.

**Results:**
The experience of health professionals revealed things at the ‘heart’ of IPP, illuminating ways of ‘being’ and ‘doing’ necessary in the turning toward, working in a spirit, and in the safeguarding and preserving of IPP.

**Discussion:**
The findings contribute to a deeper understanding of IPP as a way of being that extends beyond known and measurable skills and knowledge, to dispositional qualities that come from within a person and what they care about, and from experiences that shape their understandings.

**Conclusion:**
This study points toward IPP as being about a spirit, not a set of competencies. Who people are, what they bring and how they act is what matters.

**Architecturing health: Community wellness through interdisciplinary student learning**

**Margo Brewer¹, Helen Flavell¹**

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**Introduction/background:**
Traditional siloed education limits collaboration between disciplines and professions. Many challenges facing humanity, however, require innovative, interdisciplinary approaches with a focus on systems thinking. To provide sustainable health outcomes, for example, greater collaboration is required by disciplines whose input directly impacts community wellness. Global projects such as Blue Zones indicate the need to shift the emphasis from changing individuals’ habits to creating communities that promote healthy lifestyles. This presentation reports on a project that brought together health and architecture students to co-create an interdisciplinary studio-based learning experience with the express aim of improving health through exploring the built environment. Students also participated in a one-day symposium which incorporated industry and health consumer advocates.

**Aim/objectives:**
To investigate the impact of the studio-based interdisciplinary learning experience on health and architecture students’ attitudes to interdisciplinary collaboration.

**Discussion:**
Collaboration with fields beyond health can be complex due to differences in epistemological and educational traditions and practice. Despite this, benefits to students have been observed with the potential to impact on community wellness. Students reported, for example, greater knowledge of other fields of practice, improved confidence in communicating effectively with other disciplines, and a broadening of their thinking around future employment options.

**Issues/questions for exploration or ideas for discussion:**
Strategies for establishing and facilitating interdisciplinary learning experiences beyond health will be explored as well as how to manage collaboration with other disciplines to achieve student learning outcomes.
Interprofessional video simulation for health care professionals to enhance safety and improve quality health outcomes

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Introduction/background:
Framed within the National Safety and Quality Health Service Standards, video simulations were developed to capture a patient's hospital journey. An educational package was designed based on ISO audit data. During phase 1, optimal and sub-optimal versions of video simulation scenarios reflecting patient encounters were recorded. These were incorporated into annual professional education for staff throughout the year. Phase 2 built on the education and further video simulations were developed to incorporate additional standards.

Aim/objectives:
To improve patient safety relating to the national safety and quality health service standards using video scenarios presented and discussed at annual mandatory training.

Methods:
A mixed method study utilising, quality data, surveys and interviews was used to evaluate the effectiveness of the education programme.

Results:
The quality data collected for the accreditation purposes by the hospital indicates that the patient safety outcomes have improved during the period which the simulation videos were used. Data collection for phase 2 is in progress.

Discussion:
The “Ruby Tuesday” video simulation project actively promotes a culture of safety and learning that includes engaging with clinicians and others, to share knowledge and practice that supports person-centred care.

Conclusions:
This presentation will report the project design and results demonstrating how simulation teaching clinical skills, translates in practice and can improve patient safety.

6D Specialist Training 2

Oral Health Therapy Education in Partnership Scaffolding: A Reflective Analysis of Different Approaches with Student-Centred Frameworks and Peer Reviewing.

Ahmed Al-Humairi, Jordan Sawyers and Bree Jones

Aim:
A unique partnership for the delivery of Oral Health Therapy program has been established between Charles Sturt University and Holmesglen Institute. Several challenges were expected within the partnership. The main goals were to maintain the consistency and continuity in curriculum delivery, and unification of student cohorts that are segregated by distance.

Method:
In response, peer reviewing and student-centred strategies were adopted. Peer review of teaching was conducted at the individual and organisational level against evidence based practice, subject learning outcomes, course competencies and CSU graduate learning outcomes. Diversity of teaching
practices, experience and scholarly activities across partner site made this process more robust. A student-centred approach actively involved students in learning using a variety of strategies such as collaborative learning and problem solving using online tools and case studies between cohorts, and utilising of stimulation environment, clinical cases and rubrics to develop students’ critical thinking skills.

**Results:**
The task of the teacher becomes one of facilitator, who actively promotes student-student interactions. There is high demand in pure student-centred teaching for communication, organisation as well as provision of learning material between partners. Therefore, there is a need to underpin student-centred teaching with peer reviewing.

**Conclusion:** the benefits in the diversity in approaches and human resources across institutes are recognised, and partnerships external to the school as well as the regional surroundings must be cultivated to allow for growth of knowledge and resources that value the student experience.

**Keywords:** oral health therapy; partnership; peer reviewing; student-centred framework.

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**Development and validation of a framework for evaluating competency in medication supply**

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**Introduction/background:**
Effective medication consultation and dispensing by pharmacists is essential in ensuring patient safety. With the progressive development of standards of practice, and public demand for assurance of health professional competency, there is an increasing need for reliable and valid tools for pharmacist competency assessment, but there is a lack of adequate evidence for such assessments.

**Aim/objectives:**
The purpose of this study is to develop and test a conceptual framework for evaluating the professional competence of pharmacy students’ in clinical decision making during the review and supply of medications.

**Methods**
Key components of clinical reasoning during medication supply were identified through a think aloud study with pharmacists, and compiled to form an initial simulation based assessment framework. Validation of the framework is being undertaken with undergraduate pharmacy students participating in a simulation of a typical patient-pharmacist encounter in a community pharmacy. Expert raters’ assessments will be analysed using non parametric statistical analysis to determine the validity and reliability of the framework as an assessment tool.

**Results:**
The framework consists of 24 items grouped into five domains for assessment of pharmacy students using both observation and post-simulation discussion. We will present the results of the validation study involving a minimum of ten expert assessors from a range of Pharmacy schools. Identified assessors are pharmacists with expertise in workplace based assessment, registration examination and undergraduate pharmacy teaching and learning.

**Discussion:**
This research project will provide a structure for medicine dispensing, allowing assessment of pharmacist competency in safe and appropriate medication supply.
Medication Safety Option: Inter-professional program to improve junior medical staff transition

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Introduction/Background
Junior doctors consider prescribing to be of the most difficult tasks when they start as new doctors. They often feel unprepared and express concerns around prescribing not being highlighted within the medical curriculum. Although prescribing is known to be the most common therapeutic intervention carried out by doctors, there are currently no transition initiatives being undertaken to address this issue.

Aim/Objective
The Clinical Education and Training Unit and Pharmacy Services at Waitemata District Health Board (WDHB) designed a 3 week medication safety option for final year medical students from the University of Auckland. The aim of the option was to help develop awareness and knowledge around the process of prescribing and medication safety. This includes inter-professional involvement and promotion of safe and accurate prescribing. The option was designed to be interactive and clinical based on learning outcomes of the medical school core curriculum.

Discussion
A pre and post knowledge evaluation of three students who have completed the option in 2017 demonstrated increased awareness and knowledge around prescribing and medication safety. They found the option extremely valuable and suggest it should be offered to all medical students. To overcome new doctors’ confidence and knowledge gap issues, inclusion of this medication safety option into transition programmes is essential. Without exception all clinicians (involved or observing) fully support this initiative.

Issues
One of the issues includes adapting the option to suit individual learner’s needs. In addition, balance between clinical work and teaching time remains a challenge to maintain and expand the programme to include all students.

The difficult art of observation: teaching dermatology through art observation training

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Introduction/background:
"There is no more difficult art to acquire than the art of observation." William Osler. Physical examination skills are foundational elements of medical education but the art of observation is somewhat more difficult to teach. Visual literacy and descriptive ability vary between students, and may prove inadequate when it comes to conveying important clinical information. The direct teaching of visual observation through art observation skills may improve students’ capacity to identify critical data and patterns within it to inform clinical reasoning.

Aim/objectives:
This presentation reports on a pilot project involving medical students at a rural clinical school. Students attended voluntary art observation training with an art educator at a regional art gallery. Participants’ observation skills in dermatology were tested pre- and post-art observations skills training by requiring them to describe common skin lesions.
Discussion:
The project required collaboration between the medical school and the art gallery. Using exhibits within the art gallery, participants attended sessions external to their normal timetable. Feedback from students about perceived usefulness of the training was sought. Descriptions of skin lesions before and after training were recorded, and compared.

Issues/questions for exploration or ideas for discussion:
Art observation training has been used to improve visual diagnostic skills in general, and also for particular areas of medicine such as ophthalmology. Are there other areas of medical education that would benefit from the teaching of other educators ‘outside’ medical education? How useful would art observation training be in other types of health professional education? Are there other ways to use art to enhance health professional education?

Examining the successes and challenges of implementing a multimodality X-ray Operator training course

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Introduction/background:
X-ray Operators (XOs) are individuals (both health professionals and operational staff) who work in the health service in rural and remote locations without formal qualifications in radiography, but who are licenced to perform a limited range of plain film X-rays. XOs provide access to services for patients who would otherwise need to be transported to the closest facility with a radiographer. To become an XO in Queensland (which has a highly dispersed population), an introductory training course endorsed by Radiation Health and associated assessment must be completed before being granted a trainee licence.

Previously, training pathways for introductory XO courses in Queensland consisted of five consecutive days of face-to-face training and theory assessment. Given increasing resource and travel constraints, a pilot was conducted to trial an alternative delivery format involving an online theory component combined with a practical workshop, with the aim of providing improved XO preparedness to perform chest and extremity radiography.

Aim/objectives:
This presentation will provide insights into an innovative and collaborative training program and address the associated challenges of program implementation, particularly within the rural context.

Discussion:
Preliminary participant feedback indicates overall satisfaction with the course. The greatest challenge in implementing this program in rural Queensland has been ensuring access to appropriate support and training. This paper will examine approaches to overcoming these challenges, including the incorporation and development of online resources, collaboration with the University of Newcastle and radiographic advisors, and the role of teleradiography.

Issues/questions for exploration or ideas for discussion:
Program evaluation and research into whether this course meets the aims of the program is required. Further consideration is needed to promote participant engagement and ongoing support.

Bringing the expert into the curriculum: patients as teachers in speech-language pathology education

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**Background:** Patients are increasingly occupying active roles as teachers in health professional education. However, little is known about the perspectives of patients and students, when patients are in a teaching role, in speech language pathology (SLP) education.

**Aims:** To explore how SLP students and people with Parkinson's (PWP) experienced their involvement in a patient-as-teacher programme, hereinafter called the Expert Teacher programme.

**Methods:** This study used qualitative research methods. Semi-structured interviews were conducted with four PWP and a focus group with six students involved in the Expert Teacher programme.

**Results:** Participants reported on the benefits and challenges of their involvement. Five themes emerged from the semi-structured interviews, working on a real thing; helping the next generation; Expert Teacher-student relationship; safe environment and challenges you've got to overcome. Four themes emerged from the focus group. These were developing skills; getting feedback from the client; teacher-student relationship and having a safety net.

**Conclusion:** The Expert Teacher programme is an innovative model in SLP student education. The study identified both patient teaching and student learning benefits along with needs for support and training. These findings will support clinical educators in the development and design of initiatives involving patients as teachers in health professional education.

**Prescribing Skills Assessment – initial results from an Australian cross-institutional pilot**

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Simone Rossi and colleagues, Australian Medicines Handbook, Australia

**Introduction/background:** Safe use of medicines and practice readiness are key priorities for medical schools, healthcare systems, regulatory bodies and patients. The Prescribing Skills Assessment (PSA) is an online examination developed by the British Pharmacological Society to teach and assess prescribing competence pre-graduation. In 2016 the PSA was adapted to Australian practice and successfully piloted at Monash University and University of Newcastle.

**Aim/objectives:**
To explore the relevance, acceptability and utility of the PSA for Australian medical schools, with measurement of student perception of existing educational opportunities in prescribing.

**Methods:**
Medical schools across Australia were invited to administer the PSA in 2017. Participating schools reviewed questions and contributed to standard-setting. Three online practice papers were available. The exam was invigilated and followed by an opt-in anonymous feedback survey.

**Results:**
Eight medical schools participated. The relevance of the PSA was evidenced by the small number of changes in content required for the Australian context. Student feedback provided evidence of high acceptability and utility, with recommendations for more opportunities to practice prescribing, including ongoing use of the PSA.
Discussion:
The PSA was successfully implemented across 8 medical schools, was acceptable to participants and provided meaningful practical experience, feedback and assessment in prescribing. The PSA fills a gap in current medical education assessment and provides valuable input for curricular development.

Conclusions:
Schools that participated in the PSA in 2017 intend to implement it in 2018, with additional medical schools expected to come on board this innovative assessment, which is a sustainable, collaborative, cross-institutional teaching and learning tool for Australian medical schools.

6E Health Professions Education Research

Research funding and the development of a healthcare professional education research culture in Taiwan: A scoping review 2006-2017

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Introduction/background
Research is the heart of healthcare professional education (HPE), providing evidence for developments. If a country wishes to produce the best healthcare professionals they must develop, and sustain, a strong HPE research culture. Alongside factors such as leadership, protected time and career progression, adequate funding is necessary. In Taiwan, HPE research was recognized as a discipline, with national funding, in 2007.

Aim/objectives
We systematically explored Taiwanese HPE research to ascertain the relationship between funding and the sustainability of HPE research outputs.

Methods

Results
1,268 articles identified, mainly nursing (n=519;40.9%) and medical education (n=389;30.7%), increasing over time (combined n=80-n=159;2006-2016); also, English publications (n=39-n=138), articles in SCI/SSCI journals (n=26-n=116) and funded research (n=29-n=87;64% nationally). Funded research was more likely to be: published in SCI/SSCI journals \( \chi^2(1)=31.01, p<.001 \); in higher impact factor journals \( M=1.68, SD=1.29, t(1029.43)=12.27, p<.001 \); and more frequently cited \( M=14.59, SD=23.14, t(736)=3.67, p<.001 \) than non-funded. Most common purposes: advancing theory/knowledge (n=491;39%), evaluating courses/curricula (n=379;30%). Most popular areas: ‘teaching/learning methods’ (n=379;30%), ‘professionalism’ (n=367;29%).

Discussion
HPE research in Taiwan has developed in quantity and quality since being nationally recognised and funded. There is a lack of theory discussion and development, due to the nascent nature of HPE research in Taiwan.

Conclusions
National recognition and protected research funding are central to a country’s HPE research culture sustainability.
Translational research in medical education: What constitutes as evidence?

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Introduction: Medical education (ME) seeks to improve medical students’ education as best as possible. This is because high-quality education leads to high-quality competence and thus to better healthcare quality. In order to produce these high-quality outcomes medical education has to be optimally evidence informed. Generally there is a delay in adopting evidence into practice, even in clinical disciplines. In medical education this translation from evidence for practice is further complicated by the fact that producers of ME research and clinical educators may speak different jargons and have different views on what constitutes convincing evidence.

Objectives: This doctoral study aims to improve evidence-based educational practice in ME through the lens of implementation science and to further shed light on ME translational research processes. To achieve this, we need to first identify characteristics of transitional research constructs: what is the intervention/evidence, who are the stakeholders and where does the process take place. We are investigating these objectives: to what extent are ME researchers willing and able to change their concept of evidence to better suit the expectations of clinical educators.

Discussion: Evidence, as one of the main components of translational research, needs to be well-defined. In ME, we communicate with clinicians who may have a particular view on what constitutes evidence, differing from the view in ME. In translational research, evidence is coloured by cultural and epistemological points. In this presentation, we will further discuss those points. We will also discuss what the nature of evidence is and what constitutes as evidence in ME.

Questions for exploration: We would like to explore what role evidence plays in translational process and how the audience would use those concepts of evidence in research translational processes.

Preparing allied health students for evidence-based practice: Views and practices of workplace learning supervisors

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Introduction: Evidence-based practice (EBP) involves a range of skills and is an important process in achieving optimal client-centred healthcare. Workplace learning (WPL) experiences can contribute to authentic development of undergraduate allied health students’ EBP skills, knowledge and attitudes, and to sustainable EBP post-graduation.

Aim: To explore WPL supervisors’ perspectives regarding the development and assessment of allied health students’ EBP skills, knowledge and attitudes during WPL placements.

Methods: WPL supervisors from an on-campus allied health clinic at one Australian university participated in a face-to-face, individual interview. Supervisors were asked to share their views, practices and experiences regarding the development of undergraduate students as evidence-based practitioners.

Results:
Preliminary analysis of the collected data suggests that WPL supervisors have various understandings of contemporary EBP. Due to this variance in understanding it should not be assumed that WPL supervisors are providing the explicit coaching students may require to develop proficiency and confidence in all steps of the EBP process. Further, WPL supervisors’ assessment of students’ EBP abilities may be incomplete, focusing on the use of research evidence rather than considering students’ engagement in the entire EBP process.

Conclusion:
WPL experiences provide valuable opportunities to develop students’ confidence in the steps of EBP and their appreciation of the importance of EBP in delivering high-quality, client-centred care. We propose that providing clearer guidelines for WPL supervisors, including ways to facilitate and assess students’ EBP skills, will assist in promoting more sophisticated and sustainable implementation of EBP by future practitioners.

“Not another research project!”: conducting research in local education and training contexts without burning out our potential participants

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Introduction/background:
In local education and training contexts, we seek to conduct research that is informed by educational problems, and then draw on trainees and educators to help answer these problems through participation in research. Our imperative is to translate these findings into practice, in order to make improvements and foster innovation and quality in our education and training programs.

Aim/objectives:
This presentation will explore some of the challenges faced when conducting research in local training contexts, and provide some strategies to consider for addressing these challenges.

Discussion:
We will draw on our experience leading research projects which have informed educational development and delivery in GP vocational training. We will share the challenges we have experienced, and the strategies we have since used (and continue to refine), which endeavour to build a sustainable program of research that translates research into practice whilst minimising research-fatigue among our trainees and educators.

Issues/questions for exploration or ideas for discussion:
How can we encourage participation in research projects and avoid research-fatigue in our trainees and educators? What do research teams and training organisations need to consider when planning their projects?

Using graphic elicitation as a research method to understand group work for health professionals-in-training

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Introduction/background:
For health professionals-in-training, group work is an important format for learning about interprofessional work in healthcare settings. However, students sometimes highlight dissatisfaction
with group work. Little is known about how group work should be effectively designed to cater for students from diverse health professions, with differing academic achievement backgrounds and future professional demands.

**Aim/objectives:**
This project aimed to verify how group work could be designed to support positive outcomes in interprofessional and multidisciplinary settings. A key focus was on how the nature and characteristics of successful group work, and group work assessment, connect with effective healthcare teams. The introduction of a first cohort of medical students to existing group work designed in a multidisciplinary learning context was an opportunity to scrutinise learning for doctors-in-training alongside other health professionals-in-training.

**Discussion:**
Participant-produced graphic elicitation was used as a research method to analyse the connections between group work and successful healthcare teams. The design of this aspect of the project, using a research method which is not commonly used in health professions education, provided insights into how this method can be used to understand perspectives from different health professionals-in-training.

**Issues/questions for exploration or ideas for discussion:**
Interprofessional education is coming under increasing scrutiny in health professions training. Illuminating intergroup interactions will be key to developing strong relationships in interprofessional clinical care teams of the future. How these strong relationships can be successful is important for sustainability of health systems.

**What does Evidence-Based Practice mean to undergraduate health students?**

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**Introduction:**
The concept of evidence-based practice (EBP) has evolved considerably since its ‘evidence-based medicine’ beginnings. In particular, there is a growing emphasis on the importance of clinical experience and appropriate communication with clients and other clinicians in the application of research evidence.

**Aim:**
To qualitatively analyse undergraduate students’ conceptualisations of EBP, and compare these conceptualisations based on year level.

**Methods**
A total of 442 students from all year levels of 20 undergraduate health degrees in one Australian university responded to an online survey question: What does evidence-based practice mean to you? Employing Druckman’s method of content analysis, the students’ open-ended responses were coded based on etic and emic categories.

**Results:**
Few students at any year level defined EBP in ways that reflect contemporary notions of EBP. For example, only some students mentioned that EBP involves clients: 3.5% of students in first year, 6.2% of second year students, and 14.2% of third year students. Similarly few students mentioned the role of clinical experience: 1.4% of students in first year, 8.9% of second year students, and 10.1% of third year students.
Discussion and Conclusion:
Even towards the end of their training, many health students erroneously equate EBP with ‘empirically supported treatments’. We argue that, for EBP to be sustainable, health professional educators should work to (a) raise student awareness of issues associated with simplistic conceptualisations of EBP and (b) explicitly teach EBP as a highly collaborative and contextualised process whereby clients can be informed decision makers in their own healthcare.

Introducing health students to critical appraisal of evidence using a quantitative rating tool

Amanda Wilson

Introduction/background:
There is increasing importance placed on the concept of evidence-based learning but despite this, virtually no tertiary learning tools are validated as effective teaching interventions. This presentation will introduce the Media Doctor Australia (MDA) Student Rating Tool and discuss its validity and acceptability among undergraduate health students.

Aim/objectives:
The Media Doctor Australia (MDA) rating tools were designed to evaluate health news about new treatments. These tools are validated and have been used internationally since 2005 [1-5]. This student version of the tool is designed to introduce students to the concept of evaluating the quality of health information while encouraging collaborative practice with students working to reach consensus with colleagues.

Discussion:
All health students are required to evaluate quality of evidence in order to provide effective evidence-based practice. However, many struggle with this concept especially in their early years of education. A validated tool to teach critical appraisal should raise the interest and understanding of students in applying evidence to their practice. Pilot use of the tool has resulted in high levels of acceptability and interest from both students and their tutors.

Issues/questions for exploration or ideas for discussion:
How do we currently teach students to conduct critical appraisal of quantitative evidence and how successful is this?
What are the barriers and or facilitators for students dealing with quantitative evidence?
How much do they need to know?

Advancing research capacity in post-graduate medical education

Elena Rudnik, Hakan Muyderman, Seya Manawamma, Minh Nguyen, Karen Piper, Lucie Walters

Universities are increasingly offering post-graduate medical education though Doctorate of Medicine (MD) programs. To achieve Australian Qualifications Framework (AQF) accreditation a MD program must provide students with specialised research skills including the ability to generate and disseminate findings that contribute to the discipline of medicine. In 2014 the Flinders University MD introduced Advanced Studies as a core subject requiring students to select course-work or research project activities equating to 135 hours per year during years 2, 3 and 4 of the four-year course.

Methods:
A case-study including a description of Advanced Studies governance, education objects and research outputs since inception. Content analysis was used to classify research topics and
methods adopted by over 600 medical students. An overview of the implementation and variation of research education for students based in metropolitan, rural and remote locations will be presented.

**Results:** Advanced studies provides students with research exposure that produces outputs valued by students, faculty and community. Research fields are diverse with rural and remote stream students engaging in more community-based projects, compared with metro-based students who have greater access to laboratory equipment.

**Discussion:** Advanced studies has formally recognised the importance of student research and evidence-based practice in the Flinders MD program. Coordination, supervision and research funding is a major investment and preliminary findings indicate Advanced Studies is providing positive returns. Other medical programs seeking to introduce a longitudinal research topic will be informed by this research.

6F Learning Culture – Mental Health and Well-being

**The prevalence of sexual harassment and bullying amongst general practice registrars at a regional training centre in 2017**

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**Introduction/background:**
Sexual harassment and bullying among doctors are an ongoing occurrence. A 2016 Australian Medical Association (AMA) survey conducted in Western Australia reported 31% of 950 participants experienced sexual harassment in the workplace. An Australian prevalence study on bullying in the medical workforce revealed 1 in 4 respondents had experienced bullying in the last 12 months. There are currently limited publications on bullying and sexual harassment amongst general practitioners (GP).

**Aim/objectives:**
To identify the prevalence of sexual harassment and bullying among GP registrars at a regional training centre.

**Methods**
Voluntary anonymous participation was offered to 110 GP registrars working in this regional centre via online questionnaire.

**Results:**
50 participants (45%) completed the survey. The prevalence of either sexual harassment or bullying amongst GP registrars was 44%. Over one quarter (26%) of participants experienced bullying during their medical career. 22% of participants experienced sexual harassment in the workplace. 5 out of the 11 participants revealed sexual harassment occurred during work as a GP registrar. In contrast, 2 out of 13 registrars reported bullying during work in general practice.

**Discussion**
This study identified patient or relatives as the most common source for sexual harassment while doctors at hospital were the main perpetrator of bullying. Moreover, the study revealed only 30% of participants received training regarding sexual harassment and bullying at their current workplace.

**Conclusions:**
There is opportunity for increased training in sexual harassment and bullying. Increased awareness and management of these behaviours may curb incidence and promote a sustainable professional environment.
Gender in medicine and surgery: Where are we now?

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Introduction:
Women now outnumber men at entry to medical school but are dramatically underrepresented in certain specialties, and take longer to reach specialist level. However, no previous study has systematically investigated trends in specialty registration based on gender in Australia.

Purpose and objectives:
This study makes up part of a larger piece of work analysing the current and historical trends of gender distribution across the Australian medical specialist workforce and investigates the factors associated with changed over time.

Methods:
The details of currently registered medical specialists (n=60048) was obtained from the Australian Health Practitioner Registration Agency (AHPRA). Gender and medical speciality were used to assess the current distribution of men and women across medical specialties. Date of undergraduate medical qualification was analysed to assess specialty registration in surgery over time.

Results:
Women constitute 35.2% of currently registered specialists, making up 37.6% of physicians but only 11.2% of surgeons. Only 4.5% of women who qualified between 1952 and 1961 are registered as surgeons, compared to 22.3% who qualified between 2002 and 2011. Women are most underrepresented in orthopaedic surgery (3.7%) and cardio-thoracic surgery (6.5%), while 29.8% of paediatric surgeons are female.

Women make up 13.6% of cardiologists, but in dermatology, general practice, obstetrics and gynaecology, paediatrics and pathology women make up over 40% of the workforce.

Discussion:
In spite of positive trends of women entering surgery, they continue to be underrepresented across all surgical specialties. Implications for practice and further research will be discussed.

Promoting wellbeing and preventing student burnout: A transdisciplinary resilience student bundle and teacher toolkit

Jaime Wallis, Georgina Sanger, Elizabeth Cardell, Linda Humphreys, Kwong Chan, Gary Rogers, Nathan Reeves, Nicole Tregoning, Andrea Bialocerkowski, Jenny Campagnolo, Eve De Silva, Ganeshan Rao, Jane Evans, Rhonda Beggs, Sandra Goetz, S. Niru Nirthanan, Indu Singh, Fiona Kelly, Peter Young, Angela Ebert, Andrew Teodorczuk.

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Introduction/background:
The consequences of burnout for tertiary students across the health professions is well documented and includes higher rates of mental health challenges, suicide, alcoholism, and relationship problems. Hence the need to further promote and encourage wellbeing in the tertiary setting at individual, curricula and systems levels is compelling.

Aim/objectives:
The aim of this project is to develop a resilience focused intervention that seeks to improve student wellbeing and increase awareness in teachers of what is required. The study will be undertaken in two separate, yet interrelated phases, utilising mixed methods.
Discussion:
The project will result in an educationally robust Teacher Toolkit and Student Bundle that will be piloted in the Health Group at Griffith University. Currently, Griffith University has a range of health services and self-care resources available to students. Thus a university wide audit will take place in conjunction with focus groups held with Program Directors and students within the Health Group. Findings from the audit and focus groups will guide the development of resources. A logic model framework will be applied to evaluate the effectiveness of the intervention. Reliable and valid instruments will be utilised in the evaluation.

Issues/questions for exploration or ideas for discussion:
This pilot intervention will be implemented in the second Trimester of 2018. The Teacher Toolkit will include a range of straightforward instructional resources for educators aligning with the Student Bundle that will include links to widely available resources and supports to promote student wellbeing. The developed interventions will be presented at the conference.

Is parental involvement in their child’s education healthy and sustainable?

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Introduction/background:
Several incidents over recent years have identified a growing trend of increased parental involvement during secondary schooling, with an expectation of this continuing into tertiary education. When a student failed a placement the mother of the student contacted the clinical placement asking why he had failed, complained that she had not been informed and asked for a meeting with clinical staff. Numerous parents have called in for their sick “children”, despite students being told to make the call themselves. A parent emailed to request his daughter’s Melbourne metropolitan placement was changed because he was concerned for her driving safety. He also emailed requesting she was allocated into specific placements of personal interest. A parent contacted asking for advice on how to best help and support her daughter during a difficult placement at an external organisation. A student asked what advice she should provide her parents with as to how to best support her on placement. Parents asked for a meeting with clinical staff regarding the return to placement of their daughter following a hospital stay for a mental health illness. Young adult students referring to themselves as “still kids”. Advertising from tertiary institutions is now being targeted specifically at parents, with some universities running parent information sessions.

Purpose/objectives:
The aim of this session is to consider the challenges of adult learning in a clinical environment, when parents have been so heavily invested in their children’s education and to consider how we can prepare our students for the adult workforce?

Psychological distress among commencing medical students: is it there at the beginning?

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1The University of Western Australia, Perth, Australia; 2Flinders University, South Australia
Introduction/background:
The 2013 National Mental Health Survey reports that medical students have levels of distress higher than the general population, and that this increases when they become junior doctors. What is not known is the point at which this distress develops.

Aim/objectives:
The aim was to determine the extent to which psychological distress is already evident among commencing medical students. A secondary aim was to examine whether relocation for study purposes is associated with psychological distress.

Methods
This descriptive study invited commencing medical students at two Australian universities to complete the Kessler Psychological Distress scale. The independent variables were age, gender, the need to relocate for study, and anticipated homesickness.

Results:
170 (45%) medical students completed the survey. Of these, 72 (42.4%) had low psychological distress, 61 (35.9%) moderate distress, and 37 (21.8%) had a high or very high level of distress. There were no relationships between these K10 categories and either age, gender, or need to relocate. However, there was a modest association between anticipated homesickness and elevated psychological distress $\chi^2(1) = 4.06$, $p = 0.044$.

Discussion
22% of respondents were classified as having high or very high levels of psychological distress. The acceptability of this, and potential implications on student engagement and performance will be explored at presentation.

Conclusions:
How non-academic problems such as psychological distress can influence student motivation and learning, particularly early in the course for those students who have relocated and are anticipating homesickness, should be considered at orientation and during early student support programs.

Mental, emotional and psychological distress in ambulance practice as threats to sustainable staffing

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Introduction/background:
In ambulance practice, engagement with patients, their families and other professionals is essential. During crisis or tragedy, such interactions have the potential to take an emotional toll on the paramedic. Stigma, culture and other barriers remain in place within health and emergency services to hinder a return to staff wellbeing during distress. Burnout is known to adversely impact employees’ length of employment in health services. Further, suicide rates among paramedics are alarmingly high in some Australian states.

Aim/objectives:
This session will explore three threats to clinician wellbeing: emotional burnout, the stress of crisis, and mental health diagnoses. The impact of organisational culture and philosophy in addressing them will be considered, in addition to other potential solutions identified in the literature.

Discussion:
Employers not only have a legal duty to ensure that a workplace is as safe as possible, but an ethical responsibility to care for their staff in making supports available when required. Literature indicates that stressors and burnout begin during training, and strategies ought to be available to students in light of their particular vulnerabilities.
**Issues/questions for exploration or ideas for discussion:**
Organisations stand to receive significant benefit from investing in staff wellbeing, and some studies have placed a significant monetary return on investment into wellbeing. Mental, emotional and psychological distress may be a direct result from practice in the health professions, and individual, cultural, and executive approaches to safely maximise career longevity in this regard will be discussed.

**Flexible Training Options in Medical School: Who Wants Them and Why?**

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**Introduction/background:** Today’s medical students are more mature and have coexistent family responsibilities, financial constraints and health problems. Part-time and Flexible training (PTFT) options are rare during medical degrees. Students in difficulty withdraw, take leave or continue full-time, potentially jeopardising wellbeing.

**Aim/objectives:** To evaluate the interest levels for PTFT during medical degrees and determine key reasons.

**Methods:** An online questionnaire gathered demographic information, stage of medical training, perspectives on PTFT and barriers to training. Participants indicated whether they had taken a break of > 3 months during their studies.

**Results:** Of 218 respondents, 64.7% were female and 49.1% were aged 24-29 years. Most were current medical students (62.8%). One fifth of current students were caregivers and 19% had health problems. Half the current students had jobs. Study breaks >3 months had been taken by 11% current students. Overall, 38.9% respondents would consider PTFT if available. This included 54.8% future students and 40.9% current students. Reasons given included: mental wellbeing, finances, physical health, family responsibilities and 'time to understand difficult concepts'. Principle reasons for not considering PTFT were: increased length of study, lack of immersion and finances.

**Discussion:** This study demonstrates strong interest in PTFT, especially in current and future students. Life complexities were often cited as reasons for this interest.

**Conclusions:** Medicine has traditionally only offered full-time study options but this may need reconsideration for future generations to address attrition and leave of absence. Would it be sustainable?

**6G Learning Environment – Innovation**

**New to Hospital Social Work Program – Finding your feet whilst hitting the ground running**

Jenni Graves ¹

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**Introduction/background:**
New graduate health professionals are often expected to “hit the ground running”. They may be in a temporary contract or an under-staffed team and are expected to meet the needs within their clinical area whilst finding their feet as a new professional.

**Aim/objectives:**
This presentation discusses the New to Hospital Social Work Program, developed for new graduates and experienced Social Workers new to hospital settings. The challenges of taking a research approach whilst also providing a timely response to educational needs will also be highlighted.

**Discussion:**
The needs assessment involved a rapid literature review, focus group discussions and online survey to potential participants in partner hospitals. Seventeen eligible participants from three Sydney hospitals were invited to participate.

The New to Hospital Social Work Program utilised seminars and group supervision, which complemented the one-to-one supervision provided by Team Leaders. This was of particular use to Team Leaders with a number of new graduates within their teams who are mandated by the Australian Association of Social Workers to provide fortnightly supervision.

Initial findings include participants learning on specific topics and peer support benefits. Further evaluation results, from participants and Team Leaders, will be reported at conference, following completion of the program.

**Issues/questions for exploration or ideas for discussion:**
What are peoples’ experiences of discipline-specific versus interdisciplinary new graduate programs?
How do educators manage education needs of new graduates when there are different contract start dates?
How do educators manage timely delivery of learning program within a quality improvement or research framework?

**Involving students in the design of resources for learning clinical reasoning skills for collaborative practice**

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**Introduction/background:**
While the teaching of clinical reasoning has been well explored in medicine, it has not been as well studied from the student perspective and when healthcare professions work collaboratively to optimise patient care. Consequently, there is a need to design learning resources to support the development of students’ clinical reasoning skills for collaborative healthcare settings.

**Aim/objectives:**
The aim of this study was to evaluate resources for designed with student input for learning clinical reasoning skills for collaborative practice.

**Methods**
In a pilot and a follow-up study, design research approach was used by 7 teachers in a series of workshops with approximately n = 80 medical students and approximately n = 110 medical and physiotherapy students, respectively. Students provided written feedback about their learning needs at each workshop. Teachers used thematic analysis to identify the design specifications for teaching resources from students’ comments.

**Results:**
Teachers chose to modify familiar teaching resources to complement the often unpredictable and idiosyncratic learning opportunities that students reported encountering in clinical workplaces. Students found the resources useful when they were on their clinical placements.
Discussion
Among the resources developed were: a consultation framework with reflective prompts for performing effective consultations with patients, and an outline to help students summarise and emphasise crucial information in case presentations to colleagues in various healthcare settings.

Conclusions:
Students appreciate the learning resources designed by health professional educators at the University of Otago. The next step is to study the impact of these resources on measures of student learning related to clinical reasoning.

Evaluation of an innovative clinical skills teaching program for medical students

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Introduction/background:
In 2017, the Medical Education Guided Activities (MEGA) Day program was developed to deliver clinical skills teaching in a timely fashion to students, within a blended learning framework of lectures, and workshops.

Aim/objectives:
This project aims to evaluate the successful properties of the MEGA Days, and improve the concept through the student feedback provided.

Methods:
A survey was designed in Qualtrics™ and presented to the third-year medical student cohort at a metropolitan Clinical School. The survey consisted of questions on the logistics, and individual programs of each respective of the MEGA days.

Results:
Seventy two percent of the students completed the survey. The MEGA Day concepts was highly rated amongst the student group (74/100 satisfaction scale). Student feedback related most to reduction of lecture times, in favour of more time spent on clinical skills teaching, as well as an increase in the duration and variety of clinical skills taught. Students felt delivery of the MEGA days earlier in the year would provide more time to practice them, and requested less travelling between sites.

Discussion:
Multiple improvements could be made to the MEGA day program. These key recommendations include re-scheduling the MEGA days on Wednesdays, earlier in the year, and ideally at one site without needing to travel. More time would be scheduled to practice clinical skills, in place of certain lectures.

Conclusions:
This evaluation guides the future organisation of the MEGA days program and may be of value to others delivering similar educational programs to medical students.

You expect me do what? Exploring teacher’s experience as facilitators of student affective learning through reflective journalling.

Linda Humphreys¹, Kwong Chan¹ and Cathy Wu¹

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Introduction/background:
Professional identity (PI) in medicine is the “transformative journey through which one integrates the knowledge, skills, values and behaviours of a competent, humanistic physician with one’s own unique identity and core values”. To support student PI development throughout our MD program, we focus on reflective writing activities to attend to students’ affective response to impactful learning experiences. This facilitates student self-reported resilience and is particularly during challenging transition periods such as preparing for internship.

The implementation of reflective journaling across all year levels since 2014 now supports 3000 journal submissions annually, involving a team of over 20 facilitators. We have found facilitators to have a major impact on the culture of reflective practice in the curriculum, both through dialogue with students and in offering detailed, constructive feedback to support confidence with, and increasing depth in reflection. Observation of our facilitators as reviewers of student journals has also shown that that this activity brings unique challenges and support is needed for authentic engagement.

We propose to explore our facilitators’ views and experiences to better understand how we can best support them to develop their confidence and skills for assessing and supporting students’ affective reflective journaling.

