

# Proceedings

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**ANZAHPE**

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Association for Health  
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## Pod 1 10:30-11:15

### Factors influencing Global Assessments in General Practice training – The Global Assessment tools in (medical) Education (GATE) project

Rebecca Stewart<sup>1</sup>, Graham Emblen<sup>2</sup>, Scott Preston<sup>2</sup>, Marie-Louise Dick<sup>3</sup>, Jane Smith<sup>4</sup>, Gerard Ingham<sup>5</sup>

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<sup>4</sup>Bond University, Gold Coast, Australia

<sup>5</sup>Springs Medical Centre, Daylesford, Australia

#### Introduction:

Global assessment (GA) can be used to ascertain a doctor's level of performance in their role as a General Practitioner (GP). A GA is usually made by an experienced GP and/or Educator. Global Assessments are used in all stages of GP training, including at GP training program selection, during direct observation of practice, and within summative assessments. Although some selection and assessment tools have been validated as markers of training progression, the GA process used within these tools has yet to be clearly defined.

#### Aim:

To define the factors which influence Global Assessments by experienced GPs and Medical Educators during GP training.

#### Methods:

Participants are Medical Educators and GP Supervisors from the nine GP Regional Training Organisations within Australia and the Remote Vocational Training Scheme. A modified Delphi process was employed in the form of rounds of questionnaires with scenario-based stem questions. The questionnaires also comprise demographic and personal attribute variables including age, gender, years of clinical experience, years of supervision provided, and extent of past interprofessional medical education experience.

#### Results:

The factors influencing GA are quite varied and dependent on the context within which the assessment is occurring, and the role and experience of the assessor.

#### Discussion and Conclusions:

Global Assessment may be useful to indicate progression where traditional 'checklists' have not been reliable. These areas include communication issues, clinical knowledge deficits, cultural nuances, professionalism issues, and difficulty dealing with uncertainty. As assessment is impacted by multiple sources of error, understanding the non-evaluative sources of error can provide direction on how to improve the utility of Global Assessment in broader contexts.



## Medical students are more consistent in their certainty in assessment responses than their correctness of assessment responses

Mike Tweed<sup>1</sup>

<sup>1</sup>University of Otago Medical School

### Introduction/background:

Although medical students of all levels of experience and ability demonstrate increasing correctness with increasing certainty in assessment responses overall, why is there such variability within groups and within an individual's responses?

### Aim/objectives:

The aim of this study was to compare measures of internal consistency between certainty in and correctness of assessment responses.

### Methods:

Year 2-5 medical students sit a computer delivered 150 single-best-answer MCQ progress test twice a year. In addition to their responses for each question, students give their certainty (none, low, moderate, high). Correctness of response was coded as 0/1, and certainty of response as 0/1/2/3 and Cronbach's  $\alpha$  analysis undertaken on 16 datasets (4 year groups and 4 tests).

### Results:

4471 students sat the tests. Across the 16 datasets,  $\alpha$  for correctness of responses varied between 0.759-0.901, and  $\alpha$  for certainty of responses varied between 0.982-0.991. All the  $\alpha$  for certainty of responses were higher ( $p < 0.0001$  for all). Similar patterns were found if students with numerous responses of same level of certainty were excluded, or the certainty in response was compressed to 0/1.

### Discussion:

Is this an artefact due to the assessment or the analysis, or is consistency of certainty truly higher than consistency of correctness? Possibilities why certainty might be more consistent than correctness, that are not mutually exclusive, include: Do individual have a baseline level of certainty with limited variability? Is certainty based on wider content than the question? Does an increasingly correct and certain pattern reduce variability in certainty more than correctness?

## Choosing medical assessments – does the multiple choice question make the grade?

Hannah Pham<sup>1</sup>, Monique Trigg<sup>2</sup>, Shaopeng Wu<sup>1</sup>, Alice O'Connell<sup>1</sup>, Christopher Harry<sup>1</sup>, John Barnard<sup>2</sup>, Peter Devitt<sup>1</sup>

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<sup>2</sup>Excel Psychological and Educational Consultancy (EPEC), P.O.Box 3147, Doncaster East, Victoria,

<sup>3</sup>109, Australia.

### Background:

The multiple choice question (MCQ) is thought to be better at testing knowledge recall whilst the short answer question (SAQ) is considered better at testing higher order cognitive skills. This study tested the hypothesis that a well-constructed MCQ is a reliable test of higher order cognitive skills and can effectively measure the same constructs as the SAQ. It also sought to demonstrate that MCQs are less prone to errors of item-writing flaws and inter-marker variability.