Methods
Facilitators who contribute to affective journal marking were invited to participate in a semi-structured interview (45mins-1hour) conducted by a member of the research team who is not directly involved in the teaching team. Transcripts of these were de-identified and analysed for emergent themes.

Results
Preliminary results will be presented from the first round of interviews.

Pedagogical Content Knowledge (PCK), aka ‘Teaching Scripts’: An under-discussed and under-used concept in medical education?

Tim Clement

Introduction/background:
In the 1980s, Lee Shulman proposed that PCK is what separates teachers from mere content experts; PCK being, “the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to diverse interests and abilities of learners, and presented for instruction” (Shulman, 1987, p.8). Irby (1994) drew on PCK to develop a model of clinical teachers’ knowledge, substituting PCK with ‘content specific teaching’ and promoting the notion of ‘teaching scripts; further developed in a recent publication (Irby, 2014). Although PCK appears to be a good match with the practice of clinical teachers, it does not appear to have been enthusiastically embraced within the medical education field. In 2017, I asked, ‘How do GP-supervisors combine their knowledge of general practice with knowledge of pedagogical strategies and vocational trainees to plan and deliver instruction during protected teaching time?’

Purpose/objectives:
The session is an opportunity for people unfamiliar with this concept to gain a rudimentary understanding of PCK and for those with knowledge and interest in it to discuss the problems of applying it to their day-to-day practice or research.

Issues/questions for exploration or ideas for discussion:
Why has PCK not been taken-up for better understanding the abilities of clinical teachers?
Do the available models provide us with information about what clinical teachers need to know to teach effectively?
Has the concept of teaching scripts kept pace with the theoretical development of PCK in other disciplines?
How should we research PCK?
What implications does PCK have for ‘faculty development’?

Yes, we want to know how you feel: Measuring reflective practice development in Pharmacy students, using the GUALS tool

Fiona Miller¹, Kwong Chan², Amary Mey³, Fiona Kelly¹, Linda Humphreys², Gary D. Rogers⁶

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Background:
In response to evolving scope of practice in the Australian health care setting, pharmacists are required to be competent communicators and reflective practitioners. Traditionally, health sciences teaching has focused on the cognitive and psychomotor domains of learning. However, working with patients in diverse clinical scenarios requires empathy, flexible thinking and critical reflection. For students to incorporate skills and behaviours into their own professional behaviour framework, and develop resilience, requires learning in the affective domain. The Griffith University Affective Learning Scale (GUALS), a tool for quantifying evidence of learning in the affective domain has been developed and a validation study with medical students was published during 2017.

Third-year Bachelor of Pharmacy students at Griffith University participate in a series of complex clinical simulations wherein they practise generic and discipline-specific communication skills. Students submit reflective journals on their experiences. We observed evidence of affective learning and transformative language within student journals.

Aim:
Can the GUALS tool be used to measure reflective practice in pharmacy students?

Discussion:
218 journals submitted by 33 students were evaluated with the GUALS methodology. More than 60% of journals showed evidence of affective reflection. GUALS was able to detect differences at all levels of the scale. The sensitivity of the tool allows facilitators to provide formative feedback on reflection as a skill in itself, utilising a pedagogically-sound rubric.

Questions for exploration:
Further data analysis is underway to determine the usefulness of the GUALS in measuring longitudinal change in reflective writing when formative feedback is provided.

Self-perceived cultural responsiveness of physiotherapy students in Australia and New Zealand: A cross-sectional study

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Introduction/background:
Ensuring physiotherapy students are well prepared to work safely and effectively in our culturally diverse society on graduation is vital. Assessing cultural responsiveness among physiotherapy students may help determine whether physiotherapy programs are sufficiently fostering culturally responsive practices.
Aim/objectives:
There were three aims: 1. To assess self-perceived cultural responsiveness of physiotherapy students across Australia and New Zealand. 2. To compare cultural responsiveness between year levels. 3. To examine the association between cultural responsiveness, dogmatism (unchangeable, unjustified certainty), and social desirability.

Methods
A cross-sectional study was conducted of 817 physiotherapy students from nine universities across Australia and New Zealand using an online self-administered questionnaire containing three parts: The Cultural Competence Assessment (CCA) tool, Altemeyer's Dogmatism scale, and the Marlow-Crowne social desirability scale—short form. Demographic data relating to university, program, and level of study were also collected.

Results:
Overall, students had a moderate level of cultural responsiveness (5.15 ± 0.67). Fourth year undergraduate students perceived themselves to be significantly less culturally responsive than first and second year undergraduate students ($F(3,703) = 4.595, p = 0.003$). Cultural responsiveness was negatively associated with dogmatism, and positively associated with social desirability.

Discussion
Moderate levels of cultural responsiveness suggest room for improvement. Students who were less dogmatic were more culturally responsive, and students who held more socially desirable attitudes reported higher cultural responsiveness.

Conclusions:
More efforts and strategies, in consideration of the factors influencing cultural responsiveness, should be implemented to ensure the development of cultural responsiveness among physiotherapy students.

6H Learning Outcomes – Postgraduate

The development and repurposing of an Online Master’s Program for Cancer Clinicians

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Introduction/background:
The Masters of Cancer Sciences brings together the academic might of the University of Melbourne (UoM) and the content expertise of the Victorian Comprehensive Cancer Centre (VCCC), to produce a contemporary, evidence-based flagship educational program for cancer professionals. The program is wholly online and nested with qualification points at Specialist Certificate, Graduate Certificate and Masters Level to provide flexible progression and study options for practitioners in the cancer care workforce. The content from each subject has been repurposed and repackaged as a series of derivative educational programming that is entry level, open access and broadens the reach of the nested Graduate Programs.

Aim/objectives:
The aim is to be the first cancer-specific, multidisciplinary and wholly online Master’s program of its kind offered in Australia. Graduates of the nested Graduate Programs in Cancer Sciences or derivative programming will possess an unprecedented breadth of integrated cancer knowledge and skills. This will contribute to the development of a world-class cancer workforce and provide best practice care to Victorian patients.

Discussion:
This presentation will explore the educational development process involved in designing 10 online subjects; then repurposing and repackaging modules of each subject into a series of Massive Open Online Courses (MOOCs), workshops and webinars. Each activity derived from the Graduate
Programs in Cancer Sciences is free and open access to expand reach, improve competency of the broader cancer care workforce, and promote the Graduate Programs in Cancer Sciences.

**Questions for exploration or ideas for discussion:**
How best to engage our target audience, in enrolling and completing the course?
What other ways can we promote sustainability in our graduate and derivative programs?

**Depth of Field: Exploring Stroke Recovery**

Gabrielle Brand\(^1\), Steve Wise\(^2\), Collette Issac\(^2\), Christopher Etherton-Beer\(^1,2\)

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**Introduction/background:**
Where is the patient’s voice in the health care conversation? Witnessing people’s stories encourages health professionals to enter the world of their patients, and to see and interpret these worlds from the patient’s point of view. ‘Depth of Field’ (DOF) is a growing body of health humanities research that uses documentary style photographs, MRI images, poetry and audio-narrated film of health care experiences of patients for widespread use in education.

**Aims/objectives:**
This aim of this project was to follow four patients and their families over 12 months as they recount their narratives of stroke recovery, including the honest and raw reality of what life is really like following a stroke.

**Discussion:**
These narratives highlight the different stages of stroke recovery, themes include experiencing period of darkness and hopelessness, the importance of setting goals, cautiously managing fragile expectations and giving up activities that they love, including changing roles and relations with family.

**Issues/ questions for exploration or ideas for discussion:**
The outcome of this project was an educational resource titled Depth of Field: Exploring Stroke Recovery which served both research (lived experiences of stroke) and pedagogical purposes. It was co-produced with stroke patients, their family and allied health staff from Bentley Stroke Rehabilitation Unit (BSRU) in WA. The resource will be used to educate new stroke patients (peer-to-peer learning) and encourage current and future health professionals to move beyond “diagnosis” to more humanistic models of care.

**Readiness for clinical practice as an occupational therapy student or graduate student perspective to inform curriculum design**

Cheryl Neilson, Kylee Lockwood, Carol McKinstry

La Trobe University

**Introduction/background:**
La Trobe University Masters of Occupational Therapy Practice Program has recently undergone accreditation offering the opportunity for curriculum review and development. This project sought occupational therapy learner and graduate perceptions of their readiness to practice for professional placement and graduate positions. We aim to involve students as consultant partners to gather insights to inform curriculum design of a new final year clinical practice subject focusing on complex cases and contemporary practice issues.

**Aim/objectives:**
To explore occupational therapy learner perspectives of the critical elements for learning in preparing students for contemporary, clinical practice. This evaluation seeks to inform future teaching practice in the discipline of Occupational Therapy.
Methods A qualitative descriptive study was undertaken with final year occupational therapy students and recent occupational therapy working graduates who were recruited purposively to explore their experience of readiness for practice. Participants will share their perspectives via facilitated online synchronous focus group discussions. Recordings of focus group will be transcribed verbatim and analysed. Qualitative data collected will be analysed for common meaning and themes across participants.

Results & Discussion:
Key themes will be discussed and implications for curriculum design will be presented. In addition, experience of conducting focus groups in the online webinar space will be explored from the facilitator and participant perspective and consideration for use in student evaluation and research.

Rural Generalist workforce development model: Palliative Care

Rosemary Ramsay¹, Lynne Pearce¹

¹Specialist Palliative Care Service THS North West, Tasmania

Introduction/background:
From 2014-2016, a Rural General Medical Specialist Model was piloted within Specialist Palliative Care Services (SPCS).

Aim/objectives:
The model aimed to build capacity and strengthen the role of the General Practitioner primary provider workforce.

Methods
General Practitioners or GP Registrars have the opportunity for 6 months of training in the palliative approach to care within a primary healthcare service delivery model. Evaluation occurs at the end of each 6 month rotation. Each iteration provides opportunity for quality improvement adjustments. Evaluation included semi-structured interviews, electronic surveys and focus groups of stakeholders such as the SPCS team at the Tasmanian Health Service North West, the Primary Health North West Management group, and the rotation candidates. The Key Performance Indicators evaluated were Accessible, Sustainable, Efficient, Appropriate and Effective.

Results:
Both the SPCS THS North West and the candidates showed considerable enthusiasm for the model, particularly in relation to its effectiveness in providing training and raising awareness in the palliative approach to care for rural general practitioners working in a range of settings including general practice and hospitals. Strong linkages are forged between candidates and the SPCS.

Conclusions:
The model delivers considerable benefits to patients and their families through improved care arrangements and cost savings to the health system as more GPs are trained. Evaluation of the model has resulted in a permanent GP Registrar Palliative Care post within SPCS THS North West.

Ten years of medical education registrars – value added?

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Introduction/background:
Medical education registrar posts have become more common in postgraduate training, but there is a paucity of any long term follow up of trainees’ career pathways or organizational outcomes.
Aim/objectives:
We studied the value added to emergency medical education by surveying the graduates of these posts at three institutions.

Methods
We conducted a mixed methods survey study, examining quantitative and qualitative outcomes, of emergency physicians who had previously undertaken a medical education registrar post. Responses to Likert items were summarised descriptively. Key themes and sub-themes were identified in the reflective responses.

Results:
19 surveys were completed. Most respondents were in formal educational roles, in addition to clinical practice. The thematic analysis revealed that the medical education registrar experience, and the subsequent contribution of these trainees to medical education, is significantly shaped by the value placed on medical education by hospitals/ departments/ leaders, and the perception of others as to the value of their contributions, and value of their knowledge and skills.

Discussion
Medical education trainees in emergency medicine progress to educational roles, and attribute their career progression to the medical education training experience. Additional value from these posts may be gained by better alignment with overarching organizational, and by more formalized support for medical education registrars joining a defined clinician educator community of practice.

Conclusions:
Our findings suggest there is a large return for investment in providing a formal medical education registrar program, if the program is valued within the clinical service, and if sufficient priority is given to supporting trainees’ transition to clinician educator leadership roles.

Interprofessional education in Aged Care: Challenges and considerations in the development and maintenance of a sustainable activity

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Background
The aging Australian population places greater demands on healthcare services. Griffith University has recognised the need for future healthcare practitioners, across the professional spectrum, to be adequately skilled in collaborative interprofessional practice.

Aims
We report the development of an innovative educational activity integrating interprofessional learning in aged care settings.

Discussion
Our program has been sustained over three years and contributes to the development of graduates who are ‘collaborative practice ready’. Reasons for continued success include: ongoing support from an advisory committee comprising representatives from multiple disciplines; organisational pragmatism; communication and collaboration across faculties; provision of research opportunities; and well-coordinated administration. Furthermore, within the community: active community engagement; rapport with staff and residents; psychosocial benefits for residents; and reports on the
activity to aged care facility executive boards helped to sustain the activity. Mutually beneficial relationships and gains at and between university and community levels have been instrumental in ensuring sustainability.

Quantitative data support the effectiveness of the continued efforts of stakeholders in this interprofessional learning activity. A significant difference was observed on the Interprofessional Interaction subscale of the UWE Interprofessional Questionnaire, $t(286)=15.66, p>.001$, with a mean difference of 4.14 (SD=4.47) between student participants’ pre-test (29.32) and post-test (25.18) scores. This indicates a reduction of perceptions of hierarchies, stereotypes, and negative attitudes when interacting with other disciplines in association with participation in the activity.

Ideas for discussion
Attendees will be invited to discuss how our sustainable approach to IPE in aged care might be translated to other settings.

How employers perceive new graduate physiotherapists’ skills and performance in evidence-based practice

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Introduction/background:
Physiotherapy graduates report a decline in their evidence-based practice skills over their first year in the workforce yet there is little evidence from other perspectives to help understand this finding.

Aim/objectives:
To investigate employers’ perceptions of new-graduate physiotherapists’ performance in evidence-based practice during their first year in the workforce.

Methods
Semi-structured telephone interviews were conducted with five employers of new-graduate physiotherapists. Participants were purposively selected from different workplace contexts. Interview questions explored employers’ perceptions of the preparedness of new graduates to incorporate evidence-based practice into their work, the place of evidence-based practice in the workplace, and how new-graduates performed as evidence-based practitioners. Interview data were analysed thematically.

Results:
Strong themes emerged of new-graduates and universities as ‘champions’ of evidence-based practice. This was viewed positively as improving the effectiveness of clinical care. A theme of ‘high expectations’ acknowledged that performance expectations may be set too high in the first year, as graduates were “finding their feet”. A theme of ‘we are all busy’ explained perceived constraints on using an evidence-based approach.

Discussion
The focus on evidence-based practice in physiotherapy education has given new-graduates a leading role in this area. However, the expectations of employers in other areas of clinical practice are not always met. The availability of support and professional development for new-graduates is varied.

Conclusions:
Employers perceived new-graduate physiotherapists as skilful in performing evidence-based practice. There is opportunity for new-graduates to share their skills to build momentum in the workplace for this approach.
7A Symposium – 9

Learning about workplace learning: can video research methods help?

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Introduction:
Engagement in clinical practice develops capabilities of healthcare students and professionals. Workplace learning occurs through the interplay of individual engagement and social affordances. Yet, health professions education research (HPER) infrequently use methods addressing both aspects of workplace learning aspects, that is, observing and examining workplace affordances whilst unpacking cognitive processes. Fewer studies examine what is learned. Video research methods provide an ideal means to understand workplace learning whilst establishing real-time solutions to improving learning through practice; generating the opportunity for cultural change.

Aims:
This symposium aims to engage in a critical dialogue examining video research methods and how these methods assist in understanding workplace learning. Methodological and technical insights will be shared on using video in busy healthcare settings.

Presentations

Christy Noble, Rola Ajjaw, Stephen Billett, Andrew Teodorczuk, Joanne Hilder
Using video-reflexive ethnography (VRE) to enrich learning in busy clinical settings
Strategies to enrich workplace learning through greater balance between service and education remain elusive. Our VRE study aims to enrich medical student and junior doctor learning through clinical practice. This presentation will examine the theoretical and conceptual bases for using VRE in HPER.

Charlotte Rees, Lynn Urquhart, Lisi Gordon
The strengths and challenges of VRE in HPER
VRE is increasingly being used in HPER to illuminate the complexities of workplace learning. Drawing on illustrative examples of PhD VRE research, this presentation will consider the strengths of coupling observation with conversation, whilst highlighting how to address key challenges of VRE in clinical settings.

Victoria Brazil
Using video simulations as research data to inform simulation design and improve practice
Video assisted debriefing in healthcare simulation enhances individual and team reflection. But simulations delivered in real clinical environments (i.e. in-situ) provide further opportunities for video to capture team and system performance, aid team reflection and provide data to inform future educational and scenario design.

Elizabeth Molloy, Christina Johnson
Using video to capture feedback in supervisory encounters
Videotaping supervisory encounters can provide different insights to self-report of practice. This paper examines two examples of video-based studies exploring feedback conversations in the workplace. One study combined video with post-encounter participant interviews, and the other, video-only. The pros and cons of both will be discussed.
Discussion:
How can video research methods improve understandings of workplace learning in clinical settings?
What are the advantages and disadvantages of using video research methods?
What are effective and practical ways for conducting video research in clinical settings?

7B Symposium – 10

When the health workplace is unhealthy–can we change the culture?

Louise Nash¹,², Karen M. Scott³, Jenny Barrett⁴, Anthony Llewellyn⁵ Claire Hooker ⁶

¹ Brain and Mind Centre University of Sydney, ² Sydney Local Health District, ³ Discipline of Child and Adolescent Health, University of Sydney, ⁴ Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, ⁵ University of Newcastle, ⁶ Sydney Health Ethics, University of Sydney

Introduction/background:
Workplace mistreatment, burnout and suicide amongst frontline healthcare staff (particularly junior staff) remain significant issues in Australian healthcare. Rectifying this will require a multipronged approach including long-term culture change in healthcare.

Aim/ objectives:
This symposium explores the role the performing arts, specifically verbatim theatre, can play in contributing to long term culture change in healthcare. We discuss a research-based verbatim theatre work, Grace Under Pressure, recently undertaken by the Sydney Arts and Health Collective, a cross-disciplinary creative research group at Sydney University. This symposium asks how we can improve health workplace culture.

Presentations:
1. Karen Scott, Jenny Barrett, Louise Nash, Anthony Llewellyn, Aspasia Karageorge, Eric Wenlong Li, Dennis Nguyen: Mistreatment of medical students and junior doctors; We report on recent studies that indicate ongoing significant levels of bullying, harassment and mistreatment of medical students and junior doctors. We explore why many do not respond to or report mistreatment, including: fear of reprisal; lack of confidence in the reporting process; and finding reporting ineffective or personally harmful. We conclude that systemic changes are needed to change the culture of healthcare workplaces.

2. Claire Hooker: Background to Grace Under Pressure
We review evidence for the positive impact that acting and performance skills workshops and experiences can have for medical students and clinicians, particularly in building stronger professional identities and improving workplace and clinical communication. We discuss the processes and precedents for using research-based theatre forms, including verbatim theatre, to address difficult social issues, and explain the methodology and conceptual background to Grace Under Pressure.

3. Louise Nash, Claire Hooker: Excerpts from Grace Under Pressure - a guided discussion
We present excerpts from Grace Under Pressure, followed by small ‘buzz group’ discussion of questions that explore audience response to the play. The follow-up whole-group discussion will contribute to identification of avenues for further advocacy and action in improving healthcare workplaces.

We report on the feedback from audiences to Grace Under Pressure, collected through focus groups, an online survey tool, unsolicited email (with permission) and published reviews. We explore the emotional impact audience members experienced from witnessing faithful representations of their experiences, together with opportunities for change.
Discussion: The audience will be invited to share their experience of changing workplace and training culture. We will identify factors and processes that can facilitate change, barriers to change, and suggestions for overcoming these.

7C PeArLs – 9

Considering economic sustainability in educational practice and research

Jonathan Foo¹, Dragan Illic¹

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Introduction/background:
There are limited resources with which to conduct health professions education. Spending on health professions education globally, as well as per capita, continues to rise; driven by the growing body of medical knowledge to be learnt, increased health workforce demand, and in some cases, expensive educational innovations. In working towards increased economic sustainability of health professions education, it is necessary to consider the cost of our educational practice.

Today’s educator is confronted with more educational options than ever before; including simulation, e-learning, and interprofessional education models. The selection of educational approach should consider both educational effectiveness and resource cost – also known as cost-effectiveness. Programmes which become more cost-effective can produce higher quality health professionals at the same cost, or the same quality of health professionals at a lower cost.

Purpose/objectives:
The purpose of this PeArL is to examine educational practice through the lens of educational cost-effectiveness. By the end of this session you should be able to:
1. Describe key concepts of educational cost
2. Understand the importance of both cost and effect in educational practice
3. Identify key areas of educational practice and research which may benefit from considering cost

Issues/questions for exploration or ideas for discussion:
In this PeArL, we ask the question, how can we make health professions education more cost-effective? We will discuss aspects of educational practice which would benefit from cost-informed choice, and explore the current barriers to implementing cost-conscious decision-making in everyday educational practice and research.

Does linking licensure and continuing professional development sustain or unnecessarily burden health care professionals?

Ameeta Patel¹

¹Hamad Medical Corporation, Doha, Qatar

Introduction/background:
The licensing of health care professionals (HCP) is a story of evolution; from minimal documentation of qualifications to re-validation and re-credentialing. Qatar legislated for a national licensing system in 2013; however it was not until 2015 that it was enforced. Accreditation standards for CPD providers were introduced, along with a mandatory continuing professional development (CPD) requirement for maintenance of licensure. There is no distinction made in requirements for doctors, nurses, allied health and so on. The benefits of an externally driven CPD system on HCP in Qatar anecdotally appear significant, especially in professions like Paramedicine which are only recently (in Qatar and in Australia) nationally licensed. Meanwhile in Australia the Medical Board has rejected re-validation and endorsed strengthening CPD amongst other measures. Whilst some HCP may see the requirements as a burden, there may be very personal needs being met by CPD; these can translate to systems
changes to support the professions and to protect the public. Rather than being a human resources function, is this a golden opportunity to engage and address HCP personal development and soft skills, reducing HCP burnout and health impairment?

**Purpose/objectives:**
To share experiences in implementation of mandatory CPD; to share barriers and solutions to HCP participation in CPD; using legislative requirements to sustain HCP without being an unnecessary burden.

**Issues/questions for exploration or ideas for discussion:**
How can clinical educators use these mandatory requirements to assist HCP in wellbeing and safety? What is the role of CPD in sustaining the professions?

**7D PeArLs – 10**

**Prescribing Skills Assessment – lessons learnt and plans for the future**

Claire Harrison¹, Ric Day², Catherine Lucas³, Jennifer Martin³, Deborah O’Mara⁴, Lizzie Shires⁵, Gary Velan², Sarah Hilmer⁴

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**Acknowledgement:**
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**Introduction/background:**
Safe use of medicines and practice readiness are key priorities for medical schools, healthcare systems, regulatory bodies and patients. The Prescribing Skills Assessment (PSA) is an online examination developed by the British Pharmacological Society to teach and assess prescribing competence pre-graduation. In 2016 the PSA was adapted to Australian practice and successfully piloted at Monash University and University of Newcastle. In 2017, medical schools across Australia were invited to administer the PSA. Participating schools reviewed questions and contributed to standard-setting. Three online practice papers were available. The exam was invigilated and followed by an opt-in anonymous feedback survey. The PSA was successfully implemented across 8 medical schools. The relevance of the PSA was evidenced by the small number of changes in content required for the Australian context. Student feedback provided evidence of high acceptability and utility, with recommendations for more opportunities to practice prescribing, including ongoing use of the PSA.

**Purpose/objectives:**
To provide more information about the PSA, to invite additional participants to join the partnership and to explore strategies to further strengthen this collaborative, cross-institutional innovation.

**Issues/questions for exploration or ideas for discussion:**
Eight medical schools implemented the PSA in 2017. What lessons did we learn? What resources can we share? Can we build on the process of examination creation, review and standard-setting? The results of the PSA help inform curricular development – can we share educational enhancements? Medical students are currently using the PSA – should other health care students have the opportunity to participate?
When disaster strikes. A lesson from the shaky isles

Peter Fleischl, Allan Mbita
RNZCGP

Introduction/Background:
At midnight before the 2016 GPEP Clinical Exam a magnitude 7.8 earthquake struck 75km from the exam centre in Wellington. Candidates were woken from sleep in terror. None were physically injured, however many suffered a lack of sleep while some spent hours sheltering in their cars consoling terrified children. At 9-00am that morning the exam went ahead as scheduled.
I shall discuss the performance of those candidates and discuss the many issues that arose from this incident, including the RNZCGP’s response.

Aims/Objectives:
To share an experience of running an OSCE under adverse circumstances. To reveal some of the issues affecting candidates’ performance, various stakeholders’ reactions and the RNZCGP response to the event. I shall discuss the issues from an educational, health and safety, employment and human perspectives.

Discussion:
New Zealand lies on a tectonic plate fault line and earthquakes are commonplace. When the expected performance of candidates is known, exam performance is affected by earthquakes. The RNZCGP clinical exam is run with little knowledge of how candidates will perform in the OSCE setting. The earthquake immediately prior to the 2016 exam highlighted the vulnerability of the RNZCGP assessment processes.

Issues/questions for exploration or ideas for discussion:
How does a College protect the integrity of assessment practice during disasters?
How being employer of registrars affects College assessment practices?
How does a caring College behave during disasters?

7E Assessment General

Considering evidence for ethnicity bias using assessment case scenarios and medical student response correctness and certainty

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Introduction
Ethnicity is increasingly recognised as an important social determinant of health, with a variety of interactions reported between healthcare professionals and students with patients of different ethnicities.

Aims
The aim of this study was to investigate, a previously unexplored aspect, how varying assessment case scenario patient ethnicity influenced medical students’ correctness, certainty in being correct, or correctness by levels of certainty.

Methods
Medical students sat a 150 MCQ progress test with item level response certainty. The ethnicity of the patients in 60 of the MCQ case scenarios was varied between NZ European, Māori and none specified. The odds of a correct answer and level of certainty were compared between case scenario ethnicities with mixed model logistic regressions.
Results
1103 students sat the test. There was no significant difference in odds of correctness or levels of certainty by the case scenario patient ethnicity. These did not differ significantly by year groups or ability groups, or for correctness by level of certainty.

Discussion
There was no variation in any of the outcomes analysed produced by varying the case scenario patient ethnicity. Further exploration including incorporating more case scenario patient ethnicity descriptors, analysis of incorrect answers, analysis patterns by individual students, selecting questions where varying ethnicity is expected to alter the correct response or difficulty is warranted.

Conclusions
Using this method as a means of exploration, there was no evidence of bias based on ethnicity of case scenario in students’ responses to MCQs.

A digital assessment and feedback tool
Cham Kwang Meng¹, Martin Julie¹, Cochrane Anthea¹

¹University of Melbourne, Victoria, Australia

Introduction/background:
OSCEs (Objective Structured Clinical Examination) are integral to assess clinical competencies in health sciences. We have developed an iPad-based assessment and feedback tool in Optometry.

Aim/objectives:
Traditional paper-based OSCEs are time-consuming and delivering personalised student feedback is limited. The iPad-based OSCE tool provides timely and specific written feedback immediately following assessment. We evaluated student perception regarding feedback quality and assessment tool satisfaction.

Methods:
Examiners used the digital tool to assess Year 3 students. Feedback was emailed to students instantly. A week later, students completed a survey and participated in focus group interviews to investigate the value and impact of feedback received. Examiners were surveyed regarding using the digital tool.

Results:
45 out of 56 students (80%) were surveyed. Over 90% expressed that the feedback was timely and assisted in self-reflection. The digital tool was appropriate to assess clinical skills, and positively impacted on their skills development. All examiners reported that the assessment tool was easy to use and navigate. Overall they were satisfied with the tool and would like to use it for future OSCEs.

Discussion:
The tool has provided timely and comprehensive written feedback in formative and summative assessment in a time- and resource-constrained educational environment. This technological intervention has been well-received by both users and receivers.

Conclusions:
We have implemented technological innovations to augment educational outcomes. Additional studies are warranted to evaluate changes in performance following feedback.

Cross-institutional benchmarking of the workplace based performance of physiotherapy students.
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¹Australian Catholic University, Brisbane, Australia, ²Monash University, Melbourne, Australia, ³The University of Queensland
Introduction/background:
The Assessment of Physiotherapy Practice (APP) is a valid and reliable instrument designed for use by clinical educators and students to assess workplace based performance of pre-registration physiotherapy students. The APP is used by all Australian university programs. Following the successful development and uptake of the APP instrument, the APP was converted to an online web-based assessment system (APPLinkup.com). A key benefit of the secure web based version of the APP is that benchmarking against de-identified national data is enabled.

Aim/objectives:
The aim of this project was to design and develop the APPLinkup database reports sought by universities, health service managers, educators and students to enable effective use of benchmarking against de-identified national averages.

Discussion:
This project used an action research approach including semi-structured interviews, questionnaires and focus groups to successfully implement a database reporting system to enable benchmarking across students, educators, health service managers and universities user groups (students n=30; clinical educators n=85; university and health service managers n=48).

Issues/questions for exploration or ideas for discussion:
The secure web based assessment system, APPLinkup, not only provides real-time management of authentic workplace assessment but also enables students, educators, health service managers and universities to benchmark their performance against de-identified national data. This positions the physiotherapy profession at the forefront of the standards agenda, enables future research into student and educator approaches to assessment and provides an accessible platform for benchmarking to inform curriculum improvement within and across university programs. Examples of benchmarking reports will be presented for discussion.

Maximizing placement opportunities: How we can assess each others' students.

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¹Charles Sturt University, Orange, Australia ²Charles Sturt University, Albury, Australia

Introduction/background: In contemporary healthcare there is increasing focus on inter-professional (IP) practice to provide quality and sustainable client services. Professional standards, including both discipline specific and generic competencies, underpin quality professional practice and health service delivery. These competencies are often developed and demonstrated during clinical placements. Despite this centrality of clinical placements in allied health (AH) students’ education, the sustainability of historical placement models is under threat. In rural areas, capacity is further limited by a paucity of AH professionals. Innovative placement models such as IP assessment, whereby supervisors from different professions assess students’ generic competencies, are required to address this issue.

Aim: This project aimed to: identify common key competencies across a range of AH professions; explore AH professionals’ understanding of, and willingness and confidence in assessing students from other professions; identify barriers to adoption and implementation of IP assessment; and develop an IP assessment form and training package to support capacity building in assessing students from other AH professions.

Discussion: Health Workforce Australia (HWA) identified an increasing need for competent supervisors to support health professional students’ clinical training in the workplace, while advocating for IP learning. This presentation will discuss preliminary study findings including common key generic professional competencies, barriers to IP assessment, and implications for development of an IP assessment form and innovative training program to develop clinical supervisors’ capability to assess students from other professions. This innovative placement model would enhance student learning and ensure sustainability of clinical education through an expansion of placement capacity.
Factors influencing Global Assessments in General Practice training – The Global Assessment tools in (medical) Education (GATE) project

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Introduction:
Global assessment (GA) can be used to ascertain a doctor's level of performance in their role as a General Practitioner (GP). GAs are used in all stages of GP training, including at program selection, during direct observation of practice, and within summative assessments. Although some selection and assessment tools are validated as markers of training progression, the GA process used within them is less clearly defined.

Aim:
To define the factors which influence Global Assessments by experienced GPs and Medical Educators.

Discussion:
Four modified Delphi rounds were conducted with 20 to 28 participants (Medical Educators and GP Supervisors working in the Australian General Practice Training Program). Demographic and personal attribute variables were collected in edition to exploration of the factors that participants nominated as contributing to GA. Most respondents were female, aged over 40, and had roles as Medical Educators. GA was most commonly used in direct observation of practice, both formatively and summatively. Clinical knowledge, conscious incompetence, communication skills and help-seeking practices were ranked highly when determining GA. There was consensus regarding the significance of the criteria influencing GA across the training continuum, and the robustness of GA. There was some disagreement about what skills and factors can be learned versus those that should be inherent characteristics of a GP Registrar at training commencement.

Ideas for discussion:
Global Assessment may be useful to indicate progression where traditional 'checklists' have not been reliable. Our challenge is to appreciate and better understand the nuances of how Global Assessment is made.

7F Interprofessional Education – Environment

Interprofessional Learning on Rural Placement: a thematic analysis

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Introduction/background:
Effective health care in rural centres requires collaboration and co-operation. Interprofessional learning arises from interaction between two or more professions, whether they are students or health practitioners. Learning may occur via planned interprofessional education sessions or spontaneously in the workplace. The University of South Australia Department of Rural Health (DRH) developed the Rural Interprofessional Learning (RIPL) program to provide undergraduate nursing, midwifery, medical and allied health students the opportunity to better understand and appreciate each professions' contribution across the patient pathway while on rural placement.
Aim/objectives:
DRH staff facilitated weekly face-to-face tutorials, during which students met together to learn through participation in topics relating to interprofessional competency and rural health practice. Interviews were conducted with students from five disciplines after their rural placement to evaluate the program. Analysis identified four major themes: (1) The health team as one (2) Communicating and language within the one team (3) Preparing for the future – valuing rural practice (4) Student Community of Practice. This presentation will discuss the impact of delivering the program to health students from multiple disciplines.

Discussion:
Short Interprofessional Learning sessions add value to clinical placements in rural locations where resources are limited. Students gained both professional and personal skills through these regular interactions which prepared them for professional practice.

Issues/questions for exploration or ideas for discussion:
What is the appropriate length and depth of interprofessional sessions? How do we convert interdisciplinary student collaboration into ongoing professional practice? Other means of enhancing collaborative learning in clinical practice.

Educating for collaborative healthcare opportunities (ECHO): Ideas for a sustainable model

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Introduction/background:
Interprofessional education opportunities are commonplace in the education of health graduates, though often occur in an ad hoc manner. Based on a framework of interprofessional education (IPE) competency, a program of opportunities was developed to prepare collaboration-ready graduates. Initially established with a student focus around two professions, the program has diversified to encompass additional professions and expanded to include clinicians and academics, with a focus on educating for collaborative patient-centred care. The program fosters practitioner readiness through an evolving range of IPE strategies across multiple sites, settings and professions.

Aim/objectives:
To explore the evolution of ECHO to its current form as a dynamic, patient-centred approach to the design and delivery of student learning activities in academic and healthcare environments.

Discussion:
Inspired by new ideas, we aspire for programs that build organisational capacity and educators’ capability while simultaneously becoming self-sustaining and responsive to needs and opportunities. Moving beyond curriculum, ECHO creates IPE strategies that build from awareness through to immersion and workplace integration. Partnerships between health and education enable the generation of real-world experiences that contribute to student, clinician and academic learning across professions, and have facilitated the development of a community of practice around IPE. Understandings generated throughout the ECHO journey have led to innovative workshops exploring the nature of interprofessional rapport between educators, which have served to strengthen the program’s foundations and ensure its ongoing sustainability.

Issues/questions for exploration or ideas for discussion:
Elements for the successful creation, growth, and continued sustainability of IPE programs will be shared.
Integrating Professional Identity into an Exercise Science Program

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Introduction/background:
Understanding what influences a student’s view of their intended career (i.e., professional identity) may improve student engagement, retention, and graduate employability. While a student’s professional identity can develop throughout a program, it is unknown what drives this process.

Aim/objectives:
This project examined professional identity in final-year Bachelor of Exercise Science students by exploring work-values and work-readiness as well as the perceived usefulness of a workshop relating to professional identity.

Methods
Students (n=304) completed a survey assessing previous education-, work-, and research-experience; work values and readiness; as well as perceived contribution to the health-care profession. Students also attended a 1-h workshop discussing the broad concept of professional identity in the context of Exercise Science and were asked to rate the usefulness of the workshop.

Results
The majority (50%) of students identified as a “practitioner” (as compared to “researcher” or “scientist”) and expressed a preference for learning through practical experience. Students perceived their “communication skills” and “ability to work in a team” as some of their most valuable attributes for a health-care profession. Most (95%) students rated the workshop useful - providing an opportunity to consider their professional identity.

Discussion
These findings will facilitate curriculum changes to improve student’s work readiness, promote career pathways relating to research, and design initiatives to promote scientific and literature-based learning.

Conclusions
Professional identity is an important construct to understand the driving force behind student’s engagement in learning experiences. Information gained can be used to develop curriculum initiatives that can be used to maximise student’s employability.

Team-based interprofessional student placements: Key design elements identified by students

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Introduction/background:
While interprofessional education has gained popularity in recent years much of the focus has been on the classroom, online and simulated learning environment. Interprofessional education within the workplace (e.g. clinical placements) is challenging and resource intensive, therefore, the design of such experiences requires careful consideration. Curtin University has a large scale interprofessional education curriculum. This includes team-based interprofessional placements for health science students, a program established in 2009.

Aim/objectives:
The research aimed to explore: (1) the impact of team-based interprofessional placements on students’ development of key interprofessional practice capabilities, and (2) the elements of the learning experience which enhanced student collaboration.
Methods
Focus groups were conducted with 38 health science students towards the conclusion of their team-based interprofessional placement in three community settings. Interviews where then conducted with 24 students to ascertain the impact of this learning experience on their subsequent practice. Thematic analysis was undertaken using Braun and Clark’s six step process.

Results:
Several themes emerged indicating the importance of effective staff facilitation, the informality and independence of the learning experience, and the role of space and place. Several students reported changes to their health professional practice in subsequent clinical placements and the workplace post-qualification.

Discussion/Conclusion:
The design of interprofessional education for students within the workplace should consider not only staff facilitation but also space, place, informality and independence. Additionally, careful consideration to the use of appropriate theoretical frameworks (conceptual and educational) to inform the placement learning experience is highly recommended.

Understanding the wider health context – an innovative interprofessional education program

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1Northern Health, Victoria, Australia

Introduction/background:
Northern Health is a large public health service with the busiest ED in Victoria. Focus groups completed with Allied Health staff in 2016 identified high levels of work related stress exacerbated by access and discharge pressures and a lack of understanding of drivers behind these factors.

In response to this, a novel interprofessional education program entitled ‘understanding the wider health context’ was designed and implemented by the allied health education team. The program focusses on the current health context at the Federal, State and local level considering how factors including funding, political climate and targets influence patient care. The aim is to enable clinical staff to identify and understand the inevitable stressors arising in the complex public health environment.

Aim/objectives:
This presentation will provide the background and framework to developing and implementing education on the often overlooked issues of public health funding and access.

Discussion:
Discussion will include the approach to engaging staff in this conversion and the benefits of their involvement at both a personal and organisational level. We will explore how the use of case studies enabled participants to follow patient journeys throughout the continuum of care, with discussion points covering the perspectives of the patient, other professional groups and wider organisation. Factors influencing these perspectives, including funding and access targets, and how these were perceived by participants will also be discussed.

Issues/questions for exploration or ideas for discussion:
Potential ideas for further exploration include: understanding how increased knowledge of the health context can assist in building staff resilience and reducing stress; breaking down communication channels at different levels within a health service; and assumptions of clinician prior knowledge of funding models and health systems.
Exploring effectiveness of interprofessional education – medicine, nursing and physiotherapy: a pilot study

Joanne Connaughton¹, Susan Edgar¹, Jane Courtney², Heidi Waldron², Angela Alessandri², Chris Adams³, Michelle Katavatis³.

The University of Notre Dame Australia School of Medicine², School of Nursing and Midwifery³ and School of Physiotherapy¹

Introduction/background:
Embedding interprofessional education (IPE) across multiple tertiary programs to positively influence student's perceptions of health professionals roles and responsibilities, communication and teamwork, is a logistical challenge.

Aim/objectives:
To evaluate the effectiveness of a ‘one off’ IPE event to change biases and perceptions of teamwork, roles and responsibilities.

Methods
Year 2 medical, physiotherapy and nursing students (n=~430) attended a 2 hour IPE Event and completed a 12 statement pre and post survey using the Teamwork, Roles and Responsibilities and Interprofessional Biases questions from the Interprofessional Attitude’s Scale (IPAS). Participants reviewed and discussed the different roles, responsibilities and communication between healthcare professionals in a video detailing a clinical scenario. Data from IPAS was entered into SPSS and analysed using descriptive statistics.

Results:
There was no statistical difference between pre and post responses of medical students, statistically significant differences on 10/12 responses of nursing students and 8/12 responses of Physiotherapy students. Mann Whitney U Tests revealed significantly significant differences between responses of medical and nursing students and between responses of medical and physiotherapy students. There was no statistically significant differences between responses of nursing and physiotherapy students.

Discussion
Medical students demonstrated less positive attitudes towards IPE and this one off event did not change that, however, physiotherapy and nursing students developed even more positive views in relation to prejudices and assumptions about other health professionals and recognised these could get in the way of healthcare delivery.

Conclusions:
A one off IPE event could be useful to embed positive attitudes in students.

7G Learning Culture – Complexity

Implementation of an operational education framework in the workplace: two year evaluation

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¹Monash Health, Melbourne, Australia

Introduction
A lack of equity, structure and accountability in education offerings in allied health was identified as a problem across a large metropolitan public health setting. An educational framework was developed with four elements: governance, planning, delivery and evaluation (Golder et al, 2016). The key role of
education coordinators in facilitating education programs, aligned to staff needs, was made explicit and a suite of support tools such as attendance sheets and evaluation forms was developed.

**Research Questions**
1. Did the introduction of an education framework change education governance, planning, delivery or evaluation across allied health?
2. Has the satisfaction with education and training changed in allied health as a result of implementation of the education framework?

**Method**
Staff completed a baseline survey in 2015 (n=183) and post implementation in 2017 (n=200). A Mann Whitney U test compared the pre and post data and the qualitative comments were described by content analysis.

**Results**
The implementation of the framework was associated with significant improvements in compliance with APHRA professional development documentation (p=0.02). The role of education coordinators in determining staff learning needs and facilitating education activities, was also significantly improved (p=0.03). Overall satisfaction with education and training showed no significant change. The importance of support for external (in addition to internal) professional development was identified by staff.

**Discussion**
Standardised education resources and processes have supported an increase in compliance with APHRA documentation for professional development. Further work should promote equity of access to external professional development for allied health staff.

**Reference**

**Health professions educators in a complex system: a conceptual model**

**Adrian Schoo**¹, Koshila Kumar¹

¹ Prideaux Centre for Research in Health Professions Education, Flinders University, Adelaide, Australia.

**Introduction/background:**
Health systems are becoming more complex. Reasons include medical and technical advancement, changing populations and related health needs, specialisation, political drivers and limited resources. Health educators face the challenge to prepare students and staff to work and lead in a way that best serves client-centred care and best practice in a dynamic and complex health services environment.

**Aim/objectives:**
To outline a conceptual model that situates the clinical educator at the centre of a complex and dynamic system spanning four domains and multiple levels to assist health professionals in understanding and preparing for their leading role in contemporary complex systems.

**Discussion:**
They work in environments is becoming increasingly complex and include a number of stakeholders who may have competing interests. Consequently, clinical educators may encounter bureaucracy, high clinical workloads, competing health services, poor organisational support for work-integrated-learning and interprofessional learning, challenging staff or students, competing agendas and timetables, geographic isolation, and limited professional development and career opportunities. Hence, it has been argued that there is a need to go beyond the acquisition of knowledge and clinical skills alone in order to prepare health professionals for their role in systems that are becoming
increasingly complex. As such, health professionals can be encouraged to understand and analyse the complexity within which they work, and identify opportunities to optimise impact by utilising a micro-meso-macro level framework and by recognizing stakeholders and four different domains.

Issues/questions for exploration or ideas for discussion:
How this model can enhance sustainability, or contribute to sustainable ways to prepare health professionals for their complex roles.

Social Work Educators – Ten years strong, lessons learnt and current questions

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Introduction/background:
The Social Work Educator role was formalised ten years ago as a Health Professional Educator (Level 5) within the NSW Health award relevant to social workers. The role facilitates learning and professional development for health professionals, a significant expansion beyond the traditional student focus. South Eastern Sydney Local Health District employed the first Social Work Educator in NSW and has since employed a second Social Work Educator within the district.

Purpose: This presentation will highlight past, present and future aspects of the Social Work Educator role and present key questions relevant to Health Educators.

Discussion: In NSW there are currently four Social Work Educators based in Sydney. The presentation will look back to the establishment of these positions, look around at NSW incumbents, their contributions to social work and education more broadly within their respective hospital settings, and look forward to future issues, including advocating for these roles, assessing impact and developing future Social Work Educators.

All educators are welcome to this session, which will feature aspects unique to social work and highlight interdisciplinary achievements and opportunities.

Issues/ questions for exploration or ideas for discussion:
What influenced others in becoming a health educator?
What tools and processes are Educators using to monitor and evaluate impact?
How are we growing the next generation of Health Educators?

Innovation in ethics education: an interactive, interprofessional, online ethics resource for health science students

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Introduction/background:
Ethical practice is a cornerstone of health care professionals’ competence and a core graduate attribute for health graduates.

Aim/objectives:
Our aim was to design an engaging educational resource for health science students to apply ethical reasoning in professional practice scenarios. This interprofessional resource is flexible and may be used either as an online module or to facilitate classroom discussion of ethical issues. This
presentation will describe the methods and approaches taken to create an interactive, interprofessional ethics resource, entitled “Ethical practice during professional placements” (EPP).

Discussion:
The EPP resource was developed using collaborative action research by an interprofessional, Work Integrated Learning, academic team. Integrated within an online education platform, the EEP resource comprises five independent video case studies. Case studies address a range of ethical issues from diverse professional practice environments, and include perspectives from students, clinical educators, clients and caregivers. Case studies are supported by supplementary educational content, such as a ‘guide to ethical reasoning’. Pilot testing in a small number of student groups demonstrated flexibility in delivery options, and yielded constructive feedback on content and delivery methods. Challenges identified during the development and implementation process and future modifications will be discussed.

Issues/questions for exploration or ideas for discussion:
The advantages and disadvantages of online ethics education. How can we prepare graduating health professionals to be proactive ethical practitioners? How does the EPP resource enrich health profession students’ capacity to meet the demands of contemporary and future health environments?

Planning Responsibly in Medical Education (PRIME) - a holistic approach

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Introduction/background:
Capacity to train can be conceptualised as the combined ability of healthcare and education systems to equip specialist medical trainees to become competent independent practitioners. As such planning responsibly for capacity to train is a shared role requiring the participation of both systems.

Aim/objectives:
To develop a decision support package to assist health services optimise Basic Physician Training capacity at the individual training provider/setting level.

Discussion:
Drawing on insights from the literature, multi-level health service consultations and a survey of supervisors, a conceptual framework for capacity to train emerged which acknowledges a complex interplay of six overarching factors with numerous levers and controls operating within and outside the day-to-day environment in which physician training occurs. Some factors are easy to measure and influence and others very challenging.

A key project output was the PRIME Interim Guide for Basic Training which sets out PRIME principles, a description of the six factors impacting capacity and guidance for training providers in how they can consider the circumstances of their own setting to qualitatively appraise their capacity for Physician Basic Training and positively impact it. Decisions regarding capacity are delegated to individual training providers through a guided two-stage process, appraisal of capacity followed by responsible planning discussions. These locally run activities should proceed and inform trainee recruitment and selection activities.

Issues/questions for exploration/discussion:
Project findings suggest that capacity can be improved through smart, pragmatic educational design and implementation, and systemically sustained through supportive health service cultures and resourcing.
Creative approach to building a shared understanding of patient-centred care requirements
Kathryn Ogden1, Jenny Barr1
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Introduction/background:
Genuine patient partnership in medical education is touted as crucial to creating sustainable patient-centred care reform. The Requirements of Patient-Centred Care Systems (ROPCCS) conceptual model provides a mechanism to apply these understandings.

Aim/objectives:
To explore students responses to, and learnings from, a patient-facilitated workshop.

Methods
A workshop with year 4 medical students, co-facilitated with patients from the community, provided the opportunity for discourse about the elements contained within ROPCCS and how they might be achieved. Students and patients discussed, in groups, elements of the empirically derived ROPCCS conceptual map.

Students and patients were invited to complete a survey regarding their experiences of learning with patients in the workshop context and learning from the ROPCCS model. Qualitative data were analysed using an inductive thematic approach.

Results:
Evaluations confirmed that for the vast majority of students the workshop was relevant and presented in a new and engaging format. Qualitative themes confirmed the “unique” and “thought provoking” nature of the workshop. Perceived strengths of the workshop were the “collaboration of ideas” between patients and students in learning, and the ability for patients to provide their unique perspective. Themes will be examined further in the presentation.

Discussion
Having patients and students co-create learning in this workshop is a unique opportunity, which students appreciated. It mirrors contemporary expectations of patient-centred care where doctors work with patients in care partnerships. ROPCCS has the ability to facilitate this type of learning.

Conclusions:
Patients are a crucial resource for learning and new methods for incorporating their input into curricula should be explored to promote patient-centred care capacity.

7H Learning Environment – General

What should we teach the teachers? Learning priorities of clinical supervisors
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Introduction/background:
Curricula for faculty development programs in clinical teaching are often based on expert frameworks, however there is little published research about how clinical supervisors define their own learning priorities.
Aim/objectives:
We aimed to inform faculty development program curricula by asking: what do clinical supervisors identify as relative strengths and areas for improvement in their teaching practice?

Methods
As part of a multi-institutional and interprofessional faculty development program on the foundations of clinical teaching, clinical supervisors completed a modified version of the Maastricht Clinical Teaching Questionnaire (mMCTQ). Descriptive statistics were calculated and a content analysis was conducted on the free text comments.

Results:
481 (49%) of 978 clinical supervisors submitted their mMCTQs for the research study. Clinical supervisors identified relatively strong capability with interpersonal skills or attributes. They indicated least capability with assisting learners to explore strengths, weaknesses and learning goals. ‘Establishing relationships’ was the most reported strength. ‘Feedback’ was the most reported area for improvement.

Discussion
The data suggest that clinical supervisors find it challenging to let students take responsibility for their own learning. Key areas for curricular focus include: improving feedback practices; stimulating reflective and agentic learning; and managing the logistics of a clinical education environment. The main point of difference with expert frameworks is clinical supervisors’ emphasis on managing the logistical constraints of the clinical environment.

Conclusions:
Faculty development curricula should take into account the learning priorities of clinical supervisors, especially how to work within the constraints of a busy service environment.

Pots on the net – student usage of a virtual pathology museum

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Introduction
Online materials are replacing traditional pathology museums and microscopes. The interactivity of these ranges from static pictures to complete virtual slides. In this study we examined how students chose to interact with zoomable, rotating, macroscopic specimens versus static pictures. The study focuses on student’s motivation to interact with the extended online resource when it was supplementary to, but not required to, answer questions in an online assignment.

Methods
Students in a fourth-year anatomic pathology course (N=106) completed online clinical-case based learning activities. Both static images with sufficient information to complete questions and rotatable specimens were provided. Students’ interaction with online rotatable specimens and the underlying reasons were investigated using a self-developed online post-course survey.

Results
81% of students viewed the rotatable specimens. Coding of responses to open-end questions, identified two short-term motivators (more information and relevant to the question) and two long-term motivators (a better understanding of pathology and helpful for examinations) for viewing dynamic specimen representations.

Discussion
Students’ usage of online learning resources depends on their perceived necessity and relevance in achieving their immediate learning goals, regardless of quality and availability of the resources. Instructors may try to get around this by making learning tasks compulsory, but this will not affect student's perceived value of the activity.
Conclusions
Students who interacted with relevant online specimens were motivated by both the short-term and long-term expectancy value. When designing other online resources, the key to students using them is to design for expectancy value.

Australian physiotherapy clinical educator characteristics, confidence and training requirements.

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Introduction/background:
Clinical educators play a vital role in developing students' knowledge, skills and competence. Experienced physiotherapists have traditionally assumed clinical educator roles, however this may be changing as the demand for clinical education increases. There is limited knowledge about the professional characteristics of physiotherapists involved in providing student clinical education or the training they have received.

Aim/objectives:
To explore the current involvement of Australian physiotherapists in clinical education including their professional characteristics, participation in training and confidence in aspects of clinical education.

Methods:
Cross-sectional online survey of physiotherapists working in public and private healthcare facilities in NSW and the ACT. Probability sampling was utilised to minimise response bias. Survey content included participants: demographics; professional characteristics; experience and opinions regarding clinical education; previous clinical educator training and perceived training needs.

Results:
There were 170 respondents (34%) with a mean age of 37 years (SD=11.4) and 13 years (SD=11) of clinical experience. Most respondents (68%) were currently involved in physiotherapy clinical education and over half (56%) had received additional training, however many (56%) reported a need for more. Respondents with less clinical experience were significantly less confident managing: challenging students (p=0.003); multiple students (p=<0.001) and competing workplace/clinical education duties (p=<0.001).

Discussion and conclusion:
The professional characteristics, experience and training of physiotherapists relating to clinical education is varied. Physiotherapists, particularly novices, feel least confident managing challenging students, supervising multiple students and balancing competing workplace and clinical education duties. These aspects of practice should inform the development of clinical educator training strategies.

Making sense of phronesis in clinical education

Neville Chiavaroli, Steve Trumble

University of Melbourne, Australia

Introduction/background:
Phronesis, an Ancient Greek term commonly associated with Aristotle’s ethical writings, refers to a form of practical knowledge or reasoning. The concept of phronesis has currency in several professional fields, such as architecture, economics, engineering, management, and increasingly, in medicine and health practice, where it is used to describe the kind of thinking and judgement that is the hallmark of a ‘good’ professional – in both senses of the word, technically and ethically.
Aims:
1. To present the concept of phronesis and argue for its relevance to clinical education
2. To explore how phronesis can be incorporated into education to improve student preparedness for practice

Discussion:
In health contexts, phronesis is more than sound clinical reasoning or expert judgement; it is situationally-specific good practice. It has been characterised as going beyond what can be done for a patient to knowing what should be done for a patient in a particular context (Pellegrino, 1979). This enhanced sense of clinical reasoning has important implications for health professional education, especially curriculum design and professional development. Nevertheless, phronesis remains an elusive concept, and its applicability and usefulness in health educational contexts is not completely understood or practiced.

Issues/ questions for exploration or ideas for discussion:
1. Why do we need the concept of phronesis? Why is it not adequately covered by other concepts and terms relating to clinical reasoning and practice?
2. How might we use the concept of phronesis to help our students learn how to develop their clinical practice skills, and to think like a professional?

What motivates clinical teachers in Intensive Care?

Merry, Emma¹,²

¹. Education Unit, University of Otago, Wellington School of Medicine, New Zealand. ². Hawkes Bay Regional Hospital, Hastings, New Zealand.

Background
Clinical teachers in Intensive Care Units (ICUs) must teach in a constantly changing environment with critically ill patients, multiple competing demands and learners with varying skill sets. The factors enabling or inhibiting teaching in such an environment are unknown. Studies offer a variety of motivational reasons in other teaching environments, for example, secondary and tertiary education; in other countries; and in the non-clinical workplace. There are no studies examining the effects of these barriers and enablers on clinical teachers’ motivation and teaching practice in this unique context.
The study explored factors influencing motivation to teach amongst SMOs (Senior Medical Officers) in New Zealand ICUs.

Method
This study used a case study methodology based on semi-structured interviews with 20 clinician teachers practising as SMOs in ICUs around New Zealand. A content analysis method was used for the coded data from the interviews to shed light on this complex area.

Results
Common themes and challenges were identified across all participants.

Discussion and conclusion
Ideas to reduce barriers, enhance opportunities, and ways to identify and support new clinician teachers were developed. These include addressing resourcing, training and organisational culture change issues.
Poster Presentations

Presenting author shown - select each presentation to hyperlink to the abstract.

Monday 2 July 2018

Session 1, Monday 2 July, 2018 10:30-12:00

1A

274. Mokken scale analysis of a questionnaire to evaluate teaching in a student-led clinic  
Brett Vaughan, Victoria University, Australia

277. Change in pain neurobiology knowledge following a short term educational intervention  
Kylie Fitzgerald, Victoria University, Australia

243. Do students think the biomedical curriculum supports their clinical diagnosis and  
reasoning? Wei Dai, University of Otago, Wellington, New Zealand

246. Threshold Concepts for Traditional Teachers presented as 'Tips and Tricks to Teach  
Trainees' Diane Kenwright, University of Otago, Wellington, New Zealand

264. Using Design Thinking to embed 21st century learning skills into your courses and  
programmes Amanda Charlton, LabPLUS, Auckland Hospital, New Zealand

265. Students’ experiences using a serious game to learn environmental hazard and safety  
assessments in community and residential healthcare settings Suzanne Volejnikova-  
Wenger, University of the Sunshine Coast, Australia

268. What psychiatry should be taught in medical school? Sarah Rotstein, Monash  
University, Australia

291. Developing and sustaining online resources to enhance the learning experience of  
undergraduate medical science students Cristan Herbert, UNSW Sydney, Australia

301. MUSIC for Medical Students: Validation of the MUSIC Model of Academic Motivation in  
New Zealand Tehmina Gladman, University of Otago, Wellington, New Zealand

240. Learning from dissection; the perceptions of medical students. Natasha Flack,  
Department of Anatomy, University of Otago, New Zealand

1B

52. Facilitating change in health professions education: Is a practice network the key? Claire  
Palermo, Monash University, Australia

59. Do we have to debrief "insert eye roll": How can debrief sessions improve team culture in  
a paediatric setting? Kally Southern, Women’s and Children’s Health Network, Australia

67. Why is teaching jurisprudence in medical school occurring when we are not teaching  
medicine in law school? Shui-Shang (Sean) Hsueh, Kaohsiung Chang Gung Memorial  
Hospital, Taiwan
83. Transformative Experiences: The power to improve global health & strengthen health associations Elise Moore, Educational Commission for Foreign Medical Graduates (ECFMG), Australia

92. PUNCCS: Paediatric [placements] for Undergraduate Nurses and Child-Care Centre Socialisation. Heather Buttigieg, Monash University, Australia

106. An extended immersive pharmacy simulation game and students’ perceptions of their professional competencies Denise Hope, Griffith University, Australia

108. Sustaining an education team Lachlan Fieldhouse, General Practice Training Tasmania, Australia

125. Creating sustainable health service redesign through integrated student placement models Gillian Nisbet, The University of Sydney, Australia

126. Fostering a learning culture in busy clinical environments. The General Practice experience Kristen FitzGerald, general practice training Tasmania, Australia

133. An ethical dilemma? How donor dissection impacts healthcare students’ perceptions of ethics Charlotte Rees, Monash University, Australia

183. PETAL: Providing Enrichment, Tending And Leadership for Health Educators Caron Hewett, Central Coast Local Health District, Australia

188. Health professional wellbeing and service provision: must we choose? Amy Seymour-Walsh, Flinders University, Australia

196. Accreditation role in improving Aboriginal and Torres Strait Islander Health outcomes Narelle Mills, Australian Dental Council, Australia

199. The complex business of clinical education Koshila Kumar, Flinders University, Australia

Session 2, Monday 2 July, 2018 13:00-15:00

2A

46. A student-engaged clinical audit curriculum: giving back to the clinical placement whilst using research skills Jan Radford, University of Tasmania, Australia

69. Sustainability through Flexibility: Harnessing your hospital library as a collaborative educational support resource. Kirsty Rickett, University of Queensland, Mater Hospital, Australia

153. General Practice Academic Registrar Post - Why is this important in medical education? Sarvin Randhawa, Rural clinical School, University of Tasmania, Australia

257. Assessing the research knowledge and skills of medical students Dragan Ilic, Monash University, Australia

161. Selecting the attributes that matter: Personal attributes at MMI interview predict clinical competence in specified domains of senior medical student OSCEs Lyndal Parker-Newlyn, University of Wollongong, Australia
228. Influences on selection to surgical training in Australia and New Zealand Zaita Oldfield, Royal Australasian College of Surgeons, Australia

293. Resources, Research, and Reality: Developing and applying Behavioural and Scenario based questions in your Interview process from MMI to Standardized interviews Kelly Dore, McMaster University, Canada

2B

31. A sustainable interprofessional student clinic Susan Waller, Monash University, Australia

43. Crossing the road at night - Running a multi station scenario between the hospital and a skills unit Dale Sheehan, Unitec, New Zealand

49. Interprofessional student observation placements - facilitating collaborative practice Jeanie Weber, Calvary Public Hospital Bruce, Australia

57. From doctor thought bubble to patient's receptor site: An interprofessional pharmacotherapeutics teaching approach for future prescribers Sarah Herd, University of Tasmania, Launceston Clinical School, Australia

63. Do rural universities produce rural dentists? A pilot study examining Australian dental graduates of 2015. Lisa Limorani, James Cook University, Australia

74. Doing Music Together: an opportunity for learning, sharing, and creating for occupational therapy students, practitioners and community Daniela Castro de Jong, University of Canberra, Australia

97. Why develop an interprofessional student education program in a tertiary paediatric and woman's health service when the universities should provide it? Kylie Eddy, Women's and Children's Health Network, Australia

179. The Interprofessional Passport: An innovative model for overcoming issues of sustainability in clinical interprofessional education Peter Brack, Northern Health, Australia

220. Playing in the IPE 'sandbox' using synchronous videoconference technology. Narelle Henwood, CQUniversity Australia, Australia

252. Interprofessional simulation education in Allied Health to improve recognition and response to clinical deterioration Rodney Sturt, Alfred Health, Australia

396. A team-based learning (TBL) activity on food labelling delivered to medical students Scott McCoombe, Deakin University, Australia

6. Sustainability and advancement of skills and knowledge through continuing professional development - what's hot and what's not? Heather Grusauskas, Eastern Victoria General Practice Training, Australia
Session 3, Monday 2 July, 2018 15:30-17:00

3A

281. Clinical educator self-efficacy and its relationship with student evaluations of clinical teaching Brett Vaughan, Victoria University, Australia

16. Online versus face-to-face education for medical practitioners: can one fully substitute the other? Chris Ifediora, Griffith University School of Medicine, Australia


27. Sustainable teaching - Student Led Learning in Medicine (SLLIM pickings) Adrienne Torda, University of New South Wales, Australia

40. Medical student perceptions of GP placements Lizzi Shires, University of Tasmania, Australia

54. Health Student's Digital Interprofessional Learning Client Documentation (D-IPL Client Docs) Activity: Outcome and Results Michelle Parker-Tomlin, Griffith University, Australia

60. Strategies for clinical partners and universities to enhance student engagement in non-metro clinical placements: A mixed methods study Alison Francis-Cracknell, Monash University, Australia

3B

248. Augmenting clinical placements: What are students' preferences Niamh Keane, University of Notre Dame, Australia, Fremantle, Australia

254. Supporting placement educators to supervise international students through cross-cultural learning opportunities Bella Ross, Monash University, Australia

259. Occupational health and well-being - an introduction. Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar

260. Violence in healthcare - how do we keep our healthcare workers safe? Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar

290. Student engagement with lecture material: is there such a thing as too much flexibility? Iulia Oancea, School of Clinical Medicine, Faculty of Medicine, The University of Queensland, Australia

316. How do we prepare learners to better communicate with patients of Limited English Proficiency? - An interprofessional pilot involving medical and interpreting students Claire Harrison, Department Of General Practice, Monash University, Australia

331. A cross-cultural CLEIMS study: Experiences of Griffith University and Taiwanese medical students in extended multimethod interprofessional simulation Kwong Chan, Griffith University, Australia
421. Online continuing education for health professionals to improve the management of chronic fatigue syndrome: acceptance and adherence. Ben Barry, The University of Queensland, Australia

448. Identification of barriers to student engagement with paediatric patients: an exploration of student and tutor perspectives Jen Anderson, University of Sydney, Australia

460. JMS- A scaffolded multi modal approach Clare Polley, The Royal Children's Hospital, Australia

**Session 4, Tuesday 3 July, 2018 10:30-12:00**

**4A**

275. Near-peer self-evaluation of teaching and its relationship to understanding of teaching and learning Brett Vaughan, Victoria University, Australia

278. A sustainable approach to multiple choice question analysis using classical test and item response theory Brett Vaugahn, Victoria University, Australia

98. Help, I'm a Specialist! What Geriatricians really need to know when they start as consultants - perspectives of recently qualified consultants Mark Hohenberg, Western Sydney University, Australia

145. The 7Rs of Field Education Jenni Graves, South Eastern Sydney Local Health District, Australia

154. Give Respect: Student perspectives on the co-creation education materials for a voluntary respectful relationship program Natalya Banks, Monash University, Australia

198. Multidisciplinary approach in delivering histopathology to medical students; Evaluation of engagement and learning experience Vinod Gopalan, School of Medicine, Griffith University, Australia

202. Is it sustainable for medical students to practise the rectal examination on real patients? Harsh Bhoopatkar, The University of Auckland, New Zealand

205. Developing and sustaining an Allied Health Education service in a new and changing organisation. Katrine Nehyba, Fiona Stanley Fremantle Hospitals Group, Australia

237. #O2TheFix: Swimming between the Flags Jessica Nand, Waitemata District Health Board, New Zealand

**4B**

5. Near peer assessment during Objective Simulated Bush Engagement Experience (OSBEE) in Rural Clinical School, University of Queensland. Wasana Jayarathe, Rural Clinical School, Hervey Bay, Australia

8. Pilot testing of Objective Simulated Bush Engagement Experience (OSBEE) in the MD Program of the Rural Clinical School, University of Queensland (UQ). Wasana Jayarathe, Rural Clinical School, Hervey Bay, Australia
41. Evaluating the user acceptability of electronic marking in a patient population Nicole Koehler, Monash University, Australia

58. Evaluation of Interns in Rural General Practice Terms Lynn Hemmings, University of Tasmania, Australia

273. Cohen' method as a sustainable standard setting approach applied to a practical skills examination Brett Vaughan, Victoria University, Australia

107. Are RPL essay scores linked to training success? Lachlan Fieldhouse, General Practice Training Tasmania, Australia

116. A near peer teaching pilot program - a possible solution to capacity and resource restraints Justin Tse, St Vincent's Clinical School, Dept Medical Education, Melbourne Medical School, The University of Melbourne, Australia

132. A peer review group to sustain expatriate family physicians in transition. Ameeta Patel, Hamad Medical Corporation Ambulance Service Group, Qatar

155. Innovative online clinical assessment tool for undergraduate nursing students Lauren McTier, Deakin University, Australia

197. Evaluation of a Dementia Care Training and Education Program Michael Bentley, General Practice Training Tasmania, Australia

219. Does delay between teaching content and related clinical placements affect performance in physiotherapy students? Sean Horan, Griffith University, Australia

226. Registrar/Intern Supervisors views and perceptions of work readiness of interns Justin Tse, St Vincent's Clinical School, Dept Medical Education, Melbourne Medical School, The University of Melbourne, Australia

238. Student-generated MCQs: implementing a sustainable solution for learning and revision in your course Rebecca Grainger, University of Otago, New Zealand

241. Online alone: Students creating a glossary of medical jargon online do great knowledge construction but do not interact Rebecca Grainger, University of Otago, New Zealand

Tuesday 3 July 2018

Session 5, Tuesday 3 July, 2018 13:00-14:30

5A

276. Simulated learning video activities as a sustainable clinical placement alternative for junior clinical students Kylie Fitzgerald, Victoria University, Australia

84. TAG TEAM PATIENT SAFETY SIMULATION: Enhancing graduates capability to provide safe and effective health care. Kerry Reid-Searl, CQUUniversity, Australia

269. The physiological changes in critical care trainees during airway intubation: comparison study between simulation and clinical environments Jackson Ji, St Vincent's Hospital, Australia
297. Immersive reality instruction for medical education - stereoscopic versus desktop delivery Nicolette Birbara, UNSW Sydney, Australia

303. Hybrid simulation training: A cost-effective teaching/learning modality for low-middle income countries (LMIC) Azra Amerjee, Aga Khan University Hospital, Pakistan

367. Videos sustaining clinical placements. Heidi Waldron, The University of Notre Dame Australia, Australia

404. A Multidisciplinary Approach to Reducing Medication Errors Through Paediatric Medical Emergency Simulation Shabna Rajapaksa, Ballarat Health Services, Australia

209. Consenting to Student Services in the Disability Sector Lisa Carnegie, The Benevolent Society, Australia

5B

65. Reinvigorating procedural education for clinicians working with older adults in hospital using a conceptual model: physiotherapists & falls prevention Melanie Farlie, Monash University, Australia

242. A cost-description study of the OSCE in medical education Jonathan Foo, Monash University, Australia

286. Retrospective analysis of level of clinician expertise in paediatric regional anaesthesia: a suggestion for training guidelines to improve clinical practice Nalini Pather, UNSW Sydney, Australia

361. Implementing programmatic assessment: ensuring a successful and sustainable transition Stephanie Clota, ModMed, Australia

379. Exploring the divide between academics and clinical educators in competency based assessment Simone Gibson, Monash University, Australia

410. Evaluating Teamwork Skills Development in Second Year Undergraduate Science Courses using ePortfolio Learning, Reflective Practice and Authentic Assessment Cristan Herbert, UNSW Sydney, Australia

412. Improving student-driven feedback in postgraduate medical students during a brief clinical attachment Karen Scott, University of Sydney, Australia

424. Distributed assessment of medical ethics in case discussions facilitated by a large team of casual clinical tutors Iulia Oancea, School of Clinical Medicine, Faculty of Medicine, The University of Queensland, Brisbane, Australia

434. Effect of exposure to six second ‘Vine’ skill demonstration on medical student confidence in practical skills: cross-over design - pilot study Tarra Booth, Sydney Adventist Hospital Clinical School, Australia

450. The opportunities and challenges of digital clinical nursing placement assessments. An Australian experience. Yangama Jokwiro, La Trobe University, Australia
337. Creating Effective Small Group Learning Judi Nairn, The University of Adelaide, Australia

348. Orthopaedic Essentials: Evaluation of a student-organised intensive short course for WA medical students Victoria Toal, University of Western Australia, Australia

**Session 6, Tuesday 3 July, 2018 15:00-16:30**

6A

287. An analysis of self, peer, near peer and faculty assessment of a year 2 history taking assessment task Kylie Fitzgerald, Victoria University, Australia

288. Perception of the value of near-peer and peer assessment: a quantitative study Kylie Fitzgerald, Victoria University, Australia

365. Medical student perceptions of learning during the critical care program of Sydney Medical School: The deliberate attainment of basic airway management skills in a core rotation. Sarah Whereat, Sydney Medical School, Nepean, Australia

380. An inexpensive technique to enhance engagement: evaluation of Think-Pair-Share in an undergraduate pathology unit. Douglas Wong, Victoria University, Australia

390. Doctor as Teacher Sarah Rotstein, Monash University, Australia

402. Connecting the 'dots' through learner perception Karen Beattie, Health Education and Training Institute, Australia

431. Sustaining Deep Learning: If a CBL model is good for our students should we use it to train our tutors too? Sharon Darlington, Australia

6B

249. An approach to the quantitative analysis of radiology learning objectives in an Australian medical curriculum Daniel Townsend, University of Notre Dame, Australia, Australia

253. The appropriate use of adrenaline-containing local anaesthetics in adult dental patients on tricyclic antidepressants or monoamine oxidase inhibitors. A systematic review Orani Lancaster, James Cook University, Australia

285. Upskilling the primary care workforce in cancer survivorship Kyleigh Smith, Victorian Comprehensive Cancer Centre, Australia

392. 3D modelling and virtual reality for preoperative planning and surgical training Nalini Pather, UNSW Australia, Australia

443. National Bioscience Quality Assurance Framework for Bioscience Education in Nursing: A proposal Michael Todorovic, University of Queensland, Australia

444. Engagement and perceived utility of the biosciences by nursing students and registered nurses Michael Todorovic, University of Queensland, Australia
449. Understanding challenges dental students face in communicating with patients: Building insight to inform the development of an effective intervention Gillian McGregor, The University of Queensland, Australia

463. Training of Sonographers Lucy Taylor, Australian Institute of Healthcare Education, Australia

401. The pillars of well-constructed SP programs: A qualitative study with experienced educators Shane Pritchard, Monash University, Australia

22. Embedding a digital literacy activity in a museum environment in a 1st Year Doctor of Optometry curriculum Kwang Meng Cham, University of Melbourne, Australia

50. A digital OSCE tool for Health Sciences - Optometry, Nursing and Physiotherapy Kwang Meng Cham, University of Melbourne, Australia

86. Anatomy curriculum design for a new MD program Vaughan Kippers, The University of Queensland, Australia

146. Two different fields': supporting higher degree research students in health professions education Charlotte Denniston, The University of Melbourne, Australia

357. Nutrition education for pharmacy students Susan Miller, The University of Western Australia, Australia
**Mokken scale analysis of a questionnaire to evaluate teaching in a student-led clinic**

Brett Vaughan

*Victoria University, Melbourne*

**Introduction/background:**
The popularity of student-led clinics is increasing. This approach engages students in the role of primary patient care practitioner under the supervision of a qualified health professional. There is no literature evaluating the quality of clinical teaching in this environment. Given this clinical learning environment is different to that of a hospital-based setting, an alternative teaching evaluation tool is required.

**Aim/objectives:**
To evaluate the measurement properties of the Osteopathy Clinical Teaching Questionnaire (OCTQ).

**Methods**
Students enrolled in year 4 and 5 of the osteopathy program at Victoria University were invited to evaluate each of the clinical educators they had worked with in semester 2, 2017. The OCTQ is a 12-item questionnaire developed for a student-led clinic environment. Previous research has presented validity evidence for the OCTQ. The measurement properties of the OCTQ were evaluated using Mokken scaling analysis (MSA), a non-parametric item response theory approach.

**Results:**
308 evaluations of 42 clinical educators were received. MSA suggested the OCTQ scalability was strong (H=0.63), all items demonstrated monotonicity, and reliability estimates were above accepted levels (Mokken’s rho = 0.94, Cronbach’s alpha = 0.93). Invariant item ordering was weak.

**Discussion**
Data suggests that the OCTQ is unidimensional and measures a single latent construct, quality of clinical teaching in osteopathy student-led teaching clinics. Calculation of a total score is valid.

**Conclusions:**
The study provides further validity evidence for the OCTQ and is the first to use MSA as part of the evaluation of a clinical teaching questionnaire. Testing is required in other professions who utilise student-led clinics.

**Change in pain neurobiology knowledge following a short term educational intervention**

Kylie Fitzgerald, Kevin de Waal, Sarah Slater, John Harbis, Michael Fleischmann, Brett Vaughan

*Victoria University, Melbourne*

**Introduction/background:**
Chronic pain is a substantial burden on the Australian healthcare system with an estimated 19.2% of Australians experiencing chronic pain. A current knowledge of the neurophysiology of chronic pain is imperative to ensure practitioners apply appropriate patient management. Educators require a reliable, sustainable method of assessing the learner’s changes in neurophysiology knowledge. The
Neurophysiology of Pain Questionnaire (NPQ) has been used for this purpose in a number of student and professional populations.

**Aim/objectives:**
To evaluate the changes in pain neurobiology knowledge following a short-term educational intervention in year 3 osteopathy students as measured by the Neurophysiology of Pain Questionnaire.

**Methods**
Participants completed a demographic information survey and the Neurophysiology of Pain Questionnaire (NPQ) prior to undertaking a twelve week 'Understanding Pain' subject. Upon completion, all participants again completed the NPQ questionnaire.

**Results:**
Participants (n=55) completed the demographic questionnaire and NPQ pre-intervention and post intervention. The median NPQ score increased by 4 points from pre- to post-intervention with a large effect size (p<0.001, z = -5.71, r = 0.78). Significant increases in 'correct' responses were observed for a number of NPQ items.

**Discussion**
Results indicate that a short-term pain education intervention can increase pain neurobiology knowledge in year 3 osteopathy students. This result is consistent with the literature in other student populations.

**Conclusions:**
There was a significant increase in NPQ score after the short term educational intervention. The intervention could be readily implemented in other educational settings and demonstrates effectiveness in increasing short term knowledge.