### Methods:

Year IV and V medical students at one institution were invited to participate in a mock examination consisting of forty MCQs paired to forty SAQs, matched in cognitive skill level and content. Six markers independently marked the SAQ paper according to a guide. The presence of item-writing flaws was determined.

**Results:**

136 Year IV and 140 Year V students participated. The inter-class coefficient was 0.75 and 0.68 respectively for the Year IV and V SAQ and MCQ. There was strong inter-rater reliability between SAQ markers. MCQs were more prone to IWFs than SAQs, but the effect of flawed SAQs on student performance was greater. Removal of flawed questions from the Year V SAQ allowed 39 percent of students who would otherwise have failed to pass.

**Conclusion:**

The MCQ can test higher order skills as effectively as the SAQ. Item-writing flaws can have a critical role in determining pass/fail results. Faculties should invest in both training in constructing good MCQs as well as processes for minimising item-writing flaws to reduce sources of error.

**Queensland paramedic attitudes, experiences, and self-assessment of clinical supervision capacity during ambulance clinical placements**

Lisa Hurring<sup>1</sup>

<sup>1</sup>CQUniversity, North Rockhampton, Australia

**Introduction/background:**

All of Australia's 9,000 student paramedics will undertake ambulance clinical placement during their degrees. Their paramedic supervisors are qualified in clinical practice but often untrained in clinical supervision, resulting in inconsistent direction, expectations, and feedback, and mixed learning outcomes.

**Aim/objectives:**

This study explores paramedics' perceptions of clinical supervision, and paramedics' self-assessment of own supervision skills. Results are examined to determine the potential utility of clinical supervision training to improve the quality of clinical supervision during the ambulance clinical placement.

**Methods:**

An online survey was disseminated to Queensland Ambulance Service paramedics via internal email. The survey comprised Likert and open questions across three sections: demographical data, attitudes towards and experiences of supervision; and self-assessment of clinical supervision skills.

**Results:**

The survey was completed by 95 predominately male (n=66) respondents, with educational evenly split between the ambulance Diploma (n=42) and university Degree (n=40). 85% (n=77) agreed that they enjoy supervising students, and 65% (n=66) reported positive overall experiences. More than half however experience uncertainty regarding supervision tasks (n=48), and 89% (n=79) agreed that supervision training would improve their capacity in clinical supervision. The self-assessment tool identified training needs in clinical training, managing the struggling student, and conflict resolution.

**Discussion:**

The data demonstrate broad need for support of paramedic supervisors, particularly in role clarity and guidance in best practice supervision. A strongly positive attitude towards supervision and the benefits of a proposed training program suggest good potential uptake of clinical supervision training. These results are transferable to statutory services in all Australian jurisdictions.

## **Quantitative systematic review: How is learning assessed in near-peer teaching?**

Susan Irvine<sup>1</sup>, Brett Williams<sup>1</sup>, Lisa McKenna<sup>1</sup>

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

### **Introduction:**

Near Peer Teaching (NPT) is reported as an effective pedagogical approach to student learning and performance. Despite increasing research reports on NPT internationally, little is known about the various domains of learning used in assessment and objective learning outcomes of NPT.

### **Aim:**

To determine the domains of learning and assessment outcomes used in NPT in undergraduate health professional education.

### **Results:**

Quantitative systematic review was conducted in accord with the PRISMA protocol and Joanna Briggs Institute. Quality appraisal process involved two independent reviewers. A search of international sources yielded 212 articles, 26 studies met the inclusion criteria. Majority of studies in this review, focused on cognitive and psychomotor abilities of learners.

### **Discussion:**

Studies focused on cognitive and psychomotor abilities of learners with none assessing metacognition, affective behaviours or learning outcomes from quality of understanding. Terminology associated with NPT was confusing and a barrier to the review process. Although some studies demonstrated effective learning outcomes others were inconclusive. Methodological quality of studies and lack of theoretical frameworks underpinned by educational psychology, may have contributed to inconsistencies in learning outcomes reported.

### **Conclusion:**

This presentation will discuss how higher order thinking or metacognition in assessment of NPT, may enhance critical thinking and problem solving abilities of students, as they transition to the complex clinical setting and assume the role as teacher. Pedagogical implications and areas for further will be explored.