**Do students think the biomedical curriculum supports their clinical diagnosis and reasoning?**

**Wei Dai¹, Emily Wood¹, Rebecca Grainger¹, Emma Osborne¹, Diane Kenwright¹**

¹University of Otago Wellington, Wellington, New Zealand

**Introduction**
The biomedical components of the curricula, which were historically taught as a standalone comprehensive science courses, are now integrated, clinically-oriented components of the medical curriculum. The clinical relevance of biomedical science is in supporting the development of diagnostic skills, clinical reasoning and critical analysis of medical interventions (“evidence-based medicine”).

**Aim**
We aimed to explore whether the current integrated (post 2008) biomedical curriculum is perceived by students to support the development of clinical reasoning and/or critical analysis skills.

**Methods**
The perspectives of 2nd - 6th year medical students on the biomedical curriculum was explored via a paper-based survey. Focus groups were conducted to further explore reasons underlying student responses.

**Results**
Medical student’s reported acceptance of the biomedical programme, and this did not differ between the year groups. Students agreed that the biomedical curriculum improved their clinical reasoning and critical analysis skills. Students reported having difficulties learning and retaining content that was not applied to clinical context or explained as relevant.
**Discussion and conclusions**
Medical students are willing to learn the large biomedical curriculum but have trouble managing the detailed content or focusing highest priority content. They find integrated teaching is beneficial and relevant to their emerging clinical reasoning and diagnostic skills. This suggests that the linkages between biomedical teaching and clinical application are not yet established, or that the information in the current biomedical curriculum may be too detailed to be clinical useful.

**Threshold Concepts for Traditional Teachers presented as “Tips and Tricks to Teach Trainees”**

Diane Kenwright¹, Amanda Charlton²

¹University of Otago, Wellington, New Zealand, ²LabPlus, Auckland Hospital, New Zealand.

**Introduction**
Post graduate trainers are often unconsciously incompetent in modern pedagogy, due to being trained on average, 20 years ago under traditional regimes. They do not engage with educational jargon, are unfamiliar with educational concepts, yet want to teach effectively.

**Aim:**
To demonstrate our tools to transition traditional teachers through key threshold concepts in teaching postgraduate trainees.

**Discussion:**
We identified five threshold concepts for teachers of pathology postgraduate trainees, then developed accessible infographics to introduce, reinforce and remind trainers of these concepts. The five concepts are: feedback, engagement with learning, effective learning techniques, 21st century skills and digital literacy. We illustrate these concepts as infographics, and further develop practical examples of their application. We selected these five concepts because of an evidence base demonstrating their effectiveness in teaching, and every day applicability in postgraduate pathology teaching.

**Ideas for discussion:**
Do these threshold concepts for traditional postgraduate teachers align with your experiences and observations? What modern educational concepts are missing? How can we improve the adoption and use of these tools by teachers? How might you generalise these tips and tricks to your health professional trainees?

**Using Design Thinking to embed 21st century learning skills into your courses and programmes**

Amanda Charlton¹, Diane Kenwright²

¹University of Otago, Wellington, New Zealand ²LabPLUS Auckland Hospital, Auckland, New Zealand

**Introduction/background:**
21st century learning skills (CLS) are identified by the World Economic Forum as essential for thriving in a complex, fluid and uncertain future environment. Design Thinking is an iterative, human centred, practical approach to creating the best ideas and solutions.

**Purpose and outcomes:**
Embed 21st CLS in a lesson you teach, using the Design Thinking process.

**Issues for exploration or questions for discussion:**
Are there gaps between the 21st CLS and your institution’s graduate attributes? Where does sustainability fit in your graduate attributes? What other situations could you use this I like, I wish, What if… feedback framework?
What 21st CLS/graduate attributes would you find most difficult to embed, ideas from the group

Outline of workshop activities
Presentation [15min] What are 21st century learning skills, why do we need them? What is the Design Thinking method, and how does this apply to education?

Activity [5min] Map your institution’s graduate profile/attributes to the 21st century learning skills template.

Structured workshop [60 mins]. Pairs of participants each redesign a lesson using a Design Thinking canvas. Instructions for steps followed by a timed segments for activity.
1. Empathise with archetype student
2. Define one 21st CLS to embed
3. Ideate with wild ideas, be visual, go for quantity
4. Prototype by storyboard
5. Test by presenting to partner. I like, I wish, what if … feedback framework.
4a Prototype revision
5a Test again by presenting to partner. Feedback.

Prerequisite:
BYO internet connected device such as laptop, tablet or smartphone.

Health students’ experiences using a Serious Game to learn environmental hazard and safety assessments in community and residential healthcare settings

Suzanne Volejnikova-Wenger1, Patrea Andersen2, Karen-Ann Clarke3

123University of the Sunshine Coast, Queensland, Australia

Introduction/background:
Digital game-based learning and its application in curriculum is growing in popularity as an educational modality for healthcare disciplines. Comparing prior knowledge to post gaming knowledge is the most common method for evaluating learning and Serious Games. There is a dearth of research specifically focused on participants’ perception of a Serious Game and their lived experiences with this way of learning.

Aim/objectives:
Aim: To evaluate the efficacy of using a serious game to teach hazard and safety assessments in community and residential healthcare settings

Methods
The phenomenological approach utilised semi-structured interviews to collect data on how students experienced the serious game ‘Safe Environments’, and answer the question: What are health students’ experiences using a Serious Game to learn environmental hazard and safety assessments in community and residential healthcare settings? Analysis was conducted using processes congruent with Interpretive Phenomenological Analysis (IPA).

Results:
Four themes were identified; knowing, navigating, engaging and learning. Sub-themes addressing individual nuances explained the impact of prior knowledge, technical ability and engagement on learning using gaming approaches which increase or decrease achievement of learning outcomes.

Discussion
The findings from this study, demonstrate that learning outcomes are directly influenced by engagement with the serious game, which in turn is influenced by what the student brings to the game by way of knowledge, experience navigating technology, and the subject matter.
Conclusions:
This research gives a voice to students’ experiences, provides valuable information for future development for serious games in health education, and allows an insight into understanding the use of serious games from a student perspective.

**What psychiatry should be taught in medical school?**

Sarah Rotstein\(^{1,2,3}\)

\(^{1}\)Monash University, \(^{2}\)Monash Alfred Psychiatric Research Centre, \(^{3}\)Alfred Health, Melbourne, Australia

**Background:**
Historically, psychiatry has been considered distinctly separate from the rest of medicine. Despite the widespread deinstitutionalisation in late 20th century, there persists a perception of psychiatry as a niche set of knowledge/skills – irrelevant to everyday medical/surgical specialists. In 2017, the Royal Australian College of General Practitioners reported that the most common reason for patient presentations is ‘psychological’ and that mental health issues are the most prevalent emerging health concerns for their patients. With the increasing prevalence of mental illness and increased appreciation of mind-body links, ALL doctors need to have some degree of mental health literacy and skills. Most medical school graduates will not become psychiatrists. Therefore it is important that medical schools’ psychiatry curricula focus on knowledge and skills that are applicable to junior doctors and general practitioners (GPs).

**Aim:**
Investigate what psychiatry skills/knowledge are most relevant to junior doctors and GPs.

**Methods**
Online surveys were sent to junior doctors at a major metropolitan hospital and GPs associated with Monash University.

**Results:**
Areas of psychiatry emphasised as important to clinical practice included: high prevalence disorders, aged psychiatry, risk, capacity, delirium, drugs and alcohol, de-escalation and pharmacology.

**Discussion**
Psychiatry teaching is often delivered within public psychiatry wards and clinics – where the focus is the management of low prevalence disorders. This is in stark contrast to what will be most relevant to the majority of medical graduates.

**Conclusions:**
Universities should ensure medical school psychiatry curricula align with future practice as a junior doctor or GP – not a psychiatry trainee.

**Developing and sustaining online resources to enhance the learning experience of undergraduate medical science students**

Cristan Herbert\(^{1}\), Martin Weber\(^{1}\), Rakesh K. Kumar\(^{1}\), Gary M. Velan\(^{1}\)

\(^{1}\)School of Medical Sciences, UNSW Sydney

**Introduction/background:**
From 2015, the introductory Pathology course for Medical Science students at UNSW has been transformed into a blended learning format. This involved the development of interactive activities including online modules, online tutorial quizzes, practical classes supported by digital images hosted on the BEST network, and interactive large-group sessions. Ensuring the long-term sustainability of these online activities has emerged as a particular challenge.
Aim/objectives:
In 2017, as part of the UNSW Inspired Learning Initiative, we aimed to introduce a series of updates and enhancements to existing online content, and also assess student perceptions of the blended approach.

Methods:
Existing online modules were revised. The Moodle page was redesigned with a topic-based approach and introduction of an interactive timetable. New adaptive eLearning activities (Smart Sparrow) were designed with input from student partners. In all, over 20 new eLearning activities were created with over 150 individual questions and tailored feedback. Feedback was obtained via online surveys linked to each new activity, and also from meetings with student representatives throughout the semester.

Results:
The revised course was delivered to 280 students in Semester 2, 2017. Most students agreed that the new online activities “enhanced their motivation to learn”, and “provided feedback that enhanced their learning”. While several students found it difficult to adapt to the new Moodle layout, most appreciated the improvements.

Conclusions:
The development and maintenance of these online resources involved significant time and effort of academic staff, support staff and student partners. Therefore, long-term sustainability must be considered when creating new online content for blended courses.

MUSIC for Medical Students: Validation of the MUSIC Model of Academic Motivation in New Zealand

Tehmina Gladman, Steve Gallagher
Otago Medical School, University of Otago, New Zealand

Introduction/background:
An important aspect of student learning is that of academic motivation. Academic motivation can be defined as “a process that is inferred from actions … and verbalizations …, whereby goal-directed physical or mental activity is instigated and sustained” (Jones, 2009, p. 272). It is this motivation which spurs students to engage with teaching and learning and optimise their study strategies to excel in their programme. Jones (2009) has developed the MUSIC model of academic achievement that considers student perception of empowerment, usefulness, success, interest and caring and has been shown to be effective in measuring university student academic motivation.

Aim/objectives
The aim of this study is to determine, through Confirmatory Factor Analysis, if the MUSIC inventory developed by Jones (2009, 2017) is a valid measure of New Zealand medical student engagement in learning. This will be a first step in a planned series of studies looking at ways to engage students and staff in teaching and learning.

Discussion
Based on previous validation studies of students at university level, it is expected that New Zealand medical students’ responses will show a five-factor solution similar to that previously found. This initial analysis will pave the way for an ongoing research programme utilising the inventory as an evaluation measure for innovative teaching methods in the medical school curriculum.

Issues/questions for exploration or ideas for discussion
A key question we have with regards to this model and its inventory is how it can be used to guide and assist teaching staff in the development of innovative learning solutions for medical students.

References
Learning from dissection; the perceptions of medical students.

Natasha AMS Flack¹, Helen D Nicholson¹

¹Department of Anatomy, University of Otago, Dunedin, New Zealand

Introduction/background:
Less time is being dedicated to learning anatomy within the medical curriculum, with cadaveric dissection at risk of being cut out. There is long-standing debate as to whether dissection of cadavers is a valuable learning experience for medical students. Either, the belief is that essential knowledge can be learnt from digital resources, textbooks or plastinations, with no need for dissection. Or, the experience of whole body dissection is viewed irreplaceable. However, few reports focus on what students themselves believe they learn from dissection and whether they consider it essential.

Aims/Objectives:
The aim of this study was to obtain an understanding of what medical students perceive they learn from dissection.

Methods:
267 medical students were invited to complete three surveys; before dissection, after their first dissection module, and their final semester of anatomy. Open-ended questions captured students’ opinions of what dissection had taught them. A general inductive approach was used; common emergent themes were identified.

Results:
Dissection helps students learn: anatomy, practical/technical skills, how to learn, how to handle emotions, and fosters teamwork, makes them think about future pathways, visualize real tissues in situ, and deal with death.

Discussion:
Students commonly conveyed dissection as an appropriate, valuable educational tool. The noted effects of personal growth while participating in dissection was highly varied, but for most, were positive.

Conclusion:
In general, the responses obtained from the medical student voice supports the use of whole body dissection and future development of medical curricula should take this into consideration.

1B

Facilitating change in health professions education: Is a practice network the key?

Claire Palermo¹, Gemma Jenkins, Leesa Costello

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²Edith Cowan University, Joondalup, Western Australia, Australia

Introduction/background:
Despite the movement towards outcome-focused education for preparation of health professionals internationally, much of the preparation of our future health workforce is entrenched in history. Changing the practice of health professions educators remains a major challenge.

Aim/objectives:
This study aimed to transform the assessment practice of health professions educators, with a focus on assessment.
Methods:
Twenty-one academics from 14 universities across Australia and one from New Zealand, representing 83% of the accredited dietetics programs were recruited to a practice network. Members initially met face-to-face in a one-day workshop, then met regularly every six-to-eight weeks for approximately 1.5 hours via videoconference for 18 months. These sessions focused on discussions around competency-based education and in particular clinical placement educators’ approaches to assessment. Document analysis of agendas and meeting notes (n=11) and a ‘most significant change’ discussion was summarised to reveal the capacity of the network to influence change.

Results:
The findings suggest that there was a change in members’ thinking and knowledge around competency-based assessment. Participants were empowered to make changes to redesign assessment systems. They valued the network of like-minded people and safe space in which to share ideas and approaches. Four universities have completely transformed their assessment approaches.

Discussion/Conclusions
Practice networks may offer avenues to support change in health professions education. There is a need for more robust evaluation of the impact networks have on leading change, and in particular, what works, for whom, under what circumstances and why.

“Do we have to debrief?!” *insert eye roll*:
How can debrief sessions improve team culture in a paediatric setting?

Kally Southern¹

¹Women’s and Children’s Health Network, Adelaide, Australia

Introduction/background:
Debrief is often seen as a necessity after a critical incident but is often underutilised as a tool for ongoing development of positive team culture. Initially debrief sessions were implemented after a period of increased patient acuity within one surgical ward. The benefits of debrief sessions were recognised by the other two surgical wards, with debrief sessions being initiated in these areas.

Aim/objectives:
To use a qualitative evaluation for the benefits of debrief for nursing staff in a paediatric surgical setting. Evaluation will focus on the impact debrief has on team culture, with specific considerations given to communication, feedback and morale among nursing staff.

Discussion:
After initial reluctance from some staff members, there is now wide acceptance of this initiative throughout the surgical wards. Extensive work was undertaken to implement this initiative with each ward. Debrief sessions range in duration from five to sixty minutes and structure varies between wards. Current impressions are that debrief sessions are indeed beneficial for nursing staff to improve team culture. However, formal evaluation is to be undertaken in early 2018, with results to be provided in this oral presentation.

Issues/questions for exploration or ideas for discussion:
What benefits would this bring to other clinical areas? Is this able to be replicated in other environments? Are there possible barriers that would need to be mitigated prior to establishing debrief sessions in other environments?
Why is teaching jurisprudence in medical school occurring when we are not teaching medicine in law school?

Shui-Shang Hsueh

The University of Western Australia, Australia; Kaohsiung Chang Gung Memorial Hospital, Taiwan.

Introduction
Teaching law in the medical curriculum is widely accepted and seen as essential, however law students are currently not taught medicine. It is suggested that the conflict between science and art can be solved by medical students who have been taught law. This has created some tension between the two professions. Therefore, communication about how to teach medico-legal issues in both courses should be encouraged.

Aim
The objective of this study is to compare the attitudes of medical students and law students toward medical malpractice.

Discussion
Teaching law has been widely implemented in medical schools, however teaching medicine in law schools does not currently happen. It has been highlighted that interdisciplinary education between medicine and law is required. If it is thought that medical students can comprehend the general concept of jurisprudence by teaching law in medical schools, why can’t law students be taught medicine? It is argued that the law curriculum is already full; however, the same could be said for medicine. In order to improve the dialogue between physicians and attorneys about epistemology, interprofessional education is suggested. The ultimate aim is to improve the patient experience.

Issues
Currently, there is limited discussion between physicians and lawyers about how medicolegal issues are taught at university.

Transformative Experiences: The power to improve global health & strengthen health associations

Elise Moore¹, Anna Iacone¹

GEMx (Global Educational Exchange in the Medicine and the Health Professions), a service of ECFMG (Educational Commission for Foreign Medical Graduates), Philadelphia, USA

Introduction/background:
Transformative student experiences offered through health professional associations and its institutional members can contribute to increased student medical knowledge, clinical skills, perspectives, access to different healthcare settings and global health. Learning opportunities can be achieved when intra-institutional partnerships are formed. Health professional associations offering transformative experiences can increase the value and recognition to their institutional members whilst strengthening sustainability and mission of its health professional association.

Aim/objectives:
To provide global insight on how international transformative experiences can sustain health professional associations whilst improving global health through student exchanges.

Discussion:
Health professional associations are formed for the purposes of knowledge sharing, network expansion, internationalizing health professions’ education and training, capacity-building and forming new partnerships. However, some health professional associations might encounter challenges with sustainability due to low institutional membership, budget constraints, low institutional member engagement within the network, limited resources, and the association’s diminishing status.
It is important for these associations to differentiate themselves. One way is to actively offer international transformative experiences to students through intra-institutional partnerships within the association. Qualitative assessments show that student engagement in international transformative learning experiences result in the sharing of their newly acquired knowledge, skills, and perspectives that they bring back to their home institutions, their increased commitment to providing health care in their country, and a commitment to care for the medically underserved population. Learning opportunities provided through institutional members can forge strong alliances, thus strengthening the sustainability and mission of health professional associations.

**PUNCCS: Paediatric [placements] for Undergraduate Nurses and Child-Care Centre Socialisation.**

Heather Buttigieg¹, Noelleen Kiprillis¹, Josie Tighe¹

¹School of Nursing & Midwifery, Monash University, Melbourne, Australia

**Introduction/background:**
In Australia today, trends towards smaller family sizes, the proximity of extended family member’s homes to each other, and the increased use of child care for young children, has reduced opportunities for social exchanges and caring responsibilities. Teenagers and young adults from past generations experienced socialisation and caring responsibilities within the family context. Family dynamics have changed. Consequently, some undergraduate nurses may have had limited or no experience of socialisation with infants/toddlers, and lack confidence relating to this population group. Relating to, communicating with, and caring for infants and toddlers requires some understanding of children’s socialisation needs.

**Aim/objectives:**
The project aims to provide paediatric socialisation experiences to undergraduate nurses; to facilitate the development of communication strategies within a childcare setting. The overarching objective is to determine if this socialisation experience helps to prepare students for ‘readiness for practice’ in a paediatric placement.

**Discussion:**
This teaching program will provide selected undergraduate students a unique opportunity to develop age appropriate responses and communication strategies with infants and toddlers. To achieve this, students will spend allocated time throughout their teaching weeks engaging with the children in a childcare setting. It is anticipated this experience will improve the confidence of undergraduate students in preparation for a paediatric clinical placement.

**An extended immersive pharmacy simulation game and students’ perceptions of their professional competencies**

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¹School of Pharmacy and Pharmacology and Menzies Health Institute Queensland, Griffith University, Gold Coast, Australia, ²School of Medicine and Griffith Health Institute for the Development of Education And Scholarship (Health IDEAS), Griffith University, Gold Coast, Australia

**Introduction**
A full-time extended immersive pharmacy simulation game was implemented as a capstone activity in a Bachelor of Pharmacy program. The game aimed to motivate and challenge students, encourage collaboration and teamwork, and provide an opportunity to practice repeatedly in a safe environment.

**Aims/Objectives**
To evaluate the simulation game through investigation of senior pharmacy students’ perceptions of their professional competencies, in intervention and comparison groups.
Methods
A questionnaire was developed from Australia’s National Competency Standards Framework for Pharmacists. Students rated themselves on a 5-point Likert Scale (‘not at all competent’ to ‘very competent’) against the 26 competency standards.

In 2016, Bachelor of Pharmacy intervention students were invited to self-evaluate their professional competencies before and after game participation. In 2017, the Master of Pharmacy comparison group did not participate in the game and self-evaluated their competencies at the start and end of their final semester. Pre- and post-questionnaires were linked to enable measurement of individual change.

Data were analysed using paired t-tests and Wilcoxon matched-paired tests. Institutional ethical clearance was granted (GU Ref No: 2016/594).

Results
Twenty six of the 27 (96.3%) intervention students and 29 of the 34 (85.3%) comparison group students completed the pre- and post-questionnaires. In contrast to the comparison group, intervention students perceived significant improvement \( p<0.001 \) in standard 3.2: implement the medication management strategy or plan and 3.6: promote health and well-being.

Conclusion
Participation by final semester pharmacy students in an extended immersive pharmacy simulation game significantly improved their self-assessment of professional pharmacy competencies.

Sustaining an education team
Lachlan Fieldhouse¹ Nisha Johnston¹ ²
¹General Practice Training Tasmania, ²Aboriginal Health Service, Hobart, Tasmania, Australia

Education is often a second, third or fourth professional role for many in the health profession sector? How do we engage with professional educators to attract, sustain and nurture individuals in a rapidly changing and complex space?

GPTT will outline some of the activities that have been successful for the organisation.

This will include:

- Sharing of the contextual framework for PD for Medical Educators (the why)
- Discussing the annual CPD program for Medical Educators (the how, when and where)
- Strategies to support the enjoyment of the role of Medical Educators (the fun and collegiality)
- Attracting and developing new Medical Educators from the GP Registrar and GP Supervisor groups (the sustainability)
- Implementing a targeted educational program for GP Registrars including Evidence Based Medicine, education and leadership content
- Sharing the benefits of our communities of practice in medical education and how these have evolved regionally, state-wide, interstate, nationally and internationally.

Creating sustainable health service redesign through integrated student placement models
Gillian Nisbet¹, Tanya Thompson², Justine Dougherty¹, Christina Eagleton³, Matthew Jennings², Belinda Kenny¹, Sue McAllister¹, Merrolee Penman¹, Maria Quinlivan⁴,
¹University of Sydney, Sydney, Australia ²South Western Sydney Local Health District, Sydney, Australia ³Fairfield Hospital, Sydney, Australia ⁴Westmead Hospital, Sydney, Australia
Introduction/background:
The pace of activity, level of acuity and complexity of patients admitted to hospital has increased over recent years. Allied health teams have demonstrated ongoing efficiencies in service models to deliver patient care services. However, staffing levels do not match increased demand. There is potential for students to improve the quality and quantity of patient care and enhance sustainability of service provision. Whilst innovative integrated placement models are not new, comprehensive evaluation is lacking within the acute care setting.

Aim/objectives:
This project will investigate how students can be effectively integrated into acute care services to positively impact service delivery, patient outcomes and student learning.

Methods
We adopted an embedded multiple case-design case study utilising participant focus groups, quality improvement patient experience surveys, and secondary administrative data sources.

Discussion
Our findings are likely to reshape how allied health acute care services are delivered when students are integral to service redesign whilst also gaining high quality practical learning experience on placement.

Issues/questions for exploration or ideas for discussion:

Fostering a learning culture in rural health care environments: A Tasmanian case study

Kristen FitzGerald1, Patrick O’ Sullivan1,2, Elizabeth du Bois1,2

1General Practice Training Tasmania, Hobart, Australia
2Dover Medical Centre, Dover, Tasmania, Australia

Introduction/background:
Health professionals often balance their learning needs with providing services in areas of workforce need. This is especially true in rural primary care. Small rural settings face barriers in providing quality educational experiences, which include balancing workload and teaching load for the supervisor.

Aim/objectives:
We explore these issues using a case study of a small rural practice in southern Tasmania. The town of Dover is the southernmost town of its size in Australia, with a population of 500. The Dover Medical Centre provides a general practice with two part-time doctors, a practice nurse and several visiting allied health professionals. The town also has a residential aged care facility and a local pharmacy.

Discussion:
Some of the enablers to fostering a learning culture in this case study include flexibility in working hours, flexible/remote supervision, and using local health services (e.g., pharmacy, nursing home) for interprofessional teaching. Barriers can include difficulty in attending CPD meetings; lack of local specialist services and time constraints. However, as a university rural teaching site, Dover also offers opportunities for the vertical integration of teaching across undergraduate and postgraduate levels.

Issues/questions for exploration or ideas for discussion:
How can we better harness local interprofessional teaching for undergraduate and postgraduate learners? How can you meet the needs of learners at different stages? What teaching roles can a GP registrar take on?

Discussion will focus on our findings, specifically the elements of an integrated placement model that ensure students’ contributions add value to services in the acute care context.
An ethical dilemma? How donor dissection impacts healthcare students’ perceptions of ethics

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2. Department of Physiotherapy, Monash University, VIC
3. Monash Centre for Scholarship in Health Education (MCSHE), Monash University, VIC

Introduction:
Donor dissection remains debated in anatomy pedagogy. While short-term anatomy knowledge gains may not be impacted by dissection, studies suggest that student anxiety levels are. Compared to clinical settings, donor dissection may provide a lower stress environment for introduction to complex ethical themes such as death and dying.

Aim/objectives:
To evaluate the longitudinal impacts of donor dissection on healthcare students’ perception of ethics.

Methods:
An 18-month longitudinal qualitative study with Monash University student participants from physiotherapy and medicine involved online discussion forums during semester (n=337) and inter-professional focus groups at the end of semesters (n=9).

Results:

Discussion: The longitudinal approach presented here suggests a strong impact of donor dissection on priming students’ focus on medical ethics. Across multiple themes students demonstrated that they considered their donor as a real patient and were able to link the treatment of their “patient” with related ethical themes, such as consent of the unconscious patient.

Conclusions: This research suggests that donor dissection may have broader impacts on students than simply knowledge acquisition. Further research will focus on developing interventions to maximise the benefit of these impacts.

PETAL; Providing Enrichment, Tending and Leadership for our Health Educators

Caron Hewett1, Sue Prosser1

1Central Coast Local Health District New South Wales Australia

Introduction/background:
The district wide training needs analyses conducted by the authors in 2016 and 2017 identified a need to build and maintain a resilient workforce. Similar to other health organisations the District has experienced a multitude of significant changes. Health educators are required to lead and implement
change thus it is critical to consider the wellbeing of educators. A model has been developed that nurtures resilience, provides safety and support and grows our current and future educators.

**Aim/objectives:**
Develop a pilot model of providing enrichment, tending and leadership for our health educators.

**Discussion:**
The pilot model developed includes multiple strategies. One strategy is the education content advisory groups (ECAG) a structured partnership between consumers, subject matter experts and experienced educators and trainers around specific training content. Its purpose is to develop training content that is best practice, contemporaneous, educationally sound, create sustainable delivery options and monitor and evaluate the effectiveness of the training. A second strategy is providing a network of trainers at different levels of knowledge and skills and providing group and individual support tailored to their individual learning needs. Another strategy is linking education and training mentors with those new to education roles across nursing and allied health. These strategies are being trialled and evaluated.

**Issues/questions for exploration or ideas for discussion:**
What is the best approach to nurture future education leaders?
How to balance and prioritise clinical need and education delivery?

**Health professional wellbeing and service provision: must we choose?**

Amy Seymour-Walsh¹

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**Introduction/background:**
A health professional human resource is two things: they are employed by a service to achieve its core business of health care provision, and they are also defined by their humanity: the ability to think, feel, and relate. They are used as a resource, but they are human. Sometimes, these two roles seem mutually exclusive.

**Aim/objectives:**
This session will explore the potential conflict between a health professional’s personal identity and their professional identity. Where these conflict, there may be an erosion of one or the other, and this may be adversely affected by the ongoing demands of service provision within a professional role.

**Discussion:**
Desensitisation is sometimes used by clinicians in an attempt for self-preservation within a clinical role, however this can create a barrier between the patient and clinician, and hinder communication and care. Emotional wellbeing also impacts teamwork, problem solving, immunity and healing, all of which may indirectly impact financial resources through sick leave and clinical error. Creating a culture of clinician wellbeing may require an initial cost and time lost from clinical duties, which a service may not be able or willing to allow.

**Issues/questions for exploration or ideas for discussion:**
Emotional wellbeing impacts on sustainable and holistic health care provision. But staff can still sometimes be perceived in two different ways: as a resource to perform a task (akin to a machine) or as an agent of compassionate care in light of their humanity. This dichotomy is of significance not only to practice, but to the professionalization of tomorrow’s workforce.
Accreditation role in improving Aboriginal and Torres Strait Islander Health outcomes

Narelle Mills¹, Vanessa Oelkers², Theanne Walters³, Michael Shobbrook⁴, Elaine Duffy⁵

¹Australian Dental Council, Melbourne, Australia ²Australian Health Practitioner Regulation Agency, Adelaide, Australia, ³Australian Medical Council, Canberra, Australia ⁴Council on Chiropractic Education Australasia, Canberra, Australia ⁵Aboriginal and Torres Strait Islander Health Practice Accreditation Committee, Melbourne, Australia

Introduction/background:
The Health Professions Accreditation Collaborative Forum (Forum) is a coalition of the accreditation authorities for the regulated health professions under the Health Practitioner Regulation National Law. Collectively we accredit over 740 health practitioner programs across 338 education providers.

Aim/objectives:
The Forum is working collaboratively to determine how programs of study prepare their graduates to support Aboriginal and Torres Strait Islander Peoples to achieve their health outcomes.

Discussion:
The Objectives and guiding principles of the Health Practitioner Regulation National Law Act 2009 (National Law) includes an explicit need to... ‘enable the continuous development of a flexible, responsive and sustainable Australian health workforce and to enable innovation in the education of, and service delivery by, health practitioners.’

The Forum is committed to understanding the role of accreditation in the effectiveness and sustainability of the Australian health workforce and its ability to be responsive to the specific needs of Aboriginal and Torres Strait Islander Peoples. In order to do this the Forum is undertaking a thematic review of all regulated health professions accredited programs, to develop a better understanding of approaches to how students in accredited programs are prepared at graduation to understand, treat and work with patients who identify as Aboriginal and/or Torres Strait Islander; and how Aboriginal and/or Torres Strait Islander Peoples are attracted into, and supported through these programs.

Issues/questions for exploration or ideas for discussion:
What is a sustainable model for education of health practitioners to positively impact on the health outcomes of Aboriginal and Torres Strait Islander Peoples?

The complex business of clinical education

Koshila Kumar¹ Adrian Schoo¹

¹Prideaux Centre for Research in Health Professions Education, Flinders University, Adelaide, Australia.

Introduction/background:
There is an extensive evidence base regarding the range of competencies and qualities that clinical educators need to be successful in their educational role within a complex and dynamic healthcare system. However, we know little about what complexity looks like in the everyday practice of a clinical educator.

Aim/objectives:
To provide in-depth understandings of how complexity is experienced by clinical educators and how they navigate this complexity within the educational domain.

Methods
In this exploratory qualitative study, we purposively sampled ten health professionals across medicine and nursing with a formal role in clinical education. Semi-structured interviews were used to gather
data. The data were analysed using thematic analysis and were guided by a conceptual lens informed by complexity science perspectives.

**Results:**
Preliminary findings showed that participants worked in a complex and multilayered educational system consisting of different agents and interconnected systems of practices. Clinical educators needed to negotiate the formal and informal clinical education system, understand the interconnectedness of the system in which they educated, and think about their own professional development to be able to lead or innovate within the system.

**Discussion and Conclusion:**
In this study we examined how clinical educators experienced complexity within the educational role. The implications of these findings relate to helping health professionals understand the complexity in their everyday practice and cultivate a more sustainable system mindset and approach to their educational role and practices.

**Session 2 Monday 2 July, 2018 13:00-15:00**

**2A**

**Student-engaged clinical audit curriculum: giving back to the clinical placement whilst using research skills.**

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**Introduction/background:**
Audit informs good clinical practice by contributing to quality improvement of patient care. While the theory of audit is covered by many medical courses in Australia and overseas, very little student-conducted audit has been described in the literature.

The evolution of a student-engaged clinical audit curriculum delivered in Australian General Practices, based on a deliberative evaluation approach, using many sources of qualitative and quantitative data will be reported. The curriculum evolved to obtain optimal outcomes for students and practices.

**Aim/objectives:**
To explore whether student-engaged clinical audit can be developed and delivered in Australian general practice, deliver valued skills training to students, and be valued by clinical supervisors.

**Discussion:**
Since 2011, 160 students have undertaken numerous audits and Quality Improvement cycles in our partner teaching practices. Practices have participated in approximately 24 audit cycles (six cycles per year) over that time.

The similarity between research and audit processes became more explicit over time, including the benefit of collaborative practice.

Student-engaged clinical audit and quality improvement has provided valued learning opportunities, whilst assisting practices to review the quality of the data entered into their electronic records and of their systems of clinical care.

**Issues/questions for exploration or ideas for discussion:**
Collaborative, student-engaged clinical audit can deliver valued learning outcomes whilst 'giving back' to their clinical placement provider. The community of patients cared for by the placement provider can also benefit from the quality improvement activities that result from audit. Audit also reinforces the steps of research planning and execution.
Sustainability through Flexibility: Harnessing your hospital library as a collaborative educational support resource.

Kirsty Rickett¹, Wai Wai Lui¹, Ruth Browne¹, Marcos Riba²

¹University of Queensland Library/Mater Misericordiae, South Brisbane, Australia. ²University of Queensland Library/School of Medical and Behavioural Sciences, St Lucia, Australia.

Background:
The reality of 21st century hospital medical education is one of exciting opportunities and increasingly tight resources. Today’s hospital staff are expected to be Clinicians, Educators, Students and Researchers and often lack time. Traditional educational models may not provide support for emerging research technologies, data mining and analytics to support them across these roles. Collaborative relationships are at the heart of economic sustainability and the traditional affiliations between hospital and universities are evolving, drawing on areas external to traditional educational models.

Aims/Objectives:
Four models of support provided by the UQ/Mater McAuley Library to Mater staff and University of Queensland medical students will be showcased, demonstrating how the library can be a useful adjunct to the traditional hospital education team in both the clinical area and in emerging areas of research support.

Discussion:
By flexible delivery, the Library can support the needs of hospital health professionals. This educational support is achieved through Modelling Behaviours, Mentoring, Facilitation and Instruction in various areas. The four pillars of support examined here include: Clinical support from an embedded librarian; Course support for a Mater Diploma of Nursing; Research support for the UQ/Mater Research Institute and Liaison support for UQ medical students at the Mater. These examples demonstrate how flexible collaborations can help support a sustainable education framework within a busy hospital.

Issues/Questions for exploration or ideas for discussion:
As budgets get tighter for hospitals, universities and libraries, what kind of support will be the most sustainable? What will be the future challenges?

General Practice Academic Registrar Post – Why is this important in medical education?

Elisabeth Robin¹, Sarvin Randhawa¹, Lizzi Shires¹
Rural Clinical School, University of Tasmania (UTAS), Australia

Introduction/background:
Academic General Practitioners can make important contributions to undergraduate medical education and research.

Aim/objectives:
To discuss the importance of developing the General Practice Academic Registrar extended skills posts

Discussion:
Registrars enjoy teaching medical students, which aids their professional development. However time pressures, perceived inexperience and lack of supervision are common barriers to increased involvement. Academic registrar positions provide dedicated medical education time, academic team support and supervision to conduct GP base research projects and teaching resources.
The role of the GP Registrar academic educator can encompass a range of activities, variable upon the needs of the particular student cohort and environment. Common tasks in the Rural Clinical School UTAS are GP research projects, GP-based clinical wave consulting, university based tutorial and teaching sessions, examiner roles, participation at conferences, mentoring, community engagement and resource development. All of these activities rely on registrars gaining insight into theories and methods of adult learning and a chance to put these teaching skills into practice.

Medical students endorse registrar teaching whom are likely to describe steps in clinical reasoning and act as professional mentors.

**Issues/questions for exploration or ideas for discussion:**
How to promote and provide opportunities to GP registrars to participate in Academic Posts to sustain the future of academic General Practice.

**Assessing the research knowledge and skills of medical students**

**Dragan Ilic**

1Monash University, Melbourne, Australia

**Introduction/background:**
Medical students’ understanding of research knowledge, and their skill to apply it in clinical practice, is a key pillar in medical courses within Australia. Few empirical studies have evaluated student competency in this context.

**Aim/objectives:**
The overall aim of this study was to assess the research knowledge and skills of medical students. Specific objectives were to determine whether there were any differences in knowledge and skills across clinical versus non-clinical years, and local versus internationally based students.

**Methods**
In total, 2461 students enrolled in the MBBS degree at Monash University were invited to complete a questionnaire evaluating their research and knowledge skills. A total of 313 students (12.7% response rate) completed the questionnaire, which consisted of 25 multiple choice and extended matching questions across 13 domains.

**Results:**
In total, 45.1% of responding students were enrolled in the non-clinical years of the degree, with 87.1% of respondents locally based. Non-clinical students scored 2.8 mean units lower compared with clinical students (p<0.001). Internationally based students scored 3.6 and 3.1 mean units lower compared with Australian-based students in the non-clinical (p<0.001) and clinical years (p=0.07). Self-reported previous experience in research methods, epidemiology or statistics did not affect scores.

**Discussion**
Medical students’ knowledge and skill in research increases with greater exposure, context and opportunity to practice over time.

**Conclusions:**
Further research is required to better understand the barriers and enablers that students face in translating their research skills and knowledge in the clinical setting, as they graduate to practicing clinicians.
Selecting the attributes that matter: Personal attributes at MMI interview predict clinical competence in specified domains of senior medical student OSCEs

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Introduction/background:
Previous academic results predict future academic performance, despite weaker correlations with clinical aptitude. In previous research we demonstrated that MMI selection interview was useful at predicting overall clinical performance, especially in final year.

Aim/objectives:
In this study, we investigated specific MMI selection attributes’ ability to predict clinical performance in competence domains in final year medical school OSCE.

Methods
Attribute matched MMI stations from two cohorts of medical students (2016-2017 graduates) were correlated with their final year OSCE scores (assigned competency descriptors from the ACCLAIM collaboration) using linear regression.

Results:
MMI interviews predicted final year OSCE performance with stronger correlation than previously reported ($r^2=0.212$; $P<0.0001$). MMI selection attributes also showed a significant positive correlation with overall OSCE performance – specifically, stations assessing insight into medicine showed positive correlation with overall performance ($r^2=0.12$; $P<0.0001$) and ethics/law domains ($r^2=0.162$; $P<0.0001$). MMI stations assessing problem solving demonstrated positive correlation with investigation planning ($r^2=0.112$; $P<0.05$) and patient centred care ($r^2=0.121$; $P<0.001$). Students’ performance on leadership stations correlated with overall OSCE score ($r=0.12$; $P<0.008$), and Professional Discourse ($r^2=0.153$; $P<0.003$).

Discussion
This analysis confirms the predictive correlation of MMI interview with final year OSCE performance. Selection attributes specifically correlate with clinical performance domains, implying that MMI does not simply assess communication, but also the underpinning attributes that form foundations for clinical skill development.

Conclusions:
Predicting clinical performance is a clear goal in medical school admissions. MMI interviews can aid student selection by predicting those who will perform well in future clinical assessments and identifying key personal attributes that underpin future clinical competence.

Influences on selection to surgical training in Australia and New Zealand

Zaita Oldfield¹

¹Royal Australasian College of Surgeons (RACS)

Introduction/background:
Selection of surgical trainees is complex. The aim of selection is to admit those who are most likely to succeed in surgical training and beyond. Those responsible for selection grapple with assessing candidates’ current skills and attributes, and with ascertaining their likely future performance. Limitations of, and tensions between interacting elements—human agency, requirement specifications, instruments, processes, influences—in selection to surgical training, mean that the
long-term outcomes of selection cannot be assured. This presentation identifies principal influences in selection to surgical training and discusses interrelationships between them.

**Aim/objectives:**
Identifying and analysing the many components of selection allows us to consider their likely influences on selection outcomes and offers the potential to maximise their positive contributions.

**Discussion:**
Regulatory and social frameworks, preferred attributes of surgeons and trainees, intrinsic efficacy and implementation of selection instruments, the performance of selectors and candidates, and the intensity of competition all impact on selection implementation and outcomes. Although in many respects such influences are compatible, they can also act in divergent ways—for example, increasing a test’s reliability may decrease its feasibility, ‘fairness’ to one applicant cohort may countermand fairness to other cohorts. Those responsible for selection must consider the breadth of complex interrelationships and conflicting priorities between factors to develop selection instruments and protocols to suit local conditions.

**Issues/questions for exploration or ideas for discussion:**
What do we know about addressing these issues in order to optimise selection outcomes and minimise the consequences of imperfect selection processes?
How do we prioritise between competing influences?
How do you make selection ‘fair’?
How do you establish veracity?
How much evidence is enough?

**Resources, Research, and Reality: Developing and applying Behavioural and Scenario based questions in your Interview process from MMI to Standardized interviews**

Kelly L Dore¹, Lyndal Parker-Newlyn²

¹ McMaster Program for Education Research, Innovation & Theory (MERIT), Departments of Medicine and Obstetrics & Gynecology, McMaster University, Hamilton ON CANADA
² School of Medicine, Faculty of Science, Medicine and Health, University of Wollongong, NSW AUSTRALIA

**Introduction/background:**
This session is intended for health profession faculty and staff who are involved at all levels of learner’s trajectory in selection or the measurement of personal/professional qualities whether they use interviews or MMIs. This session will explore implications of resources and research and how to operationalize the most effective and efficient station/question format for selection interviews, screening and professionalism assessment. Participants will learn aspects of question development which influence the quality of the applicant information obtained and how these principles can be applied during training. Through this interactive session, participants will develop an understanding of the research of situational judgement assessments and behavioural descriptor questions used in selection and training.

**Purpose and outcomes:**
By the end of this session participants will:

1. Understand the evidence regarding question format and various selection measures
2. Apply aspects of question format to develop more effective questions
3. Integrate the principles from selection across in-program assessments
4. Apply principles taught to develop their own selection blueprint

**Issues for exploration or questions for discussion:**
- Applying frameworks to developing questions that assess personal professional qualities.
- Incorporating program specific missions, values and personal attributes in the process through the application of a selection blueprint
• Developing a program specific selection model with the understanding of the potential incremental value the different measures.

Outline of workshop activities
In an interactive small group style, the participants will workshop blueprinting methods, practice developing questions, discuss the evidence and share their experiences, while brainstorming solutions to potential barriers to implementation.

2B

A sustainable interprofessional student clinic

Susan Waller¹, Anne Coxall²

¹ Monash University Department of Rural Health, Moe, Australia ² Latrobe Community Health Service, Morwell, Victoria

Introduction/background:
In 2016, all external Commonwealth government funding for simulation was discontinued and services were required to consider the value of sustaining simulation activities. At Latrobe Community Health Service, the student led simulation clinic remains an integral part of the Learning Organisation which supports an interprofessional culture.

Aim/objectives:
To ensure the sustainability of the student led simulated clinic it was necessary to identify all stakeholders and to reinforce the value added by continuation of the activity. Collaboration between the independent community health service and the regional University Department of Rural Health enabled support and coordination of the administration and implementation of the simulated clinic as a mandatory requirement on student placement.

Discussion:
The model for simulated clinics has required revision and appointment of a regular facilitator and revised format to ensure that most students are able to be included. Support from the health service executive and specific policies and procedures were required to strengthen participation and ensure sustainability. The role of student education as integral to the positive culture of the community health service requires continual evaluation and promotion.

Issues/questions for exploration or ideas for discussion:
As community health services head further into a the new funding environment of user pays services, support for simulation as a mandatory activity on placement and even student placements may be threatened. The quest for sustainability continues.

Crossing the road at night – Running a multi station scenario between the hospital and a skills unit

Dale Sheehan¹, Charlotte Stott¹, Sharon Sitters¹, Joanna Thorogood¹, Kait O’Callaghan¹

¹ Unitec – University of Technology, Auckland, New Zealand

Introduction/background:
Unitec is a one of three providers of Medical Imaging Technology (MIT) education in New Zealand. Clinical practice serves as the pivotal component that brings the knowledge of medical imaging and professional perspectives together to deliver work ready graduates. To better prepare students for their placement we sought to develop a multi station simulation but faced challenges as we have limited imaging simulation equipment’s and what we have is out of date.
The solution was to use our simulation centre and a nearby radiology room in an associate hospital in close proximity as a sustainable and practical alternative.

The 6 station simulation focussed on giving students the opportunity to develop a variety of technical and psychomotor skills, communication skills, patient safety awareness and professional attributes for successful transition into the clinical arena.

To determine the effectiveness of this simulation students were surveyed at three intermittent points; immediate post-simulation, midway through their first clinical placement, and at the end of the academic year. End of placement feedback was collected from the clinical tutors and industry stakeholders.

**Aim/objectives: The presentation will:**
- Describe the multisite simulation
- Present the outcomes of the evaluation
- Discuss issues of sustainability

**Discussion:**

**Issues/questions for exploration or ideas for discussion:**
How sustainable is the practice of negotiating space in patient care areas of a hospital at night in order to run undergraduate simulations?
How sustainable are costly simulation units in a specialty where technology is rapidly changing?

**Interprofessional student observation placements: facilitating collaborative practice**

*Jeanie Weber¹, Jason Whittingham¹, Amanda Lillie¹, Noelyn Perriman¹.*

¹Calvary Public Hospital Bruce, Canberra, Australia.

**Introduction/background:**
The importance of interprofessional collaboration and information sharing has led to growing emphasis on interprofessional learning for health care students. Supporting interprofessional collaboration and learning maximises the skill, knowledge and attitudes in health care workers to strengthen interprofessional collaboration and improve health outcomes.

**Aim/objectives:**
To investigate the perceptions and experiences of physiotherapy and nursing students undertaking one day interprofessional clinical observation placements.

**Methods:**
Physiotherapy and nursing students attending Calvary Public Hospital Bruce between June 2016 and November 2017 were invited to participate in one day interprofessional placements. Qualitative and quantitative feedback was obtained through pre and post surveys.

**Results:**
69 students experienced an interprofessional day placement with survey completion rates of 77% (pre-placement) and 65% (post-placement). Prior to observation placements, students reported minimal exposure to interprofessional learning (75%). 90% of students expected learning benefits and 85% of students knew little of the observed professional role. Post placement, 96% of students stated the experience benefited their learning, 71% reported they knew ‘quite a lot’ regarding the profession observed, and 89% stated the experience will strengthen future working collaboration. Qualitative data demonstrated a positive and valuable experience.
Discussion:
The data highlights a shift in understanding of the students about the observed profession. The results demonstrate strong student support for the project with the majority reporting benefits that will assist in future interprofessional health care experiences.

Conclusions:
Inclusion of interprofessional placements can successfully provide students with the opportunities to work with professionals outside their disciplines developing collaborative skills and professional role understanding.

From doctor thought bubble to patient’s receptor site: An interprofessional pharmacotherapeutics teaching approach for future prescribers

Dr Andy Hodson¹, Sarah Herd¹

¹University of Tasmania Faculty of Health

Introduction:
Traditional delivery of pharmacotherapeutics via “pure” pharmacology pre-clinical then overlayed with clinical application – no longer meets the needs of medical graduates. Increasing number, complexity of drugs and reduced access to bedside teaching, amongst other factors, have led a drive to revise this traditional approach. We have developed an inter-professional program for year 4/5 students at the Launceston Clinical School (LCS), UTAS.

Aims:
Prescribing is a fundamental skill. All UTAS medical students are required to complete set modules from the National Prescribing Service. At LCS these were augmented by pharmacology lectures in a traditional format. Further pharmacology came incidentally and without co-ordination via specialist didactic and incidental teaching.
We present a program prepared by a clinical pharmacist and experienced GP. Weekly sessions are developed at two levels. The primary level is teaching drug therapy in line with current curriculum. The subtheme is to develop safe, patient focused, referenced and contemplative prescribing with career long sustainability.

Discussion:
A developed syllabus comprised of lecture notes, reading list and scenarios are available prior to the session via the electronic learning platform. Initial sessions concentrate on basic pharmacology, writing prescriptions with the subtheme of identifying reliable source material (especially electronic). As the year progresses these basic tenets are reiterated. Sessions have an opening address then small group work (flipped classroom) on case based scenarios involving decision making and communication. Cases may be used over several sessions allowing layering and complexity similar to real life. This dynamism creates a platform for option discussion with referenced comment and open acknowledgment that there can be more than one “correct” answer.

Questions for exploration:
We see this program as more sustainable than prior teaching. We are fostering independent patient centred prescribing. A lower rate of prescribing error lifelong would be an ideal outcome but not easily measured. We have access to the UK developed “Prescribing Skills Assessment” and plan to monitor the progress of our cohorts through this tool.

Do rural universities produce rural dentists? A pilot study examining Australian dental graduates of 2015.

Lisa Lim, Shaiel Parikh, Nadia See, Kaejenn Tchia¹

¹College of Medicine and Dentistry, James Cook University, Cairns, Queensland, Australia
Introduction/background:
Evidence suggests a maldistribution of dentists exists in Australia where there is a higher proportion of dentists working in metropolitan areas compared to rural areas.

Aim/objectives:
To compare the practice locations of dental graduates from rural universities with metropolitan universities and highlight the factors and intentions that influence the practice location of newly graduated dentists in Australia.

Methods
Bivariate two-sided Chi-square tests for trend analysis involving 2016 graduate practice location and university attended (metropolitan or rural) as well as demographic and practice intentions against metropolitan and rural practice locations.

Results:
2015 graduates from three rural universities (JCU, CSU, La Trobe) were more likely to practice in a rural area (MM 3-6) compared to three metropolitan universities (UQ, Griffith, UoA) (p = 0.044). Demographic and practice intentions for working in rural areas (MM 3-6) were multifactorial. On the other hand, “I did NOT want to work rurally because of family/friends” (p = 0.040) was the primary intention for metropolitan practice (MM 1-2).

Discussion
Evidence suggests rural graduates are more likely to work in rural areas compared to metropolitan graduates. Intentions for rural practice included exposure to environments that challenge an individual’s comfort zone, whereas intentions for metropolitan practice were family/friends.

Conclusions:
Dental students who attended a university with a rural focus were more likely to work in rural areas upon graduation. New university dental programs are contributing significantly towards satisfying the rural workforce needs. Further research is recommended to assess the retention of rurally-trained dentists and to explore the range of reasons why graduates opt for metropolitan or rural practice locations.

Doing Music Together: an opportunity for learning, sharing, and creating for occupational therapy students, practitioners and community.

Daniela Castro de Jong1, Georgia Pike2

1University of Canberra, Canberra, Australia 2Australian National University, Canberra, Australia

Background:
Music has positive effects on health and quality of life. Communal singing has therapeutic effects including increased sense of belongingness and personal joy. Occupational therapy has barely explored music usage in professional education and practice. This presentation explores the collaboration between two academic centres: an occupational therapy program, and a music engagement program which implements intergenerational and communal outreach in schools, aged care facilities, and community settings using a socio-altruistic approach.

Objectives:
To describe the collaboration between the occupational therapy and music programs, and to explore the impact of music outreach from a health and wellbeing perspective of use to educators, students, and clients.

Discussion:
Annually since 2014, a cohort of Occupational Therapy students engages as participants and facilitators of participatory music outreach sessions in caring contexts. Revealed through formal
evaluations, un-solicited feedback and educators’ reflections, students have shown that they consistently value the sessions as an authentic learning opportunity. Outcomes include: positive early encounters with clients; development of basic professional communication skills; ‘doing-together’ as an engagement strategy; and consideration of the use of the arts in future practice. Graduates from the program have implemented similar programs in healthcare contexts, demonstrating sustainability in the skills received during the sessions.

Questions for exploration:
Further research is required to evaluate the usefulness of the skills and resources gained in the sessions once students graduate. Comparative research could be conducted to assess whether these approaches might be of use to other healthcare disciplines within a diverse range of clinical settings and workplaces.

“Why develop an interprofessional student education program in an acute tertiary paediatric and women’s health service when the universities should provide it?”

Danni Boyd-Turner¹, Kylie Eddy¹

¹Centre of Education, Women’s and Children’s Health Network, Adelaide, South Australia

Introduction/background:
The Centre for Education and Training (CET) is responsible for the planning, delivery and governance of work integrated teaching and learning within the Women’s and Children’s Health Network (WCHN). The CET facilitates and coordinates nursing and midwifery student placements for the WCHN and has positive relationships with allied health and medical education student placement programs.

Aim/objectives:
To outline the rationale and process for developing the content of an interprofessional student education program based in the WCHN.
To discuss the methods and strategies used in delivering the program.

Discussion:
Student facilitators and coordinators from a range of health professions were consulted and they identified that students required specific interprofessional education in order to enhance and contextualise their clinical placement experience at the WCHN. CET staff surveyed the student facilitators about topics and collaborated in partnership with them to develop an education program suitable for all student health professionals. A range of methods and strategies were utilised to facilitate the learning needs of the students. Evaluation results show that students overwhelmingly value the program.

Issues/questions for exploration or ideas for discussion:
What education was identified as important for health students when they commence their placement at the WCHN? What were the opportunities and barriers in developing the program?

The Interprofessional Passport: An innovative model for overcoming issues of sustainability in clinical interprofessional education

Peter Brack¹, Stacey Baldac² (presenting author underlined)

¹,² Northern Health, Epping, Australia

Introduction/background:
Northern Health has a long history in delivering structured interprofessional education (IPE) activities for students on clinical placement, however; sustaining these programs has been challenging due to logistical issues of bringing learners together and securing recurrent funding for staff and facilities. To
overcome these issues we have designed an innovative new interprofessional education program called the ‘Interprofessional Passport’. The Interprofessional Passport is a suite of interprofessional education activities that are selected by the learner based on their learning needs and available time. Through IPE the model aims to increase students’ interprofessional capability in the clinical context and readiness to enter the workforce.

**Aim/objectives:**
To present an innovative model of IPE that can overcome common barriers to sustainability in the clinical setting. Evidence from the literature and the previous experience of IPE at Northern Health will be utilised to support the development of the model.

**Discussion:**
Discussion will focus on the how the Interprofessional Passport can overcome common barriers to IPE in the clinical setting. Potential benefits in relation to decreasing resources required, reducing student time out of clinical settings whilst on placement, delineating the role of Education and Placement Providers in clinical IPE and alignment with adult learning principles will be explored.

**Issues/questions for exploration or ideas for discussion:**
The benefits and pitfalls of decentralising IPE through flexible learner-led resources will be explored. Ideas for adapting this type of model for use with health professional staff and incorporating existing IPE activities into the model will also be discussed.

**Playing in the IPE “sandpit” using synchronous videoconference technology.**

*Narelle Henwood¹, Judith Broadhurst¹, Leonie Lorien¹, Sarah Blunden².*

**Introduction/background:**
Synchronous videoconference technology (SVCT) is increasingly being used for teaching in the health professions. We used SVCT to “play together nicely” as academics and students in the IPE virtual “sandpit”. Students from two regional university campuses in three allied health disciplines (occupational therapy, speech pathology and clinical psychology) used SVCT to develop aspects of three teamwork competencies in four Interprofessional Education Sessions. These focused on three domains of the Interprofessional Competencies Framework proposed by Orchard and Bainbridge (2010): interprofessional communication, role clarification, and team functioning. Students were allocated to a small IPE team to discuss cases with a facilitator, using SVCT. Student perceptions of the IPE experience were measured to enhance curriculum. Outcomes expected are improving student competencies for effective interprofessional teamwork in health care settings.

**Aim/objectives:**
The two aims of the IPE sessions were for students to understand their own role and that of other disciplines, and to collaborate as a team to plan shared treatment for the cases.

**Discussion:**
Case studies were developed using scenarios suitable for students’ level of knowledge. Students participating (n=39) were occupational therapy, speech pathology and clinical psychology students at on and off campus sites. Teaching and student interaction was streamed by SVCT to all locations. Quantitative and qualitative data was gathered from participants. Preliminary pre-post student evaluation data for two cohorts was analysed. Academics reflected upon potential improvements for using SVCT in the IPE context.

**Issues/questions for exploration or ideas for discussion:**
Implementation of student suggestions, staff reflections and literature recommendations for sustainability of IPE using SVCT will be discussed.
Interprofessional simulation education in Allied Health to improve recognition and response to clinical deterioration

Kate Lawlor¹, Rod Sturt¹

¹Alfred Health, Melbourne, Australia

Introduction/background:
An increase in medical emergency calls coinciding with a review of Riskman data revealed inconsistencies in Allied Health staff abilities to recognise and respond to clinical deterioration.

Aim/objectives:
To develop and pilot an education package, targeting Allied Health staff recognition of and confidence in the management of deteriorating patients and to improve escalation processes through enhanced communication and teamwork.

Methods
The education package included: a review of local guidelines; completion of an online training package and participation in an interprofessional simulation training session. Participants were surveyed pre and post-training.

Results:
At baseline participants rated their knowledge and understanding of local guidelines as either ‘some’ (50%) or ‘average’ (50%). Following education, a majority of staff ‘agreed’ or ‘strongly agreed’ they had the knowledge and skills to identify changes in respiratory rate, blood pressure, heart rate and temperature and 100% of staff ‘agreed’ or ‘strongly agreed’ they had the skills to identify changes in oxygen saturation and conscious state. Additionally, 88% indicated they were either ‘quite confident’ or ‘highly confident’ in escalating a patient's care. Additionally, 75% felt ‘quite confident’ in detecting and responding to clinical deterioration.

Discussion:
Measures of immediate changes in participant knowledge and confidence are encouraging. Translation of these improvements into clinical practice over the longer term would be important to measure in future work.

Conclusions:
This pilot education package increased participants’ awareness of local guidelines, increased skill levels in assessing vital signs and improved confidence in recognising clinical signs of deterioration and escalating care.

A team-based learning (TBL) activity on food labelling delivered to medical students.

Robyn Perlstein¹, Scott McCoombe², Janet McCleod², Colin Bell², Caryl Nowson¹

¹School of Exercise and Nutrition, Deakin University, Australia; ²School of Medicine, Deakin University, Australia,

Introduction/background:
Nutrition is under-represented as a content area in Australian medical courses. We have been actively increasing the nutrition content of Deakin University’s medical curriculum since 2011. We have developed some innovative learning activities to engage medical students in everyday nutritional issues that the community commonly encounters. As it is difficult for patients to interpret food labelling and understanding of the nutritional content of the food purchased and eaten is essential to following the dietary guidelines, we developed a team, based learning activity (TBL) to engage and inform medical students.
Aim/objectives:
To develop, deliver, and evaluate a TBL activity on food labelling for medical students.

Discussion:
Forty six students in their first year of the post graduate Bachelor of Medicine Bachelor of Surgery (BMBS) at Deakin University, participated in a one hour team based learning session in 2017. The TBL focused on the health star rating and students completed practical exercises to calculate the health star rating of a number of common foods. Knowledge was assessed pre and post the activity and captured using an online system (Socrative; MasteryConnect) Students demonstrated a significant increase in food labelling knowledge and were active participants in the activities and discussion. The development and implementation of these types of nutrition learning activities can assist medical students to achieve nutrition competencies.

Sustainability and advancement of skills and knowledge through continuing professional development – what’s hot and what’s not?

Heather Grusauskas

Eastern Victoria General Practice Training (EVGPT) Victoria, Australia.

Introduction/background:
What is continuing professional development (CPD)? CPD is generally understood to be an activity that contributes to professional growth and development. Such activities can include continuing education (pursuing credentials through educational programs); participation through professional organisations (attending conferences, serving on committees); research (presenting research findings to others); improving job performance (new developments in your area); or through increased duties and responsibilities (taking on new challenges in your workplace). More recently CPD has become a requirement of many professional bodies. In Australia CPD is now a requirement of Australian Health Practitioner Regulation Agency (AHPRA).

Aim/objectives:
The aim of this presentation is to look at a group of general practice managers currently working in training practices, to identify their learning needs.

Discussion:
Practice managers have various roles in the management and administration of patient care. In addition to these roles, those who are also involved in training have defined roles and responsibilities relating to both the general practice registrars and also their training organisations.

Issues/questions for exploration or ideas for discussion:
The practice managers have multi-faceted roles and very little time for CPD, so what strategies can be put into place to ensure that they remain engaged in the CPD process?

Monday 2 July, 2018 15:30-17:00

3A

Clinical educator self-efficacy and its relationship with student evaluations of clinical teaching

Brett Vaughan

1Victoria University, Melbourne
Introduction/background:  
Student evaluations of teaching are commonplace in health professions education. However, self-evaluation of teaching is less common. Multiple sources of information can help develop an educators’ understanding of their teaching. Self-efficacy is the ability to manage different situations and such a judgement may or may not be accurate.

Aim/objectives:  
Evaluate clinical educator self-efficacy in a student-led teaching clinic and explore its relationship with student’s evaluations of clinical teaching.

Methods  
Clinical educators in the osteopathy program at Victoria University were invited to complete a self-evaluation version of the Osteopathy Clinical Teaching Questionnaire (OCTQ) and the Self-Efficacy in Clinical Teaching (SECT) questionnaire. Students in the VU program completed the OCTQ for each of the clinical educators they worked with during semester 2, 2017.

Results:  
Responses were received from 37 clinical educators. OCTQ self-evaluation was higher than student’s evaluations for 32% of the clinical educators. These clinical educators demonstrated significantly higher SECT subscale scores (effect size >0.42). Age, gender, teaching qualification, and years practicing or years as a clinical educator were not associated with SECT subscale or OCTQ self-evaluation scores.

Discussion  
Educators who rated themselves highly on the OCTQ (compared to student ratings) were ‘more confident’ in their ability to manage and adapt to the requirements of clinical teaching. Demographic variables were not associated with SECT subscale or OCTQ self-evaluation scores suggesting other factors may influence clinical teaching self-efficacy.

Conclusions:  
Higher clinical educator self-efficacy appears to be associated with positive teaching self-evaluation. Reasons for this difference between ‘positive’ and ‘negative’ teaching self-evaluations requires exploration.

Online versus face-to-face education for medical practitioners: can one fully substitute the other?  
Dr. Chris O. Ifediora (MBBS, MPH, FRACGP)

Background:  
Incorporating online teaching options to traditional medical education has continued to gain broad acceptance and implementation, providing complementary and flexible options to hospitals, medical organisations and education providers. Few studies have compared both formats as it concerns medical practitioners, and little evidence exists to prove that the online approach matches the f2f method on important areas that may affect the overall quality of education and healthcare delivery. This study explores this.

Methods:  
A quantitative survey targeting 881 doctors exposed to both the online and f2f teaching sessions which offer the same contents, over a 12-month period. The surveyed doctors work in the Australian after-hours house-call (AHHC) industry.

Results:  
Eighty-nine responses were received. Ten (11.2%) participated exclusively online, while 23 (25.8%) did so by f2f. Fifty-two (58.4%) engaged through both modalities, while the remainder either did not participate at all, or played back recorded sessions. There were no statistical differences based on gender, specialty and post-graduate fellowship status of the participants, and their perceptions were the same on the teaching structure, contents, and duration of the education programs.
However, online-only participants reported more satisfaction with the program regularity (OR 6.90; p < 0.01) and its adherents were more likely to combine AHHC duties with regular-hours general practice (OR 0.15; p < 0.02). Conversely, f2f-only doctors were more likely to be more junior and younger, with age <40 years (OR 3.85; p < 0.01). They also admit easy access to effective teaching environment (OR 4.07; p < 0.01), while receiving better feedbacks (OR 3.75; p < 0.01).

Conclusions:
On multiple areas, no differences exist in the medical education delivered by online and the face-to-face methods to doctors and both should be encouraged to add flexibility. However, concerned stakeholders should ensure that younger, junior practitioners who tend to need feedbacks on their jobs, participate more in the f2f sessions.

Keywords: Doctors, teaching, medical, education, online, face to face, traditional, learning.

‘Just-in-time’ training: an innovative education approach to recognising and responding to clinical deterioration.

Rick Peebles, Ms Jo Schlieff, Mrs Amanda Peat.
Cabrini Health, Melbourne, Australia.

Introduction/background:
Failure to respond to clinical deterioration is multifactorial, involving knowledge, skills and behavioural components. Detection and escalation of deterioration education, in simulated environments, may be resource intensive, result in biased performance and removes human factors and barriers to escalation that exist in real clinical settings. An innovative Clinical Deterioration Educator (CDE) role provides in situ ‘just-in-time’ education to staff at the bedside, using real patient encounters to guide and contextualise content.

Aim/objectives:
The CDE role sought to promote patient safety and mitigation of risk through education in authentic learning contexts, while measuring staff engagement in point of care education.

Discussion:
The point of care methodology was a more cost effective model of education delivery when compared to large group clinical deterioration workshops conducted in 2015. Data obtained from education encounters with staff has been utilised to inform organisational education curriculum development as well as feedback on the use of clinical policies within the clinical setting. Feedback from staff indicates improved knowledge, skills and changed behaviours when recognising and responding to clinical deterioration. Feedback from consumer focus groups welcome the presence of education at the point of care and suggest the CDE presence contributes positively to patient satisfaction. Formal evaluation of the program is underway to determine changes in staff confidence in recognising and responding to clinical deterioration.

Issues/questions for exploration or ideas for discussion:
Is simulation the best environment for clinical deterioration education? Should liaison/outreach services have an educator involved in the team?

Sustainable teaching – Student Led Learning in Medicine (SLLIM pickings)

Adrienne Torda.

1University of New South Wales, Sydney, Australia
**Introduction/background:**
The aim of educators is to engage students in learning characterised by a drive to understand underlying principles and concepts by grappling meaningfully with content. At the same, we try to move medical students toward acquisition of measurable competencies and the ability to apply knowledge in a real-life work environment. Medical ethics is initially quite a challenging topic area for medical students to engage with early in the curriculum, as they don’t always have the ability to articulate their own views, nor the future sight to see relevance to clinical decision making.

**Aim/objectives:**
The aim of this project was to pilot a podcast series with student led topics. This allowed students to develop and expand their knowledge in a personalised way, that created space for research, analysis and discourse on a particular topic and which also matched the preferred learning styles of millennials (used modern technology, was flexible, portable, immediate and involved engagement with peers).

**Discussion:**
SLLIM pickings is a podcast series started in 2017, which was voluntary and invited students to suggest topics and participate in small group discussions (recorded as podcasts). This approach matched very closely the Community of Inquiry model, developed by Garrison et al. which describes the space created by the overlap between cognitive, social and teaching presences which allows students to project their own characteristics into an area of discourse to create personal meaning and understanding. Feedback on this project was overwhelmingly positive and topics suggested had an 80% alignment with curriculum based topics.

**Medical student perceptions of GP placements**

**Katherine Davis¹**, **Emily Doole¹**, **Colleen Cheek¹**, **Lizzi Shires¹**, **Sarah Prior¹**

¹University of Tasmania, Rural Clinical School, Burnie, Tasmania, Australia

**Introduction/background:**
Positive experiences of general practice in primary medical training are likely to impact positively on a medical student’s future career choice. Guidelines are available for teaching in general practice, but there is little literature describing the perceptions of medical students.

**Aim/objectives:**
We aimed to translate those features medical students attributed to a positive general practice placement into practical ways to build a supportive teaching and learning environment in this setting.

**Methods:**
Focus groups were conducted with medical students who completed longitudinal rural general practice placements. Questions explored their experience and perception of positive general practice clinical placements, and how these experiences impacted their consideration of general practice as a future career choice. Transcribed data was analysed thematically and embedded into an accepted conceptual framework to enhance the transferability of findings to other settings.

**Results:**
21 of 22 (95%) eligible final year students participated in the interviews. Medical students perceived the most positive clinical placements in general practice were those in which: they felt valued and respected as part of the team; had opportunity to practice procedural skills and independent consulting; and were supported by a general practitioner who demonstrated an interest in teaching, provided constructive feedback and encouraged student-directed learning.

**Discussion:**
Teaching practices were mapped to the key constructs of Self-Determination Theory: autonomy, competence, and relatedness, fulfillment of which is likely to increase medical student motivation to integrate learning.
Conclusions:
Positive clinical placements are likely to promote student wellbeing and identification with general practice as a future career choice.

Student Digital Interprofessional Learning Client Documentation (D-IPL Client Docs) Activity: Outcome and Results

Michelle Parker-Tomlin23, Christine Randall , Elizabeth Cardell1 2, Andrea Bialocerkowski1 2

School of Allied Health Sciences, Health Group, Griffith University, Queensland, Australia
Menzies Health Institute Queensland, Griffith University, Australia
3 Health Institute for the Development of Education and Scholarship (Health IDEAS), Griffith University, Queensland, Australia

Introduction/Background:
The contemporary health workforce requires proficiency in working interprofessionally, using digital technologies, being medico-legally aware, client centred, and reflective. This requires new approaches to preparing health students for practice.

Aim/Objectives:
D-IPL Client Docs aims to addresses these health workforce needs to enable post-graduation employability, as well as developing health professional identity; interprofessional role delineation and communication skills; competence in medico-legal client documentation, and confidence in using digital platforms.

Methods:
Two activity tasks (#2 and #3) were reflective journals which were qualitatively assessed for affective learning using the Griffith University Affective Learning Scale (GUALS; scale 1 = no affective learning to 7 ‘characterisation’). Qualitative thematic analysis was also conducted on the task #3 journal to examine the following research questions; 1. Activity value. 2. Interprofessional learning (IPL), 3. Digital and documentation learning. 4. Usability of the online platform.

Results:
GUALS indicated that the majority of students (occupational therapy, rehabilitation counselling and speech pathology) level 4 (valuing). This level provided evidence of student’s going beyond the recognition of the personal impact of the activity to an appreciation that the experience enabled them to learn something about themselves that they see as valuable or important. Thematic analysis provided evidence of effective IPL, while indicating some challenges of simulating a case conferences and providing a usable online platform.

Conclusion:
This activity in its present form is able to provide a simulation of digital client records, and facilitate blended learning. The activity also provided significant IPL through simulated activities.

Strategies for clinical partners and universities to enhance student engagement in non-metro clinical placements: A mixed methods study

Alison Francis-Cracknell1, Shari Maver2, Fiona Kent1, Emma Edwards2, Ross Illes1

1Monash University, Melbourne, Australia 2 Barwon Health, Geelong, Australia

Introduction/background:
There is increasing demand for physiotherapy clinical placements across Australia. University’s and Health Services need to better address challenges physiotherapy students and educators face in non-metropolitan placements to enhance these experiences, build capacity and contribute to addressing challenges in recruiting and retaining the non metro health workforce.

Aim/objectives:
To investigate strategies Universities and Health Services can provide to maximise physiotherapy student engagement in non-metropolitan placements

Methods
The study used a mixed method research design incorporating focus groups and surveys. First year physiotherapy students from one university were surveyed pre-clinical education (n = 26). A survey and focus groups was conducted with third and fourth year students post non-metro clinical placements (n=39 survey, n= 25 focus group). Two focus groups were held with clinical educators from non-metropolitan clinical sites exploring student engagement at these placements (n=15). Quantitative data was collected and thematically analysed for student and clinical educator perspectives.

Results:
Student concerns regarding non-metropolitan placements include finances, change in living situation and perceived inferior quality of clinical education. Themes identified included individual factors, clinical experience, logistical challenges and strategies for success.

Discussion
Challenges identified by physiotherapy students echoed those reported in medical education literature. Despite commonly having pre-placement concerns many students have positive non-metropolitan placement experiences. Several strategies for success were identified: strategies for individual factors, strategies for clinical placement experience factors, strategies for logistical challenges.

Conclusions:
Strategies identified included tailored preparation, paired placements and near-peer support. Having a dedicated clinical coordinator onsite and access to affordable accommodation also contributed to positive student experiences.

3B

Augmenting clinical placements: What are students’ preferences

Carole Steketee, Katharine Gardiner, Niamh M Keane
The University of Notre Dame Australia, Fremantle, Western Australia

Background:
Clinical placements aim to prepare medical students for prevocational practice. However, learning experiences remain variable across different sites, and transitioning from a student-centred preclinical program to workplace learning has its challenges.

Aims:
Our aim was to develop an educational activity to augment student learning during clinical placements.

Methodology:
Third year students were surveyed to determine the types of activities they felt might support learning during their final year clinical placements. Responses were collated using Survey Monkey and analysed using Excel.

Findings:
Seventy-seven third year students completed the survey, and expressed interest in taking part in an educational activity so that they could enhance their employability (100%), make informed choices about career options and specialisations (99%), link work experiences with course work and assessments (96%), and obtain feedback on patient encounters (95%). Most students (84%) preferred to participate in an educational activity after their clinical placements and in small groups of three to six (89%), facilitated by experienced clinicians (99%). Students expressed low preferences
for an online activity (70%). Almost half (46%) agreed that it would be important to engage with students of other disciplines.

**Discussion:**
Students were overwhelmingly positive about engaging in opportunities to reflect on and to trouble-shoot their placement experiences. The value they placed on receiving feedback from peers and from an experienced clinician-facilitator suggests that they are eager to supplement their learning during clinical placements.

**Conclusions:**
An educational activity, known as ‘clinical debriefing tutorials’, was developed and subsequently modified to augment students’ clinical placement learning.

**Supporting placement educators to supervise international students through cross-cultural learning opportunities**

**Ross, B.; Ta, B.; & Grieve, A.**

'Monash University, Caulfield, Australia  
'Monash University, Clayton, Australia

The number of international students undertaking professional health degrees has risen dramatically in Australia in recent years. This has led to challenges securing an increased number of quality placement positions for the growing international student cohorts. Many social work field educators are reluctant and some unwilling to take on international students as they perceive it will require additional work in terms of time and support due to cultural and linguistic barriers.

This research is based on the findings from an Australia-wide research project exploring the experiences and support needs of field placement educators who supervise international social work students. The data consists of 197 survey responses and 16 in-depth interviews from field educators regarding their experiences supervising international students on placement.

Our research reveals that many supervisors lack the experience and targeted professional development to feel adequately prepared to supervise students from different cultural backgrounds. Our research also reveals, however, that those who have supervised international students have found value in the cross-cultural learning opportunities that the supervision relationship has provided.

Those who have supervised international students describe their experiences as rich opportunities to learn about their students’ culture, and social work education and practice in their home country among other things. For these supervisors, working with international students brings a new perspective and these placements are viewed as cross-cultural learning opportunities. Such perspectives enable the sustainability of the provision of quality placements for international students.

**Occupational health and wellbeing – an introduction.**

**Ameeta Patel1, Rajan David2**

Hamad Medical Corporation Ambulance Services Group, Qatar  
1. Assistant Medical Director Professional development; Family Physician  
2. Senior Operational Manger; Mental Health Practitioner

**Introduction/background:**
Occupational health and wellbeing initiatives are recognised as vital to sustaining health care workers and reducing harm as well as improving patient outcomes. A clinician-led group developed inter-professional workshops to explore these concepts, and include education about stress and self-care. The setting was the national ambulance service in Qatar, with paramedics, nurses, GPs and managers from over 20 nationalities. Over a 15 month period we needed to modify the content, structure and logistics to meet the needs of participants, as well as develop new workshops to build a curriculum in professional development and wellbeing.
Aims/objectives
To describe the evolution of this activity and share with health educators one approach to developing educational activities for inter-professional and intercultural groups. The methodology reflects the context and has the overall learning objective of helping individuals recognise and describe some common hazards in health services which may impact on an individual employee’s ability to work effectively.

1. Identify adult learning methods applied in developing this workshop
2. Identify specific strategies to use in developing educational activities for diverse groups
3. Be able to identify signs of mental ill health (changes in behaviour and/or performance)
4. Understand principles of a safe return to work and reasonable adjustments.

Discussion:
Developing workshops for an interprofessional and culturally diverse group, in an international setting, needs structure and iteration. Creating safety and ensuring participation are key challenges.

Issues for exploration or questions for discussion:
Challenges in interprofessional education; feedback and cultural safety; framing mental health in occupational health

Violence in healthcare – how do we keep our healthcare workers safe?

Ameeta Patel¹, Rajan David², Hassan Farhat³, Vernon Naidoo⁴

Hamad Medical Corporation Ambulance Services Group, Qatar
1. Assistant Medical Director Professional Development; Family Physician
2. Senior Operational Manager; Mental Health Practitioner
3. Ambulance Paramedic
4. Critical Care Paramedic, Continuing Professional Development Manager

Introduction/background:
Violence against and between health professionals is gaining increasing attention as a quality and safety issue, and is a barrier to achieving an effective, sustainable workforce. Much about this subject is deeply embedded in cultural norms and power differentials. There may be a lack of understanding about what constitutes violence; a reluctance to disclose; and lack of appropriate protections. Useful lessons can be learnt from the Australian context, especially from first responder organisations; community education; and legislation that can be applied to international settings.

Aim/Objectives
A process for developing educational activities that meet the accreditation standards in Qatar was used to develop a 3 hour workshop for an inter-professional and intercultural group of paramedics, doctors, nurses and managers. This structured approach in educational planning was successfully applied; adult learning methods led to their effectiveness for this diverse group. The key learning objectives were for participants to

1. Appreciate the different contexts and causes of workplace violence affecting health practitioners
2. Have learnt a framework for anticipation, identification and prevention of violence, including de-escalation techniques

Discussion
A structured approach to developing a new educational activity, and an iterative process, using participant and facilitator feedback and experience, was needed to successfully develop an effective workshop. International experiences and resources needed to be localised to explore cultural norms, create safety and ensure participation.

Issues/questions for exploration or ideas for discussion:
Cultural norms and organisational responses to violence; creating safety; iterative processes; interprofessional educational challenges
Student engagement with lecture material: is there such a thing as too much flexibility?

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²Office of Medical Education, Faculty of Medicine, The University of Queensland

Introduction/background:
To accommodate their distribution across multiple clinical sites, in 2017 our Year 2 MD students were presented with flexible alternatives to attending live lectures including live-streaming and retrospective viewing of lecture recordings.

Aim/objectives:
We aimed to quantify the ways in which students engaged with lecture material over the course of 2017 and identify any common themes involved in their decision-making.

Discussion:
We surveyed (414) Year 2 MD students at the end 2017 to determine the way they access lecture material. The results show a strong preference for lecture recordings (62.8%) compared to live attendance (12.3%) or live-streaming (14.5%). A small but significant subset (10.3%) neither attended nor watched lecture recordings by the end of their second year. When domestic versus international student cohorts were compared, approximately three times as many domestic students engaged with lectures in real time (including live-streaming), whereas twice as many international students never accessed lecture material. Common themes identified as reasons for opting out of attendance were convenience, decentralised multi-site format, lecture quality, and priority given to exams; in particular the USMLE Step 1 for international students.

Issues/questions for exploration or ideas for discussion:
This data confirms a decreasing trend for live lecture attendance. While most students prefer the flexibility of determining where, when and if they access lecture content, does this come at the cost of losing the indirect benefits of the live lecture (especially interaction with peers and teaching staff)?

How do we prepare learners to better communicate with patients of Limited English Proficiency? – An interprofessional pilot involving medical and interpreting students

Claire Harrison¹, Jim Hlavac²

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Introduction/background:
10.5% of General Practice (Britt H et al 2015-16) and 15.6% Emergency Department consultations (Putland H et al 2016), involve patients with a non-English-speaking background. Amongst those with Limited English Proficiency (LEP), interpreter use has been associated with improved quality of health care, decreased rates of misdiagnosis and better health outcomes. Educational opportunities for medical students to work with interpreters may be limited. It is important for our future doctors to gain experience working with this group, as both will commonly collaborate in patient care upon graduation.

Aim/objectives:
To evaluate an interprofessional case-based pilot, featuring medical and interpreting students role-playing a doctor, interpreter and a patient with LEP.
Methods
Clinical scenarios were co-created by staff from the MBBS and Master of Interpreting and Translation Studies (MITS). Students learnt about each other’s roles and simulated consultations with patients of LEP. Peer-to-peer and group feedback were provided, with a post-session educational package. Participants were invited to complete a survey critiquing their experience.

Results:
19 MITS and 18 MBBS students participated. 32 (86%) completed the survey. 32 (100%) agreed that their knowledge of the other professional group had increased, the pilot was a useful way to learn how to work with each other and that the experience had provided them with skills that would be of benefit to a patient with LEP. 1,517 students received the online post-pilot educational package.

Discussion
Results suggest this is a useful way to prepare learners to better communicate with patients with LEP.

Conclusions:
Further pilots are planned for 2018 with associated evaluation.

A cross-cultural CLEIMS study: Experiences of Griffith University and Taiwanese medical students in extended multimethod interprofessional simulation

Gary Rogers1, Pit Cheng Chan1, Margo Lane1, Liz Fitzmaurice1, Jenny Witney1, Cathy Wu1, Amary Mey1, Jer-Chia Tsai2, Peih-ying Lu2, Linda Humphreys1, Kwong Chan1

1Griffith University, Queensland, Australia, 2Kaohsiung Medical University, Kaohsiung, Taiwan.

Introduction/background:
The success of the CLEIMS (Clinical Learning through Extended Immersion in Medical Simulation) module in Griffith School of Medicine suggests potential for application in other cultural contexts. Griffith University School of Medicine, in collaboration with Kaohsiung Medical University (KMU) in Taiwan, introduced six senior KMU medical students into a CLEIMS intensive week in 2017.

Aim/objectives:
• To obtain insight from KMU students about their learning experiences in CLEIMS,
• To explore Griffith student perspectives of the inclusion of Taiwanese students in their CLEIMS learning experience.

Methods
The reflective journals submitted by students from KMU and Griffith were analysed to identify evidence of affective learning. Furthermore, evaluation utilised interpretative phenomenological analysis (IPA) to guide analysis of the narrative data collected via phenomenological interviewing technique. On the final day of CLEIMS the participants were interviewed to share their experiences relative to the key research questions.

Results:
Preliminary journal analysis showed that the students appreciate the cultural and clinical practice differences. Students also expressed how mindfulness practice and reflective journaling assisted their learning. Students highlighted how they learn more about different professions in the setting. Further analysis on the interview will be available for presentation in July 2018.

Discussion
Preliminary journal analysis shows that Taiwanese students benefit from the multimethod interprofessional simulation. Modification will be required for CLEIMS to be replicated in Taiwan.
Conclusions:
CLEIMS can be used for cross-cultural interprofessional learning and teaching. This study provided the basis for building further international collaboration in teaching, learning and evaluation between Taiwan and Australia.

Online continuing education for health professionals to improve the management of chronic fatigue syndrome: acceptance and adherence.

Benjamin K. Barry¹,², Trinidad Valenzuela²,⁵, Carolina X. Sandler³,⁶,⁷, Sally M. Casson³, Joanne Cassar³, Tina Bogg², Andrew R. Lloyd³, and Sophie H. Li³,⁴

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Introduction
Chronic fatigue syndrome (CFS) is a serious and debilitating illness that affects 0.2-2.6% of people. Although there is high-quality evidence of benefit from interventions delivered by exercise physiologists, clinical psychologists, physiotherapists or occupational therapists, uptake of these interventions is low or untimely. This can be partly attributed to poor clinician awareness and knowledge of CFS and effective interventions.

Aims
To evaluate satisfaction with and adherence to online delivery of continuing education for health professionals as an accessible and sustainable approach.

Methods
A randomised controlled trial involving 239 consenting allied health professionals was conducted. The primary outcomes were knowledge and clinical reasoning skills regarding CFS and its management. Satisfaction and adherence were assessed by questionnaire and online tracking tools. The study protocol was approved by the Human Research Ethics Committee at UNSW (HC16419) and was registered (ACTRN12616000296437).

Results
Following screening and baseline assessments, 158 participants completed the learning activity and post-assessments (81 intervention; 77 wait-list control). Seventy-two percent of eligible participants completed the entire online learning intervention, comprising 10 modules. The median time spent completing the intervention was 9.5 hours in a 4-week access period. Ninety-seven percent of participants who responded agreed or strongly agreed that the lesson was interactive and provided adequate feedback, and 80% rated the difficulty to be just right.

Discussion
High ratings of adequate feedback, interactivity, and suitable challenge were particularly encouraging for unsupervised online delivery.

Conclusion
The online learning intervention for continuing education of allied health professionals regarding CFS was well accepted and adhered to.
Identification of barriers to student engagement with paediatric patients: an exploration of student and tutor perspectives

Jennifer Anderson,1,2 Stephanie Bowen1,2, Karen M Scott1

1Discipline of Child and Adolescent Health, Faculty of Medicine, University of Sydney, Sydney, Australia; 2The Children’s Hospital at Westmead, Sydney, Australia.

Introduction/background:
A growing body of research has highlighted barriers to student learning during clinical teaching, such as imposter syndrome, student confidence and self-efficacy, transactional asymmetry, timetabling (tutor and student) and performance-related factors. However, specific research in the paediatric setting is scarce. We hypothesised that the involvement of sick children in the teaching milieu adds multiple dimensions to the more familiar exercise of history-taking and physical examination of patients. As such, we sought to identify barriers specific to paediatric bedside teaching.

Aim/objectives:
This qualitative study aims to identify barriers to student learning in the clinical paediatric component of a medical program. Specific issues explored were: novelty due minimal previous experience with this patient population, both personally and professionally (comfort); challenge to professional identity (i.e., when interacting with children, how silly can I look? – identity); interactions with the patient and their carers (attention splitting); and emotional response associated with seeing vulnerable children (distress).

Discussion:
To identify barriers to clinical interactions with children within the paediatric hospital setting, we compared the experiences and perspectives of students from a single university on their paediatric rotation and their junior medical officer tutors. We sought to ascertain if any of these barriers were specific to the inpatient paediatric setting and opinions from stakeholders as to possible interventions to overcome them. This is an initial step in a wider project that aims to develop a needs-based, informed intervention specific to teaching in the paediatric setting.

JMS –A scaffolded multi modal approach

Clare Polley1,2, Angela Cisternino2 Meredith Allen2

1University of Melbourne, Melbourne Australia, 2The Royal Children’s Hospital, Melbourne, Australia

Introduction/background:
Medical Education at the RCH has been restructured into a scaffolded multi-modal learning experience that supports that strategic goals of the organisation and the education needs of our trainees. Underpinning this educational model is the CanMeds framework, the Royal Children’s Hospital Great Care triangle, quality & safety and specialty college curriculums.

This scaffolded approach to learning has been applied both to clinical knowledge/skills and professional attributes. Use of internal experts as facilitators, enhances each program.

Aim/objectives:
This presentation will focus on the scaffolded model Medical Education has implemented to support sustainability and reduce repetition, whilst emphasising the ‘building block’ learning approach for the JMS education journey.

Discussion:
The scaffolded model is designed to reduced waste and avoided duplication. The breadth of the program has enhanced sustainability by introducing the complex systems of health early to junior doctors and preparing them for challenges of consultancy. Twenty percent of programs are now being
embedded into nursing and allied health education, supporting the organisational goal of interprofessional learning.

A multi-modal learning approach is required to support the scaffolded model and accommodate flexibility in delivery in the acute care environment. Ongoing evaluation informs review and revision of current programs; Future plans for evaluation include preparedness for transition to the role of consultant.

Issues/questions for exploration or ideas for discussion:
How has delivering education mapped to a scaffolded structure assisted in a sustainable program?

Session 4 Tuesday July, 2018 10:30-12:00

4A

Near-peer self-evaluation of teaching and its relationship to understanding of teaching and learning

Brett Vaughan¹, Kylie Fitzgerald¹

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Introduction/background:
Near-peer (NP) teaching involves students from senior year levels of a program working with students in junior year levels, and has been used in teaching of anatomy and musculoskeletal assessment for example. There is minimal literature exploring the understanding of learning and learning (T&L) concepts that may be useful for the NP teaching role.

Aim/objectives:
Evaluate understanding of T&L concepts in a cohort of NP teachers and relationships with teaching self-evaluation.

Methods
NP teachers in the osteopathy program at Victoria University completed a teaching self-evaluation and the Conceptions of Learning and Teaching (COLT) questionnaire at the conclusion of the 2017 academic year. The NP teachers were mentored by academic staff but received no formal T&L training.

Results:
Nine NP teachers responded (90% response rate). COLT subscales means were 3.3 (Teacher-centeredness), 4.3 (Active learning), and 4.6 (Professional practice). The mean teaching self-evaluation was 32.5/40 and self-rated knowledge of T&L median score was 3/5 (‘good’). Males demonstrated higher mean COLT teacher-centredness scores with a large effect size (r=0.74). Self-rated knowledge of T&L and teaching self-evaluation scores were not related to COLT subscale scores.

Discussion
The NP teaching group saw active learning and orientation to practice as positives for teaching, and a less positive view of learning that is teacher-centred. However, male NP teachers expressed a greater orientation to teacher-centred approaches, potentially influencing student learning.

Conclusions:
NP teachers may use their own experiences in a teaching program to develop their own understanding of T&L. Male NP teachers may need a greater orientation to non-teacher centred learning practices.
A sustainable approach to multiple choice question analysis using classical test and item response theory

Brett Vaughan¹, Susan Johnston

¹Victoria University, Melbourne

Introduction/background:
Multiple choice questions used in assessments are routinely analysed to ensure they are fair, defensible, reliable and may be able to be utilised in future assessments. Larger scale health professions education programs may have access to psychometricians or academic/professional who are proficient in this analysis. Further, computer programs to analyse this data may need to be purchased and staff trained in the use of the program. The open source R statistical program provides an opportunity for low resource programs to implement MCQ item analysis easily and for little cost.

Aim/objectives:
Present a basic approach to MCQ item analysis in R utilising both classical test theory and item response theory approaches.

Discussion:
R is an opens source computer program that is free, flexible and routinely updated. An example of exam and item analysis will be presented using a newly constructed multiple choice question paper from the osteopathy program at Victoria University. With a small amount of training, this approach could be utilised in many health profession education programs regardless of size.

Issues/questions for exploration or ideas for discussion:
For low resource environments this free, open source approach to item analysis is both sustainable and affordable.

Help, I'm a Specialist! What Geriatricians really need to know when they start as consultants – perspectives of recently qualified consultants

Daniel Simpkins¹, Kate White², Mark Hohenberg¹, Vasi Naganathan²

¹Western Sydney University, Sydney, Australia, ²University of Sydney, Sydney, Australia

Introduction/background:
Overseas studies have shown that the transition from registrar to consultant is a significant step, involving increased clinical and non-clinical responsibilities which they do not feel prepared for.

Aim/objectives:
The aim of this study was to gain insights into the experience of Australasian Geriatricians who have recently made the transition from advanced trainee to consultant. By exploring this experience, we hypothesised that we would gain an understanding of what additional training this group would benefit from.

Methods
The project design was an interpretative explorative qualitative study. Consultants with five or less years of experience were recruited by email sent by the specialist society. Data was collected though semi-structured interviews (n=20), and analysed using an open axial coding process.

Results:
Respondents described going through a transition period in which they adjusted to becoming the final decision maker and taking on a more managerial role. Respondents felt relatively confident with their clinical skills, but unprepared for non-clinical roles. A majority described challenges with career planning. Support networks were considered critical throughout this transition period.
Discussion
This is the first study in Australia exploring the experience of the transition from trainee to consultant Geriatrician. New consultant Geriatricians found the transition challenging, as they adjusted to increased responsibilities and new roles.

Conclusions:
Findings were consistent with previous studies on new consultants, with some findings unique to Geriatric medicine. Based on this study, we make recommendations for adapting the advanced training curriculum to improve the transition to consultancy.

The 7Rs of Field Education

Jenni Graves

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Introduction/background:
Field education is a priority within the health professions with organisations and individual supervisors making a significant commitment to students. Large agencies are in the process of field education throughout the year, with pre-placement considerations occurring months prior to placement day one.

The 7Rs of Field Education provide a framework for planning and reviewing Field Education, ensuring that both task and process issues are addressed.

This is a reflective piece by a Social Work Educator, whose role includes supporting Social Work colleagues in field education, organising student group learning and development and being a liaison point for students and Universities prior to and during placements. The framework may also be of use to other disciplines, students and for Universities.

Aim/objectives:
This presentation will outline the 7Rs of Field Education: routine, relationships, rituals, reflection, risk, replenish and rehearse. These 7Rs provide a framework for organisations and field educators when planning, implementing and reviewing Field Education.

Discussion:
The 7Rs of Field Education can be used as a communication tool or a reference summary. The framework sets a context, which highlights expected requirements of field educators and students whilst also focusing on the critical processes involved in student supervision: both task and process, both a science and an art.

Issues/questions for exploration or ideas for discussion:
Might this framework assist in keeping a balance across Field Education components? What are peoples’ experiences of student supervision replenishing staff and career development? What other Field Education programming frameworks have people found useful?

Give Respect: Student perspectives on the co-creation education materials for a voluntary respectful relationship program.

Natalya Banks1, Jessie Zhou1, Jan Coles1a,2, Becky Batagol3, Fiona Newton4, Brooke Vandenberg1a, Nathanael Wells1a, Debbi Long5, Leon Piterman1a, Deborah Western6.

1 Student summer scholars, Department of General Practice, Faculty of Medicine, Nursing & Health Sciences, Monash University, Victoria
1aDepartment of General Practice, Faculty of Medicine, Nursing & Health Sciences, Monash University Victoria.
Introduction/background
There is increasing recognition within Australian universities of the harm caused to students who experience sexual violence, partner violence, and/or are targeted by racism, homophobia, sexism and other forms of discriminatory interactions.

Aim/objectives
The aims of the project were to co-create program content with students that increased student:
- (v) awareness of the signs of peer/partner violence
- (vi) understanding that sexist, demeaning, and disrespectful attitudes and behaviours cause harm
- (vii) willingness to speak out against disrespectful language/behaviour
- (viii) competency in finding resources to help support friends/peers, including if violence has already occurred

Methods
As summer scholars, two students from different course backgrounds, developed content for the Give Respect Education resource following key themes identified by the project team and built on student input from the project advisory group, focus groups interviews and social marketing class discussions.

Results
Content developed so far includes: (1) landing page and tiles, (2) factsheets, (3) posters, (4) quizzes (5) a story wall promoting emotional engagement with the lived stories of fellow students to promote respectful behaviours.

Discussion
As students, there was unique access to peers, through contacting friends and utilising networks, such as Facebook groups. The student-to-student relationship formed a buffer between the authoritative image of the university, increasing trust and honesty received from participants.

Conclusions
From a student perspective, participation allowed for the rare chance to initiate university-wide change that students reciprocate. The scholarship allowed student participation to be recognized formally and greatly improved the co-creation process by directly engaging students in content development.

Multidisciplinary approach in delivering histopathology to medical students; Evaluation of engagement and learning experience

Vinod Gopalan, Erick Chan, Debbie Ho, Suja Pillai, Alfred Lam
School of Medicine, Griffith University, Gold Coast, Australia

Background
Histopathology is generally considered as the least engaged subject during the early phases of the medical curriculum due to the involvement of microscopy, ultra-structural tissue changes and lack of clinical/scientific integrations. Our own and previous studies have confirmed that a multidisciplinary approach in delivering histopathology will be beneficial to engage medical students during their early clinical years. In this study, we aimed to evaluate the impact on the implement of multiple education strategies to improve medical student’s pathology learning experience.
Methods
Study participants in this study included year 1 and 2 medical students undertaking pathology education at Griffith University, Australia. In two consecutive years, medical students after a whole year of enrolling in pathology teaching were invited to complete questionnaires rating and commenting on the values of multiple teaching resources delivered in pathology. During their pre-clinical years, both cohorts were exposed to a series of pathology worksheets with and without clinical integration. Impact of other learning strategies such as online tools, virtual microscopy, lectures/modules integrated with normal histology, case-based learning, and integration of pathophysiology were evaluated. The data from each survey was extracted and transformed into findings by identifying, coding and categorising by three independent researchers.

Results
Approximately 178 students in the post-graduate pre-clinical medical program responded to the survey across two years. The majority of students strongly agreed that the multidisciplinary integration approach was useful and relevant to improve understanding about the significance of pathology in medical education. In both years, the overall score was high (mean score = 4.57±0.63/5) for the integrated sessions, namely histology modules, case-based learning and virtual microscopy pre-practical sessions. However, this was only marginally different from that of traditional practical (mean = 4.37±0.68/5) and pathology lecture sessions (mean = 4.42±0.61/5). Also, a paired t-test has noted 53% positive correlation for the overall responses between virtual microscopy guided pathology modules and practical sessions indicating its use in better preparing students for these sessions (p < 0.001). Thematic analysis revealed a positive response to the revised clinically integrated worksheets. Qualitative comments suggested that the virtual microscopy sessions along with clinical scenario based learning were extremely useful for students’ learning in pathology.

Conclusions
Integration of clinical medicine, as well as normal histology and pathophysiology through a revised multidisciplinary approach in delivering pathology curriculum, was appraised by a vast majority of students implying the need for this multimodal approach in medical education. The flexibility in the mode of delivery by the use of virtual microscopy and integration potential with other basic sciences has the potential to better engage students in the learning of pathology.

Is it sustainable for medical students to practise the rectal examination on real patients?

Harsh Bhoopatkar¹, Andy Wearn¹, Anna Vnuk²

¹University of Auckland, Auckland, New Zealand, ²Flinders University, Adelaide, South Australia

Introduction/background:
There is evidence of a decrease in the number of digital rectal examinations (DREs) performed by medical students over the last few years. Reasons why opportunities to practise have fallen include ethical concerns, changes in patients’ attitudes towards learners, higher student numbers in programmes, and changes in the workplace.

Aim/objectives:
To quantify how many male and female DREs have been performed on real patients by medical students at the point of graduation, and to explore opportunities for performing the rectal examination with patients.

Methods
A self-completed, online, anonymous questionnaire was developed as part of a two-centre study. Data were collected in the period just after graduation from the medical programmes at the Universities of Auckland and Flinders in 2013.

Results:
The combined response rate for the survey was 42.9% (134/312). The median category for the number of DREs performed on male patients was 4-5 and female patients was 1. Thirty-seven
percent of medical students had never performed a DRE on female patients. Self-reported opportunities for performing the rectal exam were strongly related to the setting (e.g., surgical attachments facilitated opportunities).

Discussion
Do medical students need to graduate having performed DRE with patients? How many performances are enough? What changes need to be made to ensure that students have adequate and sustainable learning experiences?

Conclusions:
For some students, their only experience is in simulation. Opportunities to perform the female DRE are rarer than for male patients. The content and delivery of the medical curricula needs to address these issues in the context of sustainability.

Developing and sustaining an Allied Health Education service in a new and changing organisation.

Katrine Nehyba1, 2, Khye Davey1, Sue Alexander1

1Allied Health Education Team, Fiona Stanley Fremantle Hospitals Group, Perth, Australia; 2Division of Health Professions Education, School of Allied Health, The University of Western Australia, Perth, Australia

Introduction
Western Australia’s first Allied Health Education Team (AHET) was established in a new, tertiary hospital in Perth in 2014. This study describes the work undertaken by the AHET over this time in order to develop and sustain the service, in response to organisational change.

Discussion
In the first 7 months of operation AHET activity was focussed on bulk orientation and on-boarding of staff. 314 staff attended induction between Aug 2014 and Feb 2015, equating to 194 hours of face-to-face delivery. Since then, staff orientation has evolved to a more bespoke service, with 178 new staff receiving 372 hours of orientation. Time spent delivering student orientation has increased, as more students attend placements at the hospital each year (n = 235 in 2015, n = 369 in 2017). Hospital accreditation in June 2016 resulted in increased hours spent delivering mandatory training; for example the AHET provide an average of 5 hours of life support training per month, which increased to 12 hours in the 4 months preceding accreditation. Since hospital opening in Feb 2015, the AHET has made over 400 hours of group education available, including face-to-face delivery of tailored education programs and facilitation of other events such as webinars, videoconferences and external speakers, for a total attendance of almost 3500. All education programs support the AH Workforce Development Framework, designed to develop a competent, capable and flexible workforce delivering best practice care across a two-campus health service. Program content addresses both profession-specific and generic clinical skill development.

#O2TheFix: Swimming between the Flags

Jessica Nand1, Nikola Ncube2, Alex Chapman3

1, 2, 3 Waitemata District Health Board, Auckland, New Zealand

Introduction/background:
#O2TheFix: Swimming Between the Flags is an innovative multidisciplinary collaboration to improve the awareness of Oxygen at Waitemata District Health Board (WDHB).

“Swimming between the flags” is a concept that guides healthcare professionals to prescribe oxygen only if required, within an appropriate target oxygen saturation range. It recognises there are potential risks in under and over-oxygenating patients.
**Aim/objectives:**
This project aimed to:
- improve the understanding of oxygen and its delivery devices
- ensure oxygen is prescribed appropriately and
- improve patient safety by incorporating the "swimming between the flags" concept in regards to target saturation ranges

**Discussion:**
A campaign was planned to showcase the mix of utilising technology via electronic prescribing, social media and educational sessions sporting a catchy phrase: "O2 the Fix, Aim 92-96. If high CO2, Aim 88-92" to improve the awareness of oxygen with improved prescribing and administration.

At baseline, only 12% of patients had their oxygen prescribed. The remaining 88% of patients were receiving oxygen without a prescription. For the 12% that did have a prescription - many did not have this prescribed in a clinically appropriate manner.

A re-audit 6 months later showed an increase of oxygen prescribing from 12% to 49%. Results following the campaign have identified an increase in both oxygen and device prescribing along with saturation ranges clearly documented. This multidisciplinary awareness campaign has improved the rate and the quality of oxygen prescribing.

**Issues/questions for exploration or ideas for discussion:**
The success of this project was the multi-disciplinary approach to help change the current practice of oxygen administration is in the clinical setting which is already challenging and requires novel and extensive initiatives.

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**Near peer assessment during Objective Simulated Bush Engagement Experience (OSBEE) in Rural Clinical School, University of Queensland.**

Y.G.S.W.Jayarathne¹, Riitta Partanen ¹, Jules Bennet¹

Rural Clinical School, Hervey Bay, University of Queensland.¹

**Introduction**
Peer-assisted learning (PAL) is defined as “People from similar social groupings who are not professional teachers, helping each other to learn and learning themselves by teaching”. Students may take the role of teacher, supervisor or assessor.

**Aim**
Our study aimed to evaluate PAL during an Objective Simulated Bush Engagement Experience (OSBEE).

**Discussion**
Third and fourth year medical students and recent graduates of the University of Queensland Rural Clinical School, Hervey Bay were supervisors for the simulated scenario stations of the OSBEE. A focus group discussion obtained views on the PAL experience, which was audio recorded, verbatim transcribed and thematically analysed. Key themes were identified in relation to the PAL process and to the advantages of PAL. Students viewed PAL as a good learning opportunity, helpful to reinforce existing knowledge, an opportunity to develop debriefing skills, provide feedback and it was a fun experience. Further, PAL developed deeper understanding of content through questioning and answering questions, including those they had not anticipated.

**Ideas for discussion:**
Introduction and evaluation of PAL during OSBEE was a formal attempt to facilitate the development of medical students’ supervisory and debriefing skills. Formal peer assisted learning experiences in medical curriculum needs to be further explored.
Pilot testing of Objective Simulated Bush Engagement Experience (OSBEE) in the MD Program of the Rural Clinical School, University of Queensland (UQ).

Riitta Partanen¹ Y.G.S.W.Jayarathne¹, Jules Bennet¹
Rural Clinical School, Hervey Bay, University of Queensland.¹

Introduction
Mal-distribution of the Australian medical workforce continues, resulting in Australian rural medical workforce shortages. Prior research has shown the effectiveness of long-term clinical placements for promoting rural medical careers but less evidence exists on brief and short term placements.

Aim
This study’s aim, assesses the students' perception of a brief preclinical rural experience (the OSBEE programme) and impact on future rural training or practice intent.

Discussion
Second year medical students rotated through 9 simulated emergency bush scenarios. Students worked in small groups and feedback provided. A mixed study was conducted using a focus group and questionnaire to evaluate students’ perception on OSBEE. Discussion was audio recorded, verbatim transcribed and thematically analysed. Frequencies were calculated for questionnaire items. Key themes identified were “overall impression on OSBEE programme”, “learning during OSBEE” and “recommendations for future”. Subthemes of “Learning during OSBEE” were: learning experience, level of knowledge gained during OSBEE, learning environment, about OSBEE stations, competency level of scenarios, learning about rural context, debriefing session and simulators. Based on questionnaire results all students agreed: “OSBEE was a positive learning experience” and “enjoyed the programme”. 66 % of students felt that “OSBEE made them consider working in rural context”.

Ideas for discussion:
Overall students enjoyed the program and felt it was an eye opening experience to the rural context. Students were inspired about the rural context. A brief immersive program such as OSBEE may influence medical students on future rural training and practice, and repeated exposure to similar programs within the medical curriculum may further promote rural medical careers.

Evaluating the user acceptability of electronic marking in a patient population

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Introduction/background:
Third year medical students see volunteer patients in a GP style setting under the supervision of a tutor in the Patient Teaching Associate (PTA) program. The program aim is for students to practice patient centred consultation skills. Patients formatively assess students using a 10-item paper form with comment section. However, patients sometimes miss ratings and provide brief/ illegible comments. Electronic marking is used in non-patient populations (e.g., OSCE examiners) to overcome these issues. Patients’ medical problems may make electronic marking challenging and if elderly they may lack computer literacy skills.

Aim/objectives:
The aim of this study was to ascertain the user acceptability of iPad assessment in a patient population.
Methods:
Patients in the PTA program in semester 2, 2017 were invited to use iPads to assess students. They were asked to complete a paper-based survey regarding their experience.

Results:
Twenty-two patients participated. The majority of patients positively rated statements pertaining to marking electronically. Nine patients positively commented on the electronic forms (e.g., easy and quick to complete). However, a few patients experienced problems such as technological issues, not being able to return to submitted forms, and not being able to pre-fill student names etc.

Discussion:
Patients predominantly had positive perceptions of marking electronically. A few patients encountered some problems. Most of these problems can be addressed via the implementation of a customised online form and further patient education about using iPads.

Conclusions:
Electronic marking appears to be acceptable within a patient population.

Evaluation of intern training in rural primary care settings in Tasmania

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²Rural Clinical School, University of Tasmania, Launceston, Australia  
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Introduction/background:
For the first time, from January 2018, twenty interns in Tasmania will undertake a term in five rural general practices. This presents an opportunity to examine the views, experiences and needs of interns and their GP Supervisors in the general practice setting.

Aim/objectives:
The aims are to explore the perspectives and experiences of interns and GP Supervisors, to evaluate the models of support provided by GP mentors and to identify support and resource requirements for future interns and their supervisors.

Methods:
Qualitative action research methods will be utilised, with three stages: pre-program implementation, mid-implementation and program conclusion. Focus groups and telephone interviews will gather information on the expectations, experiences, challenges and solutions to challenges that occurred during the program. Participants will be medical students, interns, GP supervisors, GP mentors of interns and Directors of Clinical Training. Information from the first two stages will be used to resolve issues identified by participants.

Results:
Data from the first six months of the 12 month program (from December 2017 to June 2018) will be presented.

Discussion
The challenges of training interns in rural general practice settings, and the solutions to these challenges, will be discussed. Findings from the research will be discussed with reference to the small number of previous studies on interns in general practice settings conducted interstate and overseas.

Conclusions:
Findings from the research will inform the development of educational, training and support models for future interns and their supervisors in general practice.
'Cohen’ method as a sustainable standard setting approach applied to a practical skills examination

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Introduction/background:
Numerous standard setting methods available to health profession educators however they often require substantial human resources and time to undertake. In low resource environments these methods may not be feasible. The ‘Cohen’ standard setting approach uses the best performing students as the reference point and is feasible. Studies that have utilised this approach have typically been for written assessments.

Aim/objectives:
Evaluate the utility of the ‘Cohen’ standard setting approach in a practical skills assessment.

Methods
Year 1 students in the osteopathy program at Victoria University completed a practical skills assessment in semester 1 and semester 2, 2017. The assessment covers systems and musculoskeletal examination, and manual therapy skills. The 90th percentile student was used as the reference with 60% and 65% used to establish the pass mark. Comparisons were made with the university fixed pass mark of 50%.

Results:
131 and 116 students completed the assessment in semester 1 and 2 respectively. Mean scores were 36 (±10) and 40 (±10) respectively. The 90th percentile was 51/60 (semester 1) and 53.5/60 (semester 2). In semester 1, 23% (50% pass), 28% (60% pass) and 37% (65%) would fail. In semester 2, 13% (50% pass), 18% (60% pass) and 31% (65%) would fail.

Discussion
The Cohen method would increase the number of students failing the assessment. This may influence the acceptability of the standard setting method to both students and staff.

Conclusions:
Further work is required to establish if the 2017 academic year results are consistent with subsequent years before the Cohen method could be implemented.

A near peer teaching pilot program – a possible solution to capacity and resource restraints

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3 Division of General Medicine, St Vincent's Hospital, Melbourne, Australia

Background: Near peer teaching is gaining attention in education circles.

Aims:
1. To establish a near peer teaching program in a final year subject due to issues relating to resources and capacity
2. To identify opportunities and barriers in implementing such a program

Methods: A program was constructed in 2017 involving surgical near peer tutors. Tutors were recruited based on review of their interest in education and curriculum vitae.
RPL Essay Score Utilisation Linked to Training Success (RESULTS)

Dr Lachlan Fieldhouse General Practice Training Tasmania

Background
Anecdotal evidence that the quality of reflective essays (submitted as part of an application for RPL) is associated with registrar performance in RACGP fellowship examinations.

If a composite RPL score is an early predictor of registrar exam performance, it would allow appropriate and early support and advice, or extension of learning opportunities.

Objective
To explore whether structured grading of reflective essays is useful in predicting exam result performance

Approach
- Essays - Reflective essays for each point (up to 3 per application)
- Review - Two National Educators trained in essay scoring review each application
- Score - The 3 grade results numerically weighed against other percentages or average score defined based upon how many terms have been included
- Comparison - Final score compared against a mean proposed exam result for the AKT, KFP, OSCE

Findings

Discussion
- No significant correlation between RPL essay score and training success in RACGP examinations
- Limitations:
  - Small numbers so far
  - Multiple MEs scoring
  - Overall high success rate for GPIT during this time (AKT 93%, KFP 77%, OSCE 96%)
- Are other early assessments useful as predictors of exam preparedness?
  - PCA
  - Orientation workshop
  - In practice assessment
  - Early ECTV

Abbreviations
- RPL: Recognition of Prior Learning
- AKT: Applied Knowledge Test
- KFP: Key Feature Presentations
- OSCE: Observed Structured Clinical Examination
- GPIT: Pre-Commencement Assessment
- ECTV: External Clinical Teaching Visit

For further information:
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A peer review group to sustain expatriate family physicians in transition.

Ameeta Patel1, Daniel Coffey1

1 Hamad Medical Corporation Ambulance Service Group, Qatar

Introduction/background: The health workforce is now a global commodity; however there is a paucity of literature on how to support health professionals from developed countries relocating to less developed countries. Potential conflicts in values; loss of control and mental overload can contribute to culture shock, burnout and failure to acculturate, leading to lower retention rates. To establish an innovative Mobile Health Service, approximately 50 family physicians (FP) from Ireland, United Kingdom, Australia and New Zealand were recruited to Qatar. After a fraught recruitment process, doctors and families needed to adapt to challenges including housing, language, religion, gender roles, hierarchies, workplace culture and medical ethics. The doctors developed a peer review group as one strategy to sustain them.

Aim/objectives: To share the educational process of development of an accredited continuing professional activity; describe barriers and enablers; and present evidence to demonstrate effectiveness.

Discussion: The doctors had previously experienced Balint groups or practice based small group learning continuing medical education. Based on a needs assessment, there was support for establishing a similar reflective practice group, but it needed to be a hybrid model. There were challenges in the implementation; however these barriers were addressed and the group was established with success, later leading to development of similar inter-professional groups in the service. It is a model that can be applied in diverse settings to support health professionals in transition.

Issues/questions for exploration or ideas for discussion: International health workforce migration; culture shock; reflective practice; peer support; accreditation; continuing professional development

Innovative online clinical assessment tool for undergraduate nursing students

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Introduction/background: Deakin University School of Nursing and Midwifery has approximately 2800 undergraduate nursing and midwifery students requiring clinical placement each year, totalling more than 6500 placements across Victoria. As part of student placement experience student performance must be assessed (ANMAC, 2012). The clinical educator is required to complete a Clinical Assessment Tool that reflects the registered nursing standards (NMBA, 2016). Prior to the introduction of the online Clinical Assessment Tool the tool was a hard copy 6 page document that students and clinical educators completed and signed to confirm the student had met the required learning outcomes for the placement. Use of a hard copy Clinical Assessment Tool presented challenges such as when students misplaced the document.

Aim/objectives: The aim of this presentation is to showcase the development and implementation of an innovative online clinical assessment tool for undergraduate nursing students in Australia. Deakin University, School of Nursing and Midwifery have recently moved to a wholly online assessment tool that both students and clinical educators access during clinical placements on any electronic device to complete clinical assessments.
Discussion:
In 2016, the School of Nursing and Midwifery together with a web applications officer from the Faculty of Health commenced work on an online version that has significantly streamlined this process allowing students, health care providers and School administrative and academic staff to manage this process across the student placement journey. The system involved all stakeholders from the outset to ensure the design and development of the tool met all stakeholder needs, removing significant issues associated with the previous paper based system.

Issues/questions for exploration or ideas for discussion:
The online Clinical Assessment Tool was implemented in January 2017 with success. A number of strategies were used to support the implementation of the online Clinical Assessment Tool including education for students, health care providers and School staff. The key benefits of this innovation have included significant cost savings, marking and procedural error elimination and eradication of misplaced Clinical Assessment Tools. Both students and organisations have provided positive feedback about the user friendly online Clinical Assessment Tool.

Evaluation of a Dementia Care Training and Education Program

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Introduction/background:
A current challenge in primary care is improving diagnosis, management and care of people with dementia. GPs are well placed to assess, diagnose and manage dementia but further training and education is needed on awareness of dementia for diverse staff working in general practice.

Aim/objectives:
To assess the impact of an online module on knowledge, confidence and behavioural intentions of Practice Nurses and Overseas Trained Doctors working in Tasmanian general practices.

Methods:
Mixed methods pre- and post- an online 3-hour dementia module: interview and demographic questionnaire pre-module, Dementia Knowledge Assessment Scale (DKAS) and Confidence and Attitudes Towards Dementia surveys (GPACS-D) at module commencement and completion, and interview and behavioural intentions questionnaire post-module.

Results:
Twenty-seven participants completed the module with significant increases in DKAS and GPACS-D scores pre and post module. Participants reported strong intentions to apply a systematic framework to identify and manage dementia. Post-module interviews indicated many participants had assessed new patients for dementia and reported increased confidence to do so.

Discussion
Few studies have measured ‘before and after changes’ in knowledge, confidence and attitudes of primary care professionals in relation to diagnosis and management of dementia as a result of an educational intervention.

This project indicates that GPs can take on responsibility for diagnosing dementia and practice nurses can better assess and provide support in management of patients with dementia.

Conclusions:
The evaluation has demonstrated early changes in health professionals’ behaviour resulting from improved awareness, knowledge and confidence in dementia care in general practice. The online module could be utilised across general practice.
Does delay between teaching content and related clinical placements affect performance in physiotherapy students?

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Introduction/background:
The timing of clinical placements within physiotherapy programs mostly occur in one of two structures – either integrated throughout the program where each placement follows relevant on-campus content or an end-on structure where placements are concentrated over the final year. Educationally, having placements immediately may be preferable, but the end-on model is considered to be more sustainable due to more efficient use of host facilities and administrative efficiency. At our institution from 2011 to 2014, students undertook musculoskeletal placements either (i) immediately after the relevant on-campus content or (ii) with a delay of either five or ten weeks.

Aim/objectives:
To investigate the effect of a delay after on-campus content on physiotherapy student performance during clinical placement.

Methods:
Student clinical placement marks (n=273) over a four year period were collated retrospectively. All students received end-of-placement marks, and 78% also received an optional mid-placement mark.

Results:
121 students’ placement immediately followed on-campus content, and 152 were delayed; 78% of students received mid-placement marks. No significant differences were found in end-of-placement marks (0-4 scale). For mid-placement, students with delayed placements performed worse for ‘ethics’ (no-delay: 3.0, delay: 2.7), ‘relevant outcome measures’ (no-delay: 2.2, delay: 1.9), and ‘adverse events’ (no-delay: 2.6, delay: 2.2).

Discussion:
Delays of five to ten weeks had a negative impact on mid-placement, but not end-of-placement performance.

Conclusions:
It may be important to minimise delays between content and clinical placements. Further research is continuing to determine if instituting a simulated-learning module immediately prior to clinical placements negates the effect of delay.

Registrar/Intern Supervisors views and perceptions of work readiness of interns

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Background:
The internship is a transition year between medical school graduation and entry into the profession as registered professional. Intern Supervisors/registrars have a key role in helping with this transition.
Aims:
1. To investigate views and perceptions of intern work readiness by supervisors/registrars
2. To review access to education training for supervisors and registrars

Methods: Quantitative data and descriptive comments was collected from registrars and intern supervisors. Analysis was done using frequencies and percentages. Descriptive comments were tabulated to identify themes. Three focus areas were selected for analysis which include core knowledge/clinic skills and secondly professional work skills of autonomy and resilience. The third area focussed on interns requiring remediation.

Results: 327 supervisors/registrars were asked to participate. 16 participated in the study. A preliminary review of data indicates moderate levels of participation in education training. Most supervisors had been involved with 10 interns or less. Ratings showed general satisfaction of readiness in the area of knowledge and professional skills. Procedural skills, autonomy and being proactive were rated the lowest.

Discussion: The results noting the small participant numbers indicate training needs should be addressed for supervisors. Supervisors confirm areas of concern especially in the areas of procedural skills, autonomy and role proactive-ness.

Conclusion: The project highlights the importance of supervisors in delivering education support and in turn providing education units suggested focus areas to improve hospital intern education and work training programs.

Student-generated MCQs: students don’t like it even though it’s good for them

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Introduction/background: When students are assessed using multiple-choice questions (MCQs) they often choose MCQ banks for learning and revision. Student-generated MCQs can be used for revision rather than instructor or externally sourced MCQs. Additionally, writing MCQs requires, or leads to, content knowledge mastery. In a pilot study, a student-generated MCQs approach was feasible but not well accepted by students. Students perceived MCQ-writing negatively due to high cognitive load. We hypothesised that increased scaffolding would enhance acceptability of student MCQ-writing.

Methods: All students in a fourth-year anatomic pathology course (N=103) we required to generated MCQs. Minimum requirement was to create eight clinical-case based MCQs and answer 80 MCQs. Compared to the pilot study, extra support was provided through counterbalancing and allocating topics to students. MCQ cognitive complexity and quality of peer comments were assessed using three-level rubrics. Students’ acceptability of the approach and perceived value of peer learning was assessed using subsections of Survey of Student-Generated MCQs, Technology Acceptance Model and the Constructivist Online Learning Environment Survey.

Results: Compared to the pilot, a higher acceptance and reduced question-writing time were observed. Only half of the students perceived the approach as educational valuable due to the lack of perceived relevance of topics to curriculum. Although more active participation in peer learning was found, students still prefered learning from instructors.

Conclusions: Students’ acceptability of the student-generated MCQ approach was enhanced by allocating topics. Students’ perceived educational value of the approach could be improved by using topics explicitly linked to curriculum and including instructor feedback.
Online alone: Students creating a glossary of medical jargon online do great knowledge construction but do not interact

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Introduction
Medical students can struggle with terminology and jargon in healthcare. Collaborative learning in a community of learners may engage students to learn the discourse of medicine through peer-learning. Social media has been successful in creating an online collaborative learning environment.

Aims
We aimed to form a collaborative learning environment through an online glossary activity and measure students’ cognitive and affective engagement with the activity.

Methods
Fourth-year medical students of a pathology course (N=102) selected, defined in an online glossary, and then used anatomic pathology terms in an assignment. Students were encouraged to discuss peers’ definitions online. Students’ perceived educational value of the activity was investigated with an online survey.

Results
Ninety-eight percent (100/102) of students posted at least one definition online. The quality of the definitions was high and indicated active knowledge construction. Most of the questions and responses were contributed by 10% of students. Only 35% of students found the online glossary activity to have high educational value, and 59% of students reported that commenting on peers’ definitions was unhelpful.

Discussion
Student’ are highly capable in the active knowledge construction required to produce high quality definitions but many do not perceive this as valuable. A collaborative learning community was not formed. More explicit linking of collaboration and feedback skills learnt during online community activities to the team-work of medical practice may increase value and relevance to medical students.

Conclusions
An online glossary activity engaged students in active terminology knowledge construction but did not encourage peer learning.

Session 5 Tuesday July, 2018 13:00-14:30

5A

Simulated learning video activities as a sustainable clinical placement alternative for junior clinical students

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Introduction/background:
Increasing cohorts have necessitated faculty to consider sustainable methods for clinical learning. Simulated learning can partially replace traditional junior clinical placements and may offer a viable alternative.
Aim/objectives:
To evaluate the effect on graded clinical competencies of three simulation learning (SL) activities replacing 3 clinical placements for year 3 osteopathy students.

Methods
Trial Design: Single blinded experimental quantitative study.
Participants: Year 3 osteopathy students enrolled full time in semester 1 2016.
Method: The control group (n = 66) undertook their usual six clinical placements in semester 1. The experimental group (n = 10) undertook three clinical placements and three simulated learning activities across the 12 weeks of semester 1. All participants completed the end of semester OSCE during the semester 1 examination period.
The simulated learning activity involved the participant watching pre-recorded simulated patient scenarios and answering questions on clinical reasoning, examination and diagnosis. Participants received personalised feedback from a clinical educator.
Statistics: Scores for the OSCE stations were collated. The mean scores of the two groups were compared using Wilcoxon-Mann-Whitney test.

Results:
There was no difference in the performance of experimental and control groups scores overall, in diagnostic/reasoning skills or manual technique skills as measured by the OSCE.

Discussion
Participants do not appear to be disadvantaged by undertaking simulated learning activities and achieved the same levels of competency as control group, consistent with physiotherapy education research.

Conclusions:
Traditional clinical placements can be replaced with sustainable simulated learning activities as there was no significant effect on graded clinical competencies for year 3 osteopathy students.

Tag Team Patient Safety Simulation

Professor Kerry Reid-Searl1, Professor Tracy Levett-Jones2, A Professor Patrea Anderson 3, Dr Stephen Guinea4, Professor Trudy Dwyer1, Leanne Heaton1, Tracy Flenady1, Dr Judith Applegarth1.
1CQUniversity, Queensland, Australia, Australia, 2University of Technology, Sydney, Australia, 3Australian Catholic University, Victoria, Australia.

Introduction/ Background
Creating innovative and engaging simulations that prepare students for the workforce in the context of patient safety is a challenge for undergraduate nursing programs. In an effort to address this, academics from four Australian universities came together in 2016 to design an approach called TAG Team Patient Safety Simulation (TTPSS). TTPSS includes simulations and resources in the form of a tool kit that addresses patient safety. The simulations are at basic and complex levels. All simulations are designed to be flexible and easily portable without the need for complex equipment. The simulations also cater for maximum participation of learners through a tag in and tag out approach.

Purpose/Outcomes
This poster will provide information and visual images of what TTPSS is, how TTPSS works, the use of the Patient Safety Competency Framework for Nursing Students (Levett-Jones, Dwyer, Reid-Searl et al 2017) which direct learning outcomes, roles of individuals in the simulation and the use of antagonist and cue cards which increase the complexity of the simulation. The poster closes with directions on how to access this freely available resource.

The physiological changes in critical care trainees during airway intubation: comparison study between simulation and clinical environments

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Introduction
Simulation has been an important tool for education and assessment across different levels of medical education. Doctors are exposed to stressful situations than can have an impact on performance, either in a positive or negative way. There are few studies that have compared stress in the simulated and clinical environments.

Aim/ objectives:
To determine whether the physiological response, based on heart rate changes, during airway intubations is the same in clinical practice and a simulated environment.

Methods
Critical care trainees, from anaesthetics, emergency and intensive care, were provided with a heart rate monitor, FitBit® Charge 2, to wear in their respective clinical environments and during a simulated airway scenario for the duration of the study period, three months. For each airway intubation performed information was recorded in an electronic diary and correlated with heart rate changes recorded from the FitBit®. A treadmill exercise test was also undertaken (using the Bruce Protocol) to determine the study participant’s maximal heart rate.

Results
There was no significant difference in the median changes of heart rates between the clinical environment group data and the simulation environment group data throughout the recorded period (p=0.149), or at the point of intubation for the registrars (p=0.054).

Discussion

Conclusion
Our results suggest that the simulated environment was able to replicate the stress of airway intubation, as measured by heart rate change, in the clinical environment in critical care trainees.

Immersive reality instruction for medical education – stereoscopic versus desktop delivery

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Introduction/background:
The use of immersive technologies such as virtual reality to develop virtual learning resources (VLRs) is becoming popular in higher education. It is suggested that these enhance student engagement by allowing for a greater involvement in their learning experience. The learning effectiveness of VLRs delivered using different modalities is however yet to be evaluated.

Aim/objectives:
This study aimed to compare the effectiveness of stereoscopic and desktop delivery of VLRs for student learning and engagement.
Methods
A skull tutorial was developed as a guided VLR using the Unity gaming platform. Participants were voluntarily recruited to assess stereoscopic and desktop delivery of the VLR (n = 52 and 40 respectively) by completing a validated perception survey tool. The data obtained was analysed to compare the effectiveness of both delivery modalities.

Results:
Most participants agreed for stereoscopic and desktop delivery (93% and 94% respectively) that the VLR was interesting, engaging and immersive, and aided understanding of relevant concepts. Mean ratings were high for physical comfort and low for mental strain, although physical discomfort and disorientation was reported with the stereoscopic delivery.

Discussion:
While overall perceptions of both delivery modalities were positive, feedback provided by participants highlights the importance of design to enhance the usefulness of VLRs.

Conclusions:
This study suggests that desktop may be a favourable delivery modality for VLRs, reducing the degree of physical discomfort and disorientation associated with modalities such as stereoscopic delivery, while still providing the advantages of an immersive learning experience.

Hybrid simulation training: A cost-effective teaching/learning modality for low-middle income countries (LMIC)

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Background: Hybrid simulation training (HST) is a teaching-modality that combines patient-interaction using simulated patient (SP) with pelvic-model that allows procedural-skill practice. This provides realism to learners, lacking in manikins.

Objective: To compare competency of medical students regarding Intrauterine contraceptive-device (IUCD) insertion before and after HST and to assess learner satisfaction with this methodology.

Methods: This quasi-experimental Mixed-Method study was conducted at Aga Khan University Hospital, Karachi, from October 2016 to September 2017 for third-year medical students (n=90). Students had interactive session on contraception and were provided with literature/video clip on IUCD-insertion before HST. They were pretested on OSCE-station (IUCD insertion) using SP and manikin simultaneously followed by practice on manikin and subsequently were post-tested through same OSCE-station. Learner-evaluation of activity was through validated proforma with both, Likert-scale and open-ended questions.

Results: Out of 90, seventy-three consenting students, completed pre/posttest and evaluation-survey. There was significant increase in pre and post-simulation mean scores for all clinical skills; history-taking (5.1 pretest, 8.8 posttest, \(p \leq 0.0005\)), counseling (40.11 pretest, 57.85 posttest, \(p \leq 0.0005\)), procedural (15.16 pretest, 49.09 posttest, \(p \leq 0.0005\)) and total scores (60 pretest, 115.6 posttest, \(p \leq 0.0005\)), when compared using two-sided Wilcoxon signed rank sum test. Activity was assessed as ‘very good’ to ‘excellent’ by 83.5% of participants. Four themes were generated from open ended questions of evaluation-forms; ‘Process descriptors’, ‘Teaching utility’, Pedagogic efficacy’ and ‘Way forward’.

Discussion: Strengths include use of valid assessment tool (OSCE) for pre and post tests. HST is relatively cost-effective, especially in LMIC where purchase of high-fidelity simulator may be unfeasible. This study may not address long-term students’ learning. Transferability of competency to real-life situation needs evaluation.
**Conclusion:** HST is an effective teaching/learning modality with potential to improve competency of medical students. Students expressed satisfaction with this teaching-method.

**Videos sustaining clinical placements.**

Heidi Waldron

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**Background:**
Fremantle medical school has 400 students across a four-year postgraduate course. All students use video resources for learning and revision. In the final two years students attend clinical placements at Health Services across Perth metropolitan area. In the third year approximately 100 students are selected to attend Rural Clinical School of Western Australia from Notre Dame and University of Western Australia.

**Aims:**
Video enables provision of relevant content to be presented in a dynamic and engaging format that contemporary learners desire. In the health professional context, videos support consolidation of baseline knowledge but also promote understandings of complex concepts and interpersonal dynamics essential for future professional practice. Therefore, videos offer a modality that aids development of clinical competency, reinforcing placement-based learning.

**Discussion:**
Educational and technological challenges faced include curriculum over-crowding, staffing shortages both rural and metropolitan locations, video distribution and accessibility.

**Issues for Exploration:**
Students appear to favour the ‘flipped classroom’ as evidenced by diminished lecture attendance and corresponding uptake of blended-learning approaches: for example, we observe a spike in medical students accessing videos for ‘just-in-time’ review prior to procedural credentialing.

Busy clinicians often have high workload demands, which can erode teaching time available for students. Videos fill this gap, explicitly outlining required knowledge, providing consistent expectations across placements, and enabling higher cognitive learning when clinicians are available. Cost-efficiencies result from the reusable nature of videos. Videos augment the sustainability of clinical placements, mediating when services face staff shortages and ensuring foundational learning can still continue.

**Keywords:**
Videos; clinical placements; ‘flipped classroom’; ‘just-in-time revision’

**A Multidisciplinary Approach to Reducing Medication Errors Through Paediatric Medical Emergency Simulation**

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**Introduction/background:**
Medical emergencies are often chaotic situations requiring quick decision-making and rapid administration of medicines, which can contribute to errors. The Institute for Safe Medication Practices (ISMP) recommends conducting regular simulation exercises with appropriately trained pharmacists to decrease the risk of medication errors during emergencies.
Aim/objectives:
To improve the safe use of medicines during paediatric medical emergencies through multidisciplinary team (MDT) observation at regular simulation exercises.

Methods
Monthly in situ medical emergency simulation exercises are held in the Department of Paediatrics at a regional hospital involving paediatric medical and nursing staff, the Medical Emergency Team and education staff. The paediatric pharmacist is invited to attend as part of the educational team. Recommendations from the exercise are considered for system improvement at a departmental and organisational level. The exercise is repeated following implementation of risk reduction strategies to assess improvement.

Results:
The MDT has attended six simulation exercises. Risk reduction strategies implemented include standardisation of verbal ordering process during emergencies; resuscitation trolley review, improved signage and provision of medicines in ready-to-use syringes where possible; improved availability of emergency drug resources; enhanced content regarding medicine administration in emergencies; improved adherence to labeling recommendations for injectable medicines and continuing education to improve staff knowledge.

Discussion
Utilising the expertise of the MDT in direct observation allows for identification of human factors that contribute to errors and is effective in facilitating practice change in readiness for real events.

Conclusions:
A multidisciplinary approach to clinical simulation allows for broader analysis of system changes required to enhance medication safety during management of rapidly deteriorating paediatric patients.

Consenting to Student Services in the Disability Sector
Brooke Workman, Megan Carnegie - Brown & Lisa Carnegie
The Benevolent Society, Sydney, NSW, Australia

Introduction/background:
Every person, regardless of ability, have a right to participate in decision making. It is best practice to obtain consent from people with disability for the services allied health professionals (AHP) offer including student led services, however it can be a difficult process. At a sector wide forum in 2016, AHP’s reported a lack of understanding and support in obtaining informed consent when university students are involved.

Aim/objectives:
To inform others of the resources that have been developed to support people with disability and their carers to make informed decisions about students being involved in their sessions. We will share information about the benefits of student services, and tools needed to assist people with disability understand the role of student services, and how they may engage in making decisions and providing consent. Additionally we hope to discuss the necessity of having a person with disability provide their own consent, and the importance of supported decision-making and person-centred practices.

Discussion:
Offering people with disability with more choice and control over the supports they receive and what those supports involve is a key ethos underpinning the National Disability Insurance Scheme (NDIS). The Specialist Placement and Recruitment (SPAR) unit worked with an advisory committee with representation from key stakeholders and developed several resources to assist AHPs gain informed consent for student services.

Issues/questions for exploration or ideas for discussion:
Could these resources be useful in other allied health areas of service?
Reinvigorating procedural education for clinicians working with older adults in hospital using a conceptual model: physiotherapists & falls prevention

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Introduction/background:
A lack of engagement in falls prevention procedural education was identified as a problem across a physiotherapy department in a large metropolitan public health setting. Staff engagement with procedural documents was varied. Existing orientation education packages were didactic with diverse content and lacked alignment between learning objectives and procedural compliance. A conceptual approach that emphasised key messages was used to develop an education package to re-engage staff with organisational procedures.

Aim/objectives:
This service improvement activity aimed to evaluate if a new education package incorporating a conceptual framework improved engagement and compliance with falls prevention procedures.

Methods
Staff attended an education session and completed a session evaluation. All clinicians received a lanyard card summarising key messages. A baseline documentation audit was conducted on 24 wards to assist with ongoing evaluation of longer term education program impact.

Results:
Staff evaluations of the revised education package were collected after 4 education sessions delivered over 2 weeks (n=170). Evaluations indicated high levels of staff engagement: 97% reported the session was relevant to their learning needs, and 88% reported the education was relevant to professional practice, led to acquisition of new knowledge and likely to change professional behaviour.

Discussion
Prioritisation of key messages regarding falls prevention procedures using a conceptual approach has supported clinician engagement in procedural education. Longer term education impact on procedural compliance is being evaluated.

Conclusions:
This conceptual approach to procedural education has resulted in a promising model.

A cost-description study of the OSCE in medical education

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Introduction/background:
Many different objective structured clinical examination (OSCE) variations are used, however, there is little empirical research to guide which formats provide the best value for money.

Aim/objectives:
To calculate the cost of the OSCE, differentiating between fixed and variable costs.
Methods
A cost-description study was conducted based on the MBBS program at Monash University, Australia in 2017. The Monash MBBS has approximately 500 students per cohort, who complete 10 8-minute OSCE stations per semester. Costs were categorised into fixed (cost always occurring), station-variable (cost varying based on the number of OSCE stations), and student-variable (cost varying based on the number of students).

Results:
The total cost is $204,503 for 500 students using a 10-station OSCE. There is a $2,441 fixed OSCE cost, which occurs regardless of the number of OSCE stations or number of students. Keeping the number of students constant, the cost to add (or savings by removing) one station, is $17,085. On the other hand, keeping the number of stations constant, the cost to add (or savings by removing) one student, is $376.

Discussion
Educators should consider ‘economies of scale’ in deliberate design of assessments, keeping in mind fixed and variable cost components. The number of OSCE stations and assessor costs are critical, and should be considered together with known validity data.

Conclusions:
Consideration of assessment cost is not new. However, the empirical approach used in this study provides an analytical framework and objective data on which to explicitly consider cost in assessment design.

Retrospective analysis of level of clinician expertise in paediatric regional anaesthesia: a suggestion for training guidelines to improve clinical practice

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Introduction/background:
The level of clinical expertise of anaesthetists has long been an important factor in determining the outcome of paediatric regional anaesthesia. This level would vary depending on the duration and type of training and practice. Yet most available training resources are adult-oriented with a lack of evidence-based guidelines for paediatric regional blocks.

Aim/objectives:
As a first step to developing standardised guidelines, this study aimed to assess the efficacy and safety of regional blocks in relation to patient age, techniques and competency of the clinicians at a Sydney children’s hospital.

Methods
Paediatric regional block cases from 2015-16 were retrieved for patients between 0-10 years of age from the hospital database. The data collected included patient age, regional block techniques, recovery in Post Anaesthesia Care Unit (PACU) and the level of clinician expertise by years of experience.

Results:
Majority of procedures were performed by specialists with more than 10 years of experience (64% of 2665). Local anaesthetics were mostly injected below recommended dosage (96% of 695). Time to induce anaesthesia, anaesthesia duration and duration in PACU increased with the increasing level of experience and decreased as the patient age increased. Of 2665 reports, only 452 mentioned regional block types, 160 mentioned block techniques and 16 recorded complications.
Discussion:
Lack of correlation in these results and detail in anaesthetic reports suggest a need for improved reporting and training guidelines.

Conclusions:
The results of this study will be used to further develop standardised guidelines and educational training resources to improve paediatric anaesthetic practice.

Implementing programmatic assessment: ensuring a successful and sustainable transition

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1ModMed, Adelaide, Australia

Introduction/background:
The general practice training program, GP365, developed by ModMed in partnership with the Flinders University's Prideaux Centre, adopts a programmatic assessment for learning approach and has been used Australia since 2015.
For our organisation, the decision to move to programmatic assessment was obvious, we saw this approach aligned to our core purpose to train safe independent practitioners adaptive to their context.
Challenges presented in the implementation of the program and the engagement of all stakeholders.

Discussion:
When pursuing transformations, organisations rarely realise the benefits or retain the value they anticipate. While there are many reasons for this, studies confirm that the top contributors are related to people and organisational issues. It was our experience that even though individuals were willing to accept the concept of programmatic assessment there was still a tendency to revert to traditional approaches. A systematic approach to implementation was adopted to address the issues identified and ensure increased adoption, quality, safety and cost outcomes were achieved and the sustainability of programmatic assessment beyond the implementation phase. The framework developed was based on the congruence model of organisational alignment. Very simply, the greater the congruence of organisational elements such as work, people, structure, and culture the higher the performance.
Critical to the adoption of GP365 was the change management approach, designed to support successful transition. It was imperative to incorporate behavioural and cultural elements in a co-ordinated and transparent manner to bring about lasting change, enable continuous improvement and optimise benefit realisation.
Since implementation careful guidance and continuous support has been maintained to embed the principles of programmatic assessment.

Exploring the divide between academics and clinical educators in competency based assessment.

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2Monash Centre for Scholarship in Health Education, Monash University, Clayton, Victoria, Australia

Introduction/background:
Making decisions regarding student competency assessment is challenging and involves the input of multiple stakeholders in both the academic and work-based settings. Variation in assessment decisions can be a source of frustration and confusion for all stakeholders, including students.

Aim/objectives:
This study aimed to explore the attitudes and behaviours of academics and work-based clinical educators and their impacts on assessment.
Methods
Focus groups with experienced academics from ten Australian universities involved in student dietitian training explored views on competency-based assessment (n=58). Questionnaires then explored clinical educators’ attitudes to assessing competency across 17 acute and sub-acute hospitals (n=26). Views of the different groups were analysed separately.

Results:
Focus groups acknowledged: the relationship between competency and future employment; holistic assessment; professionalism and challenges with a one-size fits all approach. Contrastingly, the majority of hospital-based educators reported: preference for a single standardised tool; the importance of quantifiable objective measurements; and separate assessment for different domains of practice.

Discussion:
Academics appreciated of the complexity of competency assessment along with its potential for subjectivity and its connection with the prospects for graduate employment beyond hospital settings. Clinical educators’ views were more focused on the hospital environment and they valued the concepts of objectivity and validated, standardised tools.

Conclusions:
Attitudes to assessing competency for work-based performance differed. Further training of clinical educators may develop their understanding of the complexities involved in competency based assessment. This includes extending their understanding of competency assessment beyond the clinical domain and the role of self and subjectivity.

Evaluating Teamwork Skills Development in Second Year Undergraduate Science Courses using ePortfolio Learning, Reflective Practice and Authentic Assessment

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Introduction/background:
Development of co-curricular professional skills and capabilities by undergraduates that are linked to formal academic learning is difficult to capture at a course level within higher education institutions. Feedback from employers, educators and students suggests that the teamwork graduate capability is highly sought after, but it is hard for students to prove mastery.

Aims:
Our aim was to build student teamwork skills awareness, capabilities and reflective practice.

Methods:
The Comprehensive Teamwork Learning and Assessment (CTLA) model was applied to an authentic assessment task in a second year undergraduate Pathology course at UNSW, focused on building teamwork capabilities combined with self- and peer-evaluation of teamwork skills awareness and development and ePortfolio implementation. These CTLA model elements support student reflective practice and awareness of teamwork skills attainment using an adapted AAC&U VALUE rubric for teamwork; the UNSW Teamwork Skills Development Framework. We implemented this system using Workshop UNSW in Moodle for teachers to monitor and students to evaluate teamwork skills progression for themselves and their peers. ePortfolio/reflective blogging using WordPress to document and reflect on their personal-professional development of teamwork skills was implemented as a key part of this approach. We evaluated reflective practice using the Reflective Rubric UNSW.

Results:
Evaluation of teamwork skills for undergraduate Pathology students appeared to demonstrate significant improvement in all elements of teamwork skills except ‘Responds to Conflict’.
Conclusions:
Study outcomes demonstrated the innovative CTLA model and assessment approaches improved teamwork skills awareness and attainment in undergraduate Pathology courses at UNSW.

Improving student-driven feedback in postgraduate medical students during a brief clinical attachment

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Background
Feedback is a cornerstone of learning, however, student dissatisfaction with feedback is common. Teacher-focused interventions to improve feedback have been minimally effective. Student-focused interventions may be an alternative strategy.

Aims
To explore student feedback behaviours and beliefs, and to determine whether a student-directed feedback education improves student feedback behaviour and satisfaction.

Methods
Focus groups were conducted with three student cohorts undertaking Sydney Medical Program’s paediatric term (May-November 2017). Data from the first cohort informed development of a feedback education package, which was piloted with the second cohort (10 students) and fully implemented with the third cohort (all students). The package was evaluated through focus groups and pre/post surveys consisting of Likert-scale (rated 1-5;1=least) and open-ended questions. Qualitative data was analysed using thematic analysis; quantitative data was analysed using descriptive statistics.

Results
Most students rarely sought feedback, believing it should be teacher initiated.

Analysis of survey data showed satisfaction with feedback quantity increased during the term, with pre-post means of 2.6-2.9(no intervention), 2.6-3.3(pilot intervention) and 2.7-3.2(full intervention). Satisfaction with feedback quality increased during the term, with pre-post means of 3.1-3.3(no intervention),3.1-4.0(pilot intervention) and 2.9-3.6(full intervention). The percentage of students seeking feedback weekly or more increased during the term, with pre-post percentages of 64%-70%(no intervention),64%-100%(pilot intervention) and 50%-82%(full intervention).

Discussion
Feedback satisfaction and feedback-seeking mostly increased during the term across all cohorts, however, the improvement was more pronounced in the cohorts that received feedback education.

Conclusions
Low levels of feedback-seeking may be improved by student-targeted feedback education.

Distributed assessment of medical ethics in case discussions facilitated by a large team of casual clinical tutors

Iulia Oancea1, Nicole Shepherd1, Sharon Darlington1, Sarah Winch1, Ben Barry1

1School of Clinical Medicine, Faculty of Medicine, The University of Queensland
**Introduction/background:**
Sustainable assessment of ethics in a large cohort of medical students presents a major challenge. The integration of this perspective within clinical science teaching is an accompanying curriculum goal that might also present avenues to support assessment. Case-based learning amongst a small group is an opportunity to assess ethical reasoning and professionalism, but does rely on a large and diverse cohort of tutors.

**Aims:**
To design an assessment tool for ethical reasoning and professionalism that is integrated in the case-based learning sessions of a clinical science course. To design staff development activities that support tutors in the use of this assessment tool and to facilitate related case discussion.

**Discussion:**
Participation in case-based learning is currently being assessed using rubrics relating to clinical reasoning and professional communication. An additional domain relating to ethical reasoning has been designed and includes anchors relating to ethical dimensions to medical practice. The combined rubric will be marked by a single tutor for each case-based learning group. To ensure consistency of marking across tutors, training will aim to enhance knowledge related to specific ethical positions, to clearly differentiate between reasoning relating to clinical science and medical ethics, and to recognise developing levels of reasoning in year 1 graduate entry medical students.

**Issues/questions for exploration or ideas for discussion:**
With an adequate evaluation form and tutor training, this type of assessment can be extremely valuable for supporting sustainable, valid and reliable assessment. In the first instance of use, a broad grading scaling is a possible approach to minimise the influence of differences in grading between tutors.

**Effect of exposure to six second “Vine” skill demonstration on medical student confidence in practical skills: cross-over design – pilot study**

**Booth, Tarra¹, Woo, Henry¹**

¹ Sydney Adventist Hospital Clinical School, University of Sydney, Sydney, Australia

**Introduction/background:**
Blended learning utilising social media is increasingly being used in Medical Education, yet no consistent clear advantage of this method in the literature. Further, research has not previously looked at confidence as an outcome of learning methods for practical skills, yet this confidence barrier may hinder opportunistic learning under supervised practice.

**Aim/objectives:**
Compare traditional teaching (written instruction + demonstration) to Blended learning (written instruction + demonstration + six second looped video on social media) in confidence to perform a clinical skill in first year graduate entry medical students over a 10-minute exposure.

**Methods**
A cross-over 10-minute exposure to traditional teaching, and blended learning involving custom created 6-second looped videos, in 21 first-year medical students. Self-reported questionnaires were completed after each teaching session.

**Results:**
Pooled analysis of teaching components found significant correlation between demonstration-confidence, and video-confidence, yet no significance between written instruction-confidence. However, no significant difference was detected in the primary outcome - confidence between the treatment and control groups.
Discussion
Our study is significantly limited by participant numbers and hence power. Findings of significance, revealed during pooled analyses, however, suggest video delivery is considered helpful by students. Demonstration inclusion in both arms may have influenced the results. An expanded, more highly powered study is necessary to establish clear benefit prior to integration into curricula.

Conclusions:
Despite limitations in power, this study found video, and demonstration, positively correlated with confidence, while written instruction was not. The study failed to demonstrate a difference between traditional vs blended learning mean confidence intervals.

The opportunities and challenges of digital clinical nursing placement assessments. An Australian experience.

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¹La Trobe University

Background
Digital learning technologies have transformed the teaching landscape over the past decades. The advent of the learning management systems, the integration of web 2.0 tools and the development of personalised learning spaces has transformed nursing education at the universities. Similarly, these technologies have also transformed clinical practice especially the digitisation of patient management process in hospitals. However, the interphase governing the training relationship between universities and clinical practise setting has remained largely a traditional paper based process. This limits the information at hand to provide effective education and management of nursing students on clinical placements. La Trobe University School of Nursing and Midwifery implemented the online tool to improve efficiency in monitoring and managing nursing students and to support personalised learning spaces, which foster reflective practice, evidencing and validation of competencies and employability skills obtained during the placement.

Purpose
The purpose of this session is to present and discuss three years of experience of moving to a digital online assessment system designed to improve accountability, transparency and record keeping of student placement data.

Issues/ questions for exploration or ideas for discussion:
The challenges and opportunities are explored under the following themes; university technology culture vs clinical workplace technology culture, workforce stability vs knowledge management, flexibility vs workarounds, functionality vs usability, customisation vs changing business processes and access vs privacy.

Creating Effective Small Group Learning

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Introduction/background:
Small group, learner-centred tutorials are at the centre of many health profession curricula. Small groups encourage students to self-reflect, compare ideas with peers, and polish communication and team work skills. This promotes self-directed and collaborative peer learning and gives the opportunity for immediate feedback. Faculty who facilitate small group learning session need practical, effective strategies for managing small groups, dealing with particular stresses, and anticipating how a group’s development stages and dynamic influences other group processes (e.g., cohesiveness, conformity, productivity).
Purpose and outcomes:
This workshop is for health profession educators who facilitate small group sessions. Novices may benefit most from this workshop; however, those more experienced with small group facilitation will have the opportunity to share and discuss small group facilitation strategies. By the end of the workshop, participants will be able to: (1) self-reflect on teaching styles and issues; (2) identify challenges and opportunities in small group facilitation; (3) reflect on how small group dynamics affect student performance; (4) develop strategies to promote a positive learning environment so a group can achieve its goals.

Issues for exploration or questions for discussion:
Participants will self-reflect on challenges/successes in small group teaching. After discussing small group development over time, “buzz groups” will be given various case vignettes of a dysfunctional group and consider strategies to resolve the issues. The workshop will include a short role-play scenario, depicting interactions between facilitator and learners. Participants will be asked to share one take-home strategy they will implement.

Orthopaedic Essentials: Evaluation of a student-organised intensive short course for WA medical students

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¹Medical student, ²Orthopaedic surgeon and Adjunct Senior Lecturer, University of Western Australia, Perth, Australia.

Introduction:
The student-led University of Western Australia Surgical Society (UWASS) provides a range of events and opportunities to students interested in pursuing a career in surgery. Over the last three years, UWASS has offered a two-day intensive course combining a mini-lecture series with practical workshops covering core orthopaedic knowledge.

Aim:
The aim of this work was to evaluate the course, focusing on learning outcomes, and to determine areas for improvement and further development of the program.

Methods
Pre- and post-course surveys were completed addressing participant study level, reasons for attendance and a Likert scale on their confidence in a series of key orthopaedic skills.

Results:
Overall, feedback was very positive with all participants indicating they would recommend the course to other students. Confidence levels of orthopaedic knowledge and practical skills increased across the group.

Discussion:
The course remains a popular initiative. Of particular interest, the majority of participants attended with the goal of supplementing medical school teaching and only a few expressed an active interest in pursuing a career in orthopaedics.

Issues/questions for exploration or ideas for discussion:
Many students feel there is inadequate time in a postgraduate course to gain a comprehensive understanding of the expected medical school curriculum and seek additional learning opportunities. This program provides an example of engaging medical students in identifying their educational needs and working with clinicians to provide relevant and desired teaching and learning opportunities: providing a sustainable and contemporary medical education opportunity that could be adapted to other clinical specialties.
An analysis of self, peer, near peer and faculty assessment of a year 2 history taking assessment task.

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¹Victoria University, Melbourne, Australia.

Introduction/background:
Peer assessment may offer a framework for expected skill development and feedback appropriate to the learner level. Near peer (NP) assessment may elevate expectations and motivate student learning. Feedback from peer and near peers may be a sustainable approach to enhancing student feedback on assessments without overloading faculty staff resources.

Aim/objectives:
To explore the relationship of self, peer, NP and faculty assessment of students' history taking skills using a simulated peer patient.

Methods
Year 2 students in the osteopathy program at Victoria University were invited to self and peer assess a written assessment. Near-peers and faculty also marked the assessment. Students received training with respect to grading the assessment. Year 2 students also completed a peer/NP attitudes questionnaire.

Results:
Year 2 students (n=9), near-peers (n=3) and faculty (n=5) were recruited. There was a moderate positive correlation between self and peer grades (r=0.38) and self and faculty (r = 0.43) and a weak positive correlation between self and near peer (r = 0.25). Perceptions of peer and near-peer marking were variable. Over half of the participants suggested peer or NP assessments should not contribute to a grade.

Discussion:
Framing peer and NP assessment as another feedback source may be more valuable than having a grade awarded. The small number of students recruited may be an indication as to the acceptability of peer and NP assessment.

Conclusions:
There is the potential for peer assessment to be utilised in addition to faculty assessment as another source of feedback.
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**Discussion:**
Framing peer and NP assessment as another feedback source may be more valuable than having a grade awarded. The small number of students recruited may be an indication as to the acceptability of peer and NP assessment.

**Conclusions:**
There is the potential for peer assessment to be utilised in addition to faculty assessment as another source of feedback.

**Medical student perceptions of learning during the critical care program of Sydney Medical School: The deliberate attainment of basic airway management skills in a core rotation.**

**Sarah Whereat, Prof A Mclean, Dr G Hendry**

**Background:** The Critical Care Medicine (CCM) environment provides a unique clinical experience. However, junior doctors identified they lack clinical experience and preparation in CCM. In the Australian context, there lacked understanding and knowledge of medical student learning and skill attainment during CCM rotations and an absence of clinical assessment in CCM.

**Summary of work:** A interpretative/constructive theoretical approach to student learning during the Critical Care Medicine Rotation (CCMR) of the Sydney Medical School Program (SMP), used the deliberate assessment of basic airway skills, to identify both the effect of assessment and the experience of the rotation on student learning.

**Study results and findings:** The airway study results demonstrated a statistical change in declarative knowledge. While not statistically significant, students’ management of patients’ airways was equal, to their simulation assessment maintaining procedural and conditional knowledge. The non-formative assessment guided student learning during the rotation. Analysis of focus group discussion identified 4 themes Goal setting, participation, peer learning and conflict.

**Discussion:** Observation, questioning, guidance and participation were core features of student learning. The students’ valued time to observe peers, wanting to understand thought processes (clinical reasoning). Students identified that ‘Conflict’ with curriculum requirements external to the clinical rotation, restricted their ability to gain adequate clinical experience.

**Conclusion:** While the current program was found to be effective for student learning, opportunities exist for additional improvements. These include the addition, for skill teaching the principles of deliberate practice in the clinical environment to guide student learning. More simulation, greater patient involvement and directed learning.
Take home message
Students wanted to participate in more clinical activities than they currently do. Deliberate assessment guided students learning during the rotation. Peers of all levels are vital to the success of student learning. Curriculum requirements can impact on the degree of clinical immersion if not also seen as required attendance.

An inexpensive technique to enhance engagement: evaluation of Think-Pair-Share in an undergraduate pathology unit.
Douglas Wong
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Introduction/background:
Fostering student engagement in low-resourced environments is a common challenge in health professional education. Content-rich subjects, in particular, are associated with a high risk for disengagement. It is possible to enhance the student experience by incorporating principles of active learning and cognitive psychology within traditional forms of instruction.

Aim/objectives:
This study explored osteopathy student perceptions of think-pair-share, a teaching strategy that combines elements of retrieval practice with cooperative learning. Furthermore, this study sought to quantify the effect of think-pair-share on self-reported engagement and academic achievement.

Methods
Seventy-six second-year osteopathy students participated in this before-and-after study, which conceptualised think-pair-share as an educational intervention. Twelve pathology lectures were divided into subtopics of 12-20 mins duration. After each sub-topic, a short-answer question was posed to the class for consideration using the think-pair-share approach. A post-test survey assessed self-reported engagement and perceptions of the teaching strategy.

Results:
Participants reported significantly higher levels of engagement ($p < .001$) following instruction with think-pair-share. Whilst the intervention did not appear to have an impact upon final grades, the majority of learners were satisfied with the approach. Qualitative feedback on think-pair-share was largely positive: perceived benefits to learning emerged as a dominant theme. Learners also valued the collaborative nature of this teaching strategy.

Conclusions:
Think-pair-share is an inexpensive teaching strategy that was received well by osteopathy students. This easily implemented technique can transform a didactic lecture into a collaborative community of active learners.

Doctor as Teacher
Sarah Rotstein1,2,3
1Monash University, Melbourne, Australia 2Monash Alfred Psychiatric Research Centre, Melbourne, Australia 3Alfred Health, Melbourne, Australia

Background:
‘Some are born great teachers, but ALL doctors will have teaching roles thrust upon them’. The word ‘doctor’ originates from the Latin, *doeere*, meaning ‘teach’. Whilst, the word doctor carries different connotations today, the origin of the word remains relevant to medical practice and training. Medical training, especially in postgraduate years, is essentially an apprenticeship. Supervisors carry much responsibility and influence relating to patient care and their junior staff. However, little training is provided on how to manage these often conflicting responsibilities. Specific clinical education
degrees do exist, however, they are generally external to medical degrees and are not required for practice.

**Aim:**
Investigate clinicians’ perspectives on the role of teaching in their practice and to determine what, if any, additional training in Clinical Education clinicians would find useful.

**Methods**
Online surveys sent to doctors at a major metropolitan hospital.

**Results:**
Will be discussed at conference.

**Discussion**
Teaching is an important component of medical practice and clinician’s skilled in teaching are essential to the sustainability of the medical profession.

**Conclusions:**
Postgraduate specialty colleges and medical schools should consider effective means of teaching clinicians, and future clinicians, how to teach.

**Connecting the ‘dots’ through learner perception**

Karen Beattie

1Health Education and Training Institute, Kempsey, Australia

**Introduction:**
The Training and Support Unit provides education and support to Midwives, Nurses and Aboriginal Health Workers from the Aboriginal Maternal Infant Health Services (AMIHS) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF) programs across NSW, providing staff development which supports sustainable, culturally appropriate care to Aboriginal women, families and communities.

The AMHS and BSF Education and Training ‘Matrix’ was developed in 2014 to support the core professional knowledge and skills recommended for AMIHS and BSF staff.

**Aim:**
To consult with AMIHS and BSF staff and determine from their perspectives: the current relevance of ‘Matrix’ core competencies to their roles, and their individual perceived level of competency in relation to the competencies

**Discussion:**
Consultation was undertaken with multidisciplinary staff (33) from 26 NSW sites at the August 2017 ‘Creating Connections’ workshop. Utilising a ‘world café’ style consultation process participants through progressive rounds of conversation explored the learning competencies in small groups, ranking perceived importance and any gaps.

Participants then completed an anonymous individual survey ranking their perceived level of competency or ability against the core professional skills and knowledge using a 7 point Likert scale.

Whilst the participating cohort cannot be generalised as representative of all staff in the AMIHS and BSF network, several significant practice knowledge to perceived competence gaps which impact on delivery of culturally competent evidence based practice were identified, identifying opportunities for education development to enhance staff capabilities.

**Ideas for discussion:**
Comparison of learner perceptions against objective competencies to identify learning needs.
Sustaining Deep Learning: If a CBL model is good for our students should we use it to train our tutors too?

Sharon Darlington¹, Cherri Ryan¹

¹Faculty of Medicine, The University of Queensland, Brisbane, Australia

Introduction/background:
Case-based learning (CBL) is the cornerstone of teaching in the early years of the medical program at the University of Queensland. Small group, collaborative, inquiry-based learning processes such as CBL are widely used internationally and valued for promoting sustained, deep learning. For our tutor training program, our team developed a purpose-written case, featuring a CBL group displaying symptoms of dysfunction, to reinforce the value of the CBL process and provide new and experienced tutors with experiential learning in the CBL model.

Aim/objectives:
To determine if the CBL process is an effective method of training tutors in both the process skills of facilitating the CBL model and content knowledge of strategies for managing group dynamics.

Methods:
The case was designed specifically to provide tutors with the experience of being “students” in a CBL process. It has been used in tutor training workshops since late 2014, with over 90 tutors having now experienced this case. At the conclusion of each workshop, attendees are asked to comment on the effectiveness of working through this case.

Results:
Qualitative and quantitative feedback indicated overwhelming satisfaction with the training workshops. Through participation in a CBL case, tutors reported they gained skills in the CBL process, valuable insights into the strengths of this educational model and additional content knowledge regarding management of functional and dysfunctional groups.

Conclusions:
Using a CBL model to teach CBL tutors is an engaging and effective way to introduce tutors to both the process of CBL and the facilitation of functional group dynamics.

An approach to the quantitative analysis of radiology learning objectives in an Australian medical curriculum
Daniel Townsend

Introduction:
There is an increased reliance on a diverse range of imaging modalities in health care. To prepare medical students for future practice this should be reflected in radiological education. It is therefore relevant to develop an approach to assess the coverage and depth of radiology learning in an integrated curriculum.

Aim:
To develop a quantitative approach to assess the diversity and depth of radiology learning objectives (Lo) and apply this to an Australian medical curriculum

Methods:
The radiology Los from the 2017 MBBS/MD courses at the School of Medicine, Sydney (SoMS), University of Notre Dame, Australia were identified and mapped. These were compared with the Undergraduate Radiology Curriculum’s (URC) Los proposed by the Royal College of Radiologists.
Blooms Pedagogy (BP) was applied to each SoMS Lo to determine the expected depth of learning and the progression of learning across the four years of the program.

Results:
There were 25 Los in the URC and 156 radiology Los from SoMS. 89% of SoMS Los were aligned with 2 URC Los. 13 URC Los were not addressed. The median depth of learning of Los rose from “Remember” in first year to “Understand” in second year, it remained at this level for years three and four.

Discussion:
This approach described the span and depth of the radiology curriculum, while identifying gaps in comparison with an international standard. The gaps that were identified will facilitate discussion in ongoing curriculum review. This approach could be adapted to other areas of the curriculum.

The appropriate use of adrenaline-containing local anaesthetics in adult dental patients on tricyclic antidepressants or monoamine oxidase inhibitors. A systematic review

Orani Lancaster¹, Julian Oronos¹, Melina Jablonski¹, Madeleine Chin¹, Lynlee Tatnell¹, Alan Nimmo¹

¹College of Medicine and Dentistry, James Cook University, Cairns, Australia

Background:
With the number of prescriptions for antidepressants rising and local anaesthetics used in routine dentistry, clinicians should be aware of the appropriate use of adrenaline-containing local anaesthetics (AcLA) and adverse effects with antidepressants. Controversy exists on whether significant interactions occur between adrenaline and tricyclic antidepressants (TCA) or monoamine oxidase inhibitors (MAOI). The Australian Therapeutic Guidelines Oral and Dental (eTG) recommend AcLA be avoided in patients on MAOIs, without contraindication for TCAs.

Objective:
The objective of this systematic review was to determine the evidence surrounding the putative interactions of TCA/MAOIs and AcLA and investigate what is considered safe use.

Methods:
Electronic databases were searched for studies in English without restriction to publication year that observed adult participants exposed to both adrenaline and TCAs and/or MAOIs. A total of 19,777 citations were retrieved and four studies included.

Results:
A clinically significant interaction was identified between adrenaline and TCAs and caution was advised when using AcLA. MAOIs showed nil to minor potentiation of adrenaline, which authors deemed to be unimportant for the dental setting.

Discussion
All included studies had small sample sizes, and moderate quality design characteristics. The review findings contradict the existing eTG recommendations that adrenaline is not contraindicated with tricyclic antidepressants, and should not be used concurrently with monoamine oxidase inhibitors.

Conclusions:
AcLAs should be used with caution for patients taking TCAs, while there seems to be little risk for adverse interactions with MAOIs. Further studies are required and revision of the current Australian Therapeutic Guidelines should be considered.

Registration number: CRD42017057292 (PROSPERO)
Upskilling the primary care workforce in cancer survivorship

Kyleigh Smith¹, Mari Shibaoka¹, Michelle Barrett¹ and Prof Jon Emery¹,²

¹Victorian Comprehensive Cancer Centre, Victoria, Australia  ²The University of Melbourne

Introduction/background:
There is a rapidly increasing population of people living with and beyond cancer due to ageing and improvements in detection and treatment. This has impacted on the complexity of the primary care practitioners’ role in managing cancer survivorship. The Massive Open Online Course (MOOC) was developed to address this need in a sustainable education model.

Aim/objectives:
The Cancer Survivorship for Primary Care Practitioners program aims to enhance knowledge and skills in the transition of survivors from oncology treatment into shared care. The Victorian Comprehensive Cancer Centre’s (VCCC) goal was to develop a freely accessible, relevant, flexible, evidence based and sustainable resource for a global audience.

Discussion:
Aimed at primary healthcare practitioners including General Practitioners, nurses (general practice nurses, community nurses and nurse practitioners) and allied health professionals; the program was developed to adhere to best practice survivorship care in the areas of: Survivorship Fundamentals; Communication and Coordination of Care; Promoting Self-Management, Psychosocial and Community-based Support; Surveillance, Long Term and Late Effects; and New and Emergent Technologies. The MOOC is contextualised in the narrative of a patient story and includes a series of real patient stories, interactive presentations, interviews, readings, online discussions, quizzes and peer reviewed assessments. Alumni from the program will contribute to a growing community of practice and contribute to the teaching and quality improvement of the program. A description of the sustainable MOOC delivery model and evaluation results from the first cohort will be presented.

Issues/questions for exploration or ideas for discussion:
How best to engage our target audience, in enrolling and completing the course?
How can we best engage our alumni as teaching faculty in subsequent courses?

3D modelling and virtual reality for preoperative planning and surgical training

Sina Sobhanmanesh¹, James Otton¹,²,³, Nalini Pather¹

¹UNSW Sydney, NSW, Australia  ²Victor Chang Cardiac Research Institute, Sydney, NSW, Australia  ³Liverpool Hospital, Sydney, NSW, Australia

Introduction/background:
Congenital heart disease (CHD) is complex and requires understanding patient-specific anomalous heart anatomy. Patient-specific three-dimensional (3D) models are invaluable tools for this surgical planning. There is however no standardised procedure for 3D modelling patient-specific models. Furthermore, 3D immersive virtual reality (VR) is novel and has yet to be evaluated and integrated into clinical practice.

Aim/objectives:
The aim of this study was to compare the effectiveness of three different 3D modalities (3D-print, and 3D-VR headset and desktop delivery) for preoperative planning and management.

Methods
3D printed, desktop-VR, and immersive-VR (for Oculus Rift headsets) model were created using CHD patient imaging datasets. Cardiac professionals (n=29) were surveyed to compare the usefulness of the three types 3D models.
Results:
All survey participants found the 3D models useful and most were likely to use patient-specific 3D immersive VR models for preoperative planning, followed by a 3D desktop VR and a 3D printed model.

Discussion
While clinicians indicated that they were likely to use 3D VR, younger health professionals demonstrated greater comfort and confidence with using this novel technology. 3D VR presents an interesting modality for patient and public education.

Conclusions:
In conclusion, imaging data with sufficient contrast can be used for 3D modelling and 3D immersive VR technology has great potential in future personalised medicine.

National Bioscience Quality Assurance Framework for Bioscience Education in Nursing: A proposal

Amy Johnston1,2,5, Matt Barton2,3,4, Grant Williams-Pritchard2,4, Patricia Fell6, Vanessa Taylor1, Sarah Ashelford7, Jim Jolly8, Penelope Goacher9, Michael Todorovic2,3,4,

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7Department of Health Sciences, University of York Yorkshire UK
8School of Healthcare, University of Leeds Leeds UK
9School of Health Sciences, University of East Anglia Norwich UK

Introduction/background:
It is clear that bioscience underpins informed clinical reasoning and the delivery of quality patient-centred clinical care. Despite this, how bioscience is integrated into undergraduate nursing education remains a point of significant program variation. Available evidence suggests that most of the 36 programs offering nursing in Australia provide different bioscience courses; offering varied content through differing modes of delivery by differently qualified staff. While all program curricula are reviewed and approved by the Australian Nursing and Midwifery Accreditation Council, there appears to be particular variability in bioscience offerings, potentially varying the quality and capacity of Australian nursing graduates.

Aim/objectives:
The aim of this project is to explore the feasibility of introducing an Internationally validated National Bioscience Quality Assurance Framework for bioscience nursing Education in Australia.

Discussion:
The UK Bioscience Quality Assurance Framework for Education in Nursing has been in place for several years and was developed using an evidence-based consensus process to set out the learning outcomes for biosciences in British preregistration nursing programs. Several Queensland nursing programs are engaging with this framework to aid the development of quality nurse graduates.

Issues/questions for exploration or ideas for discussion:
This paper will support discussion around the introduction of the UK Bioscience in Nursing Education (BiNE) network and Bioscience Quality Assurance Framework (BQAF), as developed by the UK Higher Education Academy, as an underpinning standard for all Australian and New Zealand nursing programs. A steering committee has begun to explore evidence to underpin an Australian adaptation of this quality program.
Engagement and perceived utility of the biosciences by nursing students and registered nurses

Amy Johnston\textsuperscript{1,2,5}, Oliver Dupen\textsuperscript{4}, Grant Williams-Pritchard\textsuperscript{2,4}, Michael Todorovic\textsuperscript{2,3,4}, Matt Barton\textsuperscript{2,3,4}

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Introduction/background:
Biosciences typically form a challenging, content-dense part of early years of curricula in health education, but rarely feature strongly in later components of undergraduate degrees or in postgraduate health courses. For nurses, this may present a challenge as the clinical relevance of biosciences may not be evident until opportunities for engagement have largely past.

Aim/objectives:
The aim of this project is to explore the alignment of access to and engagement with bioscience learning with perceived professional need for bioscience content by nursing students and registered nurses.

Methods:
An explorative, qualitative study using semi-structured focus group interviews to examine undergraduate and postgraduate nursing students’ perceptions of engagement with and utility of biosciences content will be undertaken.

Results:
Transcripts of the interviews will be analysed to identify key themes using a multistep process.

Discussion:
Based on data that emerges from the interviews two processes will be undertaken. The first is serious consideration of the order and content progression of biosciences in undergraduate and postgraduate nursing curricula. The second is, in conjunction with input from other health professional educators the development of a broader survey to explore broader perception and accordance with the interview themes.

Conclusions
Bioscience educators in the health sciences may need to consider and adjust the stage and depth of content presented to nursing students as they progress through their professional careers. To best support patient-centred, evidence-based critical clinical thinking nurses may need to revisit and reengage with biosciences progressively through their degrees and beyond.

Understanding challenges dental students face in communicating with patients: Building insight to inform the development of an effective intervention

Gillian McGregor, Emma Bartle

University of Queensland, Queensland, Australia

Introduction/background:
Effective communication is critical to successful dental treatment and the establishment of a competitive practice. Barriers exist to the teaching of communication skills to dental students, requiring innovative approaches to teaching and learning. Technological progress offers the potential for innovative platforms to support the teaching and learning of new skills. Games for learning
facilitate motivation, engagement and learning as players construct knowledge from experience, a process supported by Experiential Learning Theory. These games offer a potential solution to training dentists as effective communicators. Year 1 to 5 dental students, recent graduates, clinical and academic staff of the UQ Bachelor of Dentistry (Honours) were surveyed using an anonymous online survey. Mixed methods analysis was conducted.

**Aim/objectives:**
Research was undertaken to explore students’ learning needs regarding communication with patients. This information will be key to developing a game for learning effective patient communication.

**Discussion:**
Findings help to build a better understanding of knowledge and attitudes regarding communication skills critical to competent dentist-patient communication and practice. Barriers to learning these skills, and difficulties students experience when communicating with patients are also discussed. Key findings will be discussed and used to build understanding into the types of communication skills training that may be most beneficial to students.

**Issues/questions for exploration or ideas for discussion:**
The role of communication skills training in dental programs and the use of innovative approaches to address barriers to teaching these skills.

### Training of Sonographers

**Lucy Taylor**¹, **Luke Fay**², **Amanda Dietsch**³

¹Australian Institute of Healthcare Education, Sydney, Australia

**Introduction/background:**
This poster explores Vocational Education Training as a choice of pathway for training sonographers using holistic pedagogy from Yang’s model.

**Aim/objectives:**
Arising from this, there is an opportunity to further explore the benefits of training of sonographers through Vocational training from data on graduates who have completed the course. The proposed research would involve graduate and student feedback via surveys and questionnaires.

**Discussion:**
There are many approaches to train sonographers. More investigation would expand knowledge of this particular pathway empathizing the holistic pedagogy as a method for student sustainability.

**Issues/questions for exploration or ideas for discussion:**
Pathways that use the holistic pedagogy to enhance student sustainability.
The function of Spiral curriculum model in the holistic pedagogy.
Factors that contribute to student sustainability with reference to Vocational training.

### The pillars of well-constructed SP programs: A qualitative study with experienced educators

**Shane Pritchard**¹, **Felicity Blackstock**², **Jennifer Keating**¹, **Debra Nestel**¹

¹Monash University, Melbourne, Australia ³Western Sydney University, Sydney, Australia

**Introduction/background:**
Simulated patient (SP) based health professional education is growing internationally. Formal standards for practice are emerging to equip educators and advance practice. However, evidence-based “how-to” guidelines to inform application to programs are not available. Direct exploration with experienced SP educators about their contemporary practices and beliefs may inform novice educators and advance practice and research.
**Aim/objectives:**
This study aimed to determine how experienced SP educators support SPs in simulation-based education for health professional students.

**Methods:**
A qualitative design was adopted. Experienced educators were identified via relevant professional associations, peer-reviewed publications, and peer referral. Fifteen semi-structured individual interviews were conducted via telephone. Independent thematic analysis was conducted by three researchers. Institutional ethical approval was obtained.

**Results:**
Four themes were identified that represent the key structural components to SP programs that support SPs and optimise learning for students: managing SPs – operationalising an effective program; selecting SPs – rigorously screening for suitability; preparing SPs – educating for a specific scenario; directing SPs – leading safe and meaningful interactions.

**Discussion:**
Considerable consensus in the key structural components of SP programs were identified. However, significant variations existed in the approaches used to operationalise each component. Variation may be an advantage of programs as educators facilitate learning that is contextualised. Alternatively, variation may be the product of individual assumptions and beliefs.

**Conclusions:**
From the perspective of experienced SP educators, a successful “well-constructed” SP program is comprised of the three pillars of selecting SPs, preparing SPs, and directing SPs, supported by a platform of appropriate management practices (managing SPs).

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**Embedding a digital literacy activity in a museum environment in a 1st Year Doctor of Optometry curriculum**

Cham Kwang Meng¹, Gaunt Heather¹

¹University of Melbourne, Victoria, Australia

**Introduction/background:**
Students recognize the key role digital literacy has in enhancing employability. Scholarship on teaching health ethics is limited in Optometry. There are no existing research focussing on the key conceptual content for an optometric curriculum.

**Aim/objectives:**
This project aims to explore student personal and professional learning and reflection in ethics via engagement with artefacts in Grainger Museum, University of Melbourne. We seek to explore students’ understanding of ethical concepts and skills in health professional contexts, including teamwork, communication and collaboration.

**Methods:**
Optometry students experienced activities in the museum that focused on ethical dilemmas, including dealing with present or future ‘moral distress’ in health professional contexts.

**Results:**
Together, 90-99% of the students (n=81, 100% response rate) reported that this task increased their understanding and awareness in digital literacy, professionalism and health ethics. They reported it has helped in identifying strengths and weaknesses in communication and inter-personal skills. 85% of the students recommended incorporating activities involving digital literacy and museums into the program in future. Overall, students appreciated incorporating Humanities in a clinical discipline as it encouraged lateral thinking and allowed more personal growth.
Discussion:
This research focuses on strategies for optometric teaching and learning in health ethics. It investigates object-based learning through pedagogical encounters with cultural artefacts. We have successfully implemented activities that are sustainable and embedded within the curriculum.

Conclusions:
Engaging with material culture in a museum context has delivered a deeply interactive and engaging learning experience, promoting the development of professional identity, awareness, and professional wellbeing.

A digital OSCE tool for Health Sciences – Optometry, Nursing and Physiotherapy

Cham Kwang Meng¹, Tarrant Bronwyn¹, Mathew Thomas¹, Kelly David¹, Cochrane Anthea¹
¹University of Melbourne, Victoria, Australia
(Optometry: Kwang and Anthea; Nursing: Bronwyn and Thomas, and Physiotherapy: David)

Introduction/background:
A digital iPad-based Objective Structured Clinical Examination application (OSCE app) has been adapted to conduct clinical assessments in Optometry, Nursing and Physiotherapy at the University of Melbourne. The aim is to improve the provision of student feedback after OSCEs to allow critical self-reflection, and at the same time, enable time-efficient and cost-effective staff administrative processes.

Purpose and outcomes:
The goal is to describe and showcase the digital tool that have been customised to suit each discipline’s requirements all based on a common template, but ending up with subtle different versions. The design, setup, execution and implementation of the OSCE app will be discussed. It is hoped that this interactive and engaging workshop will lay the foundation for potential inter-university and cross-discipline collaborations.

Issues for exploration or questions for discussion:
The strengths and areas for further improvements of the OSCE app in its current format will be evaluated. Any interest in cross-discipline and inter-university adaptation, collaboration, and further development of the iPad-based OSCE app will be sought.

Outline of workshop activities:
IPads will be provided to workshop participants. They will have hands-on opportunity to work through the design and setup of the app, and be exposed to three different versions. Participants will get to see how assessment rubrics are displayed and marks collated on a spreadsheet. The format, quality and type of feedback that students receive will also be shown.

Anatomy curriculum design for a new MD program

Vaughan Kippers, Peter Wragg, Peter Landy, Yacoob Omar, Kristy Weir, Louise Ainscough

School of Biomedical Sciences, The University of Queensland, Brisbane, Australia

Introduction/background:
In the previous MBBS program, students perceived learning in anatomy to be a “low yield activity” because of “the paucity of examination questions covering these … disciplines” (2010 Australian Medical Council Medical School Accreditation Committee). Consequently, there were concerns about the depth of anatomical understanding in medical students as they progressed into clinical rotations.
Aim/objectives:
The School acknowledged the need to improve anatomy teaching in the planned MD program, and aimed to improve the anatomy teaching resources by increasing the core teaching team from two to six academic staff who; rewrote the gross anatomy practical notes with a clinical focus, organised formative assessment for gross anatomy sessions, introduced radiological anatomy, consolidated virtual microscopy in the histology curriculum, introduced e-tutorials, some using the BEST Network platform, and re-introduced practical examinations in all sub-disciplines of anatomy.

Discussion:
In 2016, the Faculty of Medicine awarded the MD anatomy teaching team an award for a program that enhanced learning, based on four criteria; (1) distinctiveness, coherence and clarity of purpose, (2) influence on student learning and engagement, (3) breadth of impact, and (4) concern for equity and diversity. In 2016, a Director of Surgery at a public hospital was “pleased to report that the anatomical knowledge of these [UQ MD] students has progressed astoundingly in just a few short years.”

Issues/questions for exploration or ideas for discussion:
The aims include the retention of the benefits outlined, improvement of blended learning using shared resources, and optimisation of assessment using a range of methods.

‘Two different fields’: supporting higher degree research students in health professions education

Charlotte Denniston1,2,3 & Joanna Tai4

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3College of Intensive Care Medicine of Australia and New Zealand, Prahran, Australia
4Deakin University, Centre for Research in Assessment and Digital Learning (CRADLE), Melbourne, Australia

Introduction
Despite meeting threshold standards for admission into a Higher Degree by Research (HDR) studies, candidates may have done their clinical training at a time when academic writing and research skills were less prioritised in health profession education (HPE). Therefore, standard university HDR supports may be insufficient for these clinicians returning to university for HDR study. The aim of this study was to address the following questions: What supports are offered to HDR students in HPE research, are they aware of them, and what can we do better?

Methods
After ethics approval, data were collected in a PeArLS at the ANZAHPE conference in July 2017. Fourteen participants, in three small groups, responded to facilitator prompts and recorded their discussions on butcher’s paper. A larger group discussion was audio-recorded and transcribed. Written and transcribed data were collated and thematically analysed.

Results
Participants in this PeArLS were mostly from university settings, with a range of roles and clinical backgrounds. Most participants were aware of institutional support at their home institutions (n=10), however half of the group were unaware if there was specific support for HPE HDR students (n=7). Thematic analysis of discussions revealed three main themes regarding support needs: 1) managing clinical and educational disciplinary differences, 2) navigating the system and 3) connecting as a part-time student.

Discussion
Theme 1, managing clinical and educational disciplinary differences, seems particularly unique to this population. This presentation will discuss these findings and implications for the support of current and future HPE research students.

Nutrition education for pharmacy students.
Susan Miller¹, Liza Seubert¹, Professor Caryl Nowson².

¹The University of Western Australia, Perth, Australia.²Deakin University, Melbourne, Australia.

Introduction/background:
Long term health conditions that are either wholly or partly diet-related are increasing in the community. Pharmacists have a significant role to play in promoting health, preventing illness and responding to the primary health care needs of patients. This includes treatment of nutrition-related diseases and providing nutrition advice to patients and consumers. Students at The University of Western Australia (UWA) undertake a two year Masters’ program in pharmacy.

Aim/objectives:
The purpose of this project is to investigate the level of nutrition education in the current postgraduate pharmacy program at UWA.

Discussion:
The Nutrition Competency Implementation Toolkit developed by staff at Deakin University has been used to map the relevant learning outcomes in the current offerings of the course and the final year students will be asked their perception of their knowledge of nutrition. Staff in pharmacy will use the information to enhance the current program in relation to nutrition topics.

Issues/questions for exploration or ideas for discussion:
What constitutes adequate nutrition-related knowledge in a two year postgraduate pharmacy program? How do students perceive their knowledge of nutrition in their postgraduate education?
Workshop Presentations

Presenting author shown - select each presentation to hyperlink to the abstract.

Sunday 1 July 2018

Workshop 1

Julie Ash, Svetlana King, Flinders University, Australia

Workshop 4

454. Sustaining core principles of patient-centred care education in two medical schools
Jenny Barr, Kim Roony, Michelle Horder, Kath Ogden, Jenepher Martin University of Tasmania, Australia

Workshop 6

3. Research paradigms and methods: An interactive and applied workshop across the methodological spectrum
Marcus Henning, Craig Webster, University of Auckland, New Zealand

Workshop 7

203. Difficult Conversations - why we find them challenging and what we can do to make them learning conversations Heather Grusauskas and Patrick Kinsella, EVGPT, Australia

Workshop 8

216. Increasing feedback literacy of learners and educators: engaging with the ‘feedback for learning framework’ Elizabeth Molloy, University of Melbourne, Australia

Workshop 9

295. Achieving greater student sustainability by using competencies to monitor and coach the professional growth and development of pre-clerkship medical trainees
Neil Osheroff, Cathleen Pettepher, Vanderbilt University School of Medicine, USA
Workshop 1

Case Study Research Workshop: Researching Phenomena in Context

Julie Ash and Svetlana King

Introduction/background:
Case study methodology is well established in educational and social science research but is arguably under-utilised in health professions education research. Case study research methodology is ideal for understanding complex phenomena that are context bound – like sustainability – and can be used to answer how and why questions, for both research and evaluation purposes. Case study is versatile, aligning readily with most paradigms and theories and allowing integration of qualitative and quantitative data.

Purpose and outcomes:
From this workshop, participants will develop:
- An understanding of the theoretical underpinnings of case study methodology
- An appreciation of its practicality and versatility across a range of research contexts
- Skills in assessing the quality of case study research
- ‘First steps’ experience of developing a case study project

Issues for exploration or questions for discussion:
This workshop will address the following questions:
- What is case study methodology and how can it be applied to health professional education?
- How can a case study be developed?
- How can case study be assessed for its quality?
Discussion questions are encouraged from participants to maximise individual learning.

Outline of workshop activities
The presenters will provide an overview of the theoretical underpinnings of case study before outlining two different research projects which utilised this methodology. The majority of the workshop will comprise two small-group activities and shared discussion on:
- Using criteria to appraise the quality of published case study research in the health professions education literature
- Applying case study methodology to participants’ own (or, where appropriate, facilitator-generated) research questions

Workshop 4

Sustaining core principles of patient-centred care education in two medical schools

Jenny Barr, Jenepher Martin, Kathryn Ogden, Michelle Horder

Introduction/background:
Building sustainable patient-centred care education (PCCE) for health professional students can be advanced through collaboration between Universities that strive for continual improvement in PCCE. Translating a patient partnership program from one site to another has enabled two clinical schools to forge innovations for student learning in PCCE, research contributions and has broadened high-level patient engagement networks in education and research across two states.
Purpose and outcomes:
This workshop aims to:
Build an appreciation of the importance of promoting the patient voice within health professional education; understand the core principles, challenges and solutions when translating a PCCE program; be introduced to and trial a validated PCCE tool for assessment and multi-source feedback tool and generate a recognisable logo for PCCE to be utilised by any participating attendee in their organisation.

Issues for exploration or questions for discussion:
The workshop will encourage sharing of experiences of PCC education and discuss: What level of PCC education occurs in their organisation?; What needs to occur to improve?; How do we overcome barriers to building PCCE?; and student responsiveness to PCCE.

Outline of workshop activities
Presenters from two medical schools, including patients and graduates will explore core principles for effective and sustainable PCCE and key initiatives for assessment and multi-source feedback. Group discussions will focus on the barriers and creative solutions for driving PCCE in attendee’s organisations. Participants will become familiar with using the PCCE RICS assessment tool after reviewing a videoed consultation. Educationally engaged patients will share experiences and participants will be asked to reflect on the impact of these stories and generate a wordle.

Workshop 6
Research paradigms and methods: An interactive and applied workshop across the methodological spectrum

Marcus A. Henning¹, Craig S. Webster¹

¹Centre for Medical and Health Sciences Education, University of Auckland, New Zealand.

Introduction/background:
In medical and health sciences education, it is important to consider the diverse set of research approaches required to answer multi-layered and often complex research questions. As senior lecturers who have research interests in this area and in the teaching of research paradigms and methods, we believe it is imperative for educational researchers to have an appreciation of the full breadth of the methodological spectrum, including quantitative, qualitative and mixed methods approaches. We will also consider the important theoretical world views which frame the various research paradigms and are operationalised in specific methods selected and data collected.

Purpose and outcomes:
This workshop is aimed at developing participants’ conceptual understanding of the breath of educational research methods available.

The Specific Learning (Educational) Outcome is to identify and deliberate on the various research paradigms that can be applied in medical and health sciences educational research.

Issues for exploration or questions for discussion:
1. How can we determine the most appropriate research paradigms are being applied in reference to the research questions being asked?
2. How can we apply appropriate methods of gathering information dependent upon the research paradigm being employed?
3. What are the most appropriate research paradigms in reference to the different research examples to ensure more rigorous and sound research planning is being conducted?
Outline of workshop activities
Structure (duration - 4 hours)
1. The introductory session will focus on the historical background of key research paradigms and their application in medical and health sciences educational research.
2. The session will consider data collection methods that can be used, and which best suit the research paradigm being employed.
3. An interactive discussion will cover examples of research followed by teams working together to develop mini-research proposals dependent upon their area of interest.

Workshop 7
Difficult Conversations - why we find them challenging and what we can do to make them learning conversations
Heather Grusauskas¹, Patrick Kinsella²

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Introduction/background:
Delivering negative feedback can be very challenging. Many “difficult” conversations fail because they begin with us starting the conversation from our own perspective.

Purpose and outcomes:
This workshop explores what makes conversations difficult; why we often manage them poorly and what we can do to make them more effective.

Issues for exploration or questions for discussion:
Conversations will be explored using a framework developed by the Harvard Law School. The model describes the fact that there are in fact 3 conversations occurring in most difficult conversations - the "What Happened Conversation", the "Feeling Conversation" and the "Identity Conversation".

Outline of workshop activities - 2 hours
This "hands on" workshop gives participants the opportunity to practice their skills in small groups utilising two scripted scenarios and one unscripted scenario. The participants will work in groups of three in which two will role play whilst the third will observe. These roles will rotate within the group of three. Participants are requested to bring to the workshop a "difficult conversation" that they are about to have or one that they have had in the past. There will be the opportunity for individual participants to feedback on their experiences to the larger group - all within a safe learning environment.

Workshop 8
Increasing feedback literacy of learners and educators: engaging with the ‘feedback for learning framework’
Elizabth Molloy¹, Michael Henderson², Phillip Dawson³, Michael Phillips², Tracii Ryan², Paige Mahoney³, David Boud³

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Introduction/background:
Feedback is critical for promoting student learning in health professions education. However, despite this potential, feedback is often misunderstood and under-utilised by both students and educators. We surveyed approximately 4,500 students and 400 staff from two universities to identify units of study that demonstrated effective feedback. From these we chose seven cases both staff and students
thought were effective. This research-based framework, funded by the Office of Learning and Teaching, is designed to improve student learning through improving institutional, educator, and student capacity to generate and use feedback.

**Purpose and outcomes:**
- Identify current problems and tensions in feedback practice within your context
- Describe a more productive model of feedback
- Identify conditions in your own institution that may influence feedback practices
- Identify institutional/departmental factors that might improve learner and teacher literacy in feedback
- Identify and plan next steps in terms of improvements in your own feedback contexts

**Issues for exploration or questions for discussion:**
Why is it important that we consider a broader view of feedback beyond ‘provision of comments’?
How might your range of feedback practices be extended beyond the current repertoire?
What considerations are there when it comes to designing new feedback processes and influencing others?

**Outline of workshop activities**
This interactive workshop will draw on participants’ experiences and will share video-based case studies and key findings from a multi-institutional study examining feedback practices. Participants will have opportunities to identify how the ‘feedback for learning framework’ relates to current practices, and we will discuss implementation considerations across different practice contexts.

**Workshop 9**

**Achieving greater student sustainability by using competencies to monitor and coach the professional growth and development of pre-clerkship medical trainees**

Cathleen C. Pettepher and Neil Osheroff

Vanderbilt University School of Medicine, Nashville, Tennessee USA

**Introduction/background:**
Clinicians require skills and attitudes beyond medical knowledge. However, because of the heavy focus on medical knowledge during pre-clerkship training, programs often struggle to design experiences and assessments that prepare students for all aspects of clinical work. One approach to addressing this issue is to incorporate competency-based assessment schemes into the pre-clerkship curriculum. While maintaining the importance of medical knowledge, competency-based strategies allow a more holistic view of student development and can be used to provide coaching for learners in a variety of domains. They also provide students with rich feedback across all aspects of their performance and establish a roadmap that encourages learner development and sustainability.

**Purpose and outcomes:**
This workshop will benefit curricular leaders, administrators, and faculty who are involved in health professional student education and assessment. Attendees will leave with practical strategies for implementing milestone-based learner assessments.

**Issues for exploration:**
This interactive workshop will explore the advantages and challenges of incorporating qualitative milestone-based competency assessments across the medical curriculum, discuss differences between “competencies” and “competence,” describe the learning settings, milestone language, and feedback that enable the use of competencies, and discuss how competency-based assessment enhances student sustainability.
Workshop activities:
The workshop will begin with an interactive discussion that explores the advantages of qualitative milestone-based competency assessments over quantitative knowledge-based assessments alone. Attendees will then break into small groups and discuss approaches for integrating novel activities into their curricula that could be used to observe specific student behaviors and apply milestone-based assessments. Participants will share these strategies and develop milestone language for specific competency domains.