## **Sometimes a Hawk, Sometimes a Dove: Applying the Many Facet Rasch Model to identify variation in intra-examiner severity.**

Imogene Rothnie<sup>1</sup>, Chris Roberts<sup>1</sup>

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

### **Introduction/background:**

In rating assesses, severity/(leniency (hawk/dove effect) is an intrinsic and stable property of examiners. The many facet Rasch model (MFRM) identifies and adjusts candidate scores for the severity of the rater the assesses have seen. Research indicates that examiner severity can interact with different test items rated within a single assessment.

### **Aim/objectives:**

We investigated the relationship between examiner severity and the component of performance being assessed within stations in a medical student OSCE.

### **Methods:**

MFRM was used to investigate rater severity, student ability, station difficulty, and perspective rated ('communication skills' and 'structure and summary'). We examined the interaction between examiner severity and perspective rated.

**Results:**

Seven percent of examiners showed significantly different levels of severity/leniency depending on which perspective they were rating within each student's performance.

**Discussion:**

Our results will evidence which aspects of rater cognition produces interactions between rater severity and perspectives of assessment. We discuss the fairness of adjusting assessee scores for rater effects in an OSCE.

**Conclusions:**

This study demonstrates that raters may demonstrate differential levels of rater severity within a single performance assessment, related to the perspective they are rating. This study demonstrates that the MFRM is a useful framework for exploring rater cognition through the identification and classification of rater effects.

## **Assessing the medical student learning in Pediatrics using the pretest-posttest study of knowledge gain**

Somboon Chansakulporn

Department of Pediatrics, Faculty of Medicine, Srinakarinwirot University, Bangkok, Thailand.

**Background:**

Pretest and posttest are the important tools in measuring the student's knowledge gained from the learning course. Comparing posttest to pretest scores could present the success in increasing student's knowledge of the training content.

**Objectives:**

To assess the knowledge gain of Pediatrics by using the pretest-posttest instrument.

**Methods:**

This study was performed among 76 medical students during the studying of Pediatrics. The pretest was done in the second week and did the posttest again at the end.

**Results:**

Seventy six students were enrolled and normally distributed. The mean percentages of pretest and posttest scores were 56.94  $\pm$  11.73 and 62.07  $\pm$  7.89, respectively. Between posttest and pretest scores, there were significantly medium positive correlation ( $r = 0.560$ ,  $p = 0.000$ ) and a significant average difference ( $t_{75} = 4.563$ ,  $p = 0.000$ ). Among the students with low pretest scores ( $\square$  percentiles 25), there was insignificant weakly correlation ( $r = 0.076$ ,  $p = 0.718$ ), while the average difference was significant ( $t_{24} = 6.620$ ,  $p = 0.000$ ) which the mean posttest scores was increased 12.85% (95% CI, [8.84, 16.85]). This association was not found among those with high pretest scores ( $\square$  percentiles 75,  $p = 0.155$ ).

**Discussion:**

The pretest-posttest instrument reveals significantly medium gain and correlation in Pediatrics knowledge of 76 medical students. The students with low pretest scores got more gain of the average score difference.

**Conclusions:**

Pretest-posttest knowledge's gain was influenced among students with low pretest scores. The pretest-posttest instrument is useful in assessing the knowledge's gain.

## Pod 9 10:30-11:15

### Benefits of a feedback based near-peer teaching programme

S. McGowan-Smyth<sup>1</sup>, D. Annan<sup>1</sup>, T. Durrand<sup>1</sup>

<sup>1</sup>National Health Service, United Kingdom

Near-peer teaching has been recognised as a valuable and effective approach for learning and has been integrated into many medical school curriculums around the world. Its success is thought to arise from the relatability of the tutors and their ability to communicate more effectively thereby creating an improved learning environment. This study describes the design and implementation of a programme for final year medical students at University College London designed to prepare them for their final exams and to help facilitate a smooth transition from studying into their first working year. The students were taught by relatively inexperienced newly qualified doctors in the hope that they would benefit from their social and cognitive congruence whilst providing the teachers the opportunity to reinforce and expand their own learning and develop essential teaching skills. The programme consisted of weekly lectures and bedside teaching on topics decided by the junior doctor teaching leads that they felt the students would need to know for their intern year. The objective was to make it an updated and effective supplement to the teaching provided by their more 'traditional' faculty educators. Throughout the programme feedback from the participants was actively sought to ensure that they were finding the programme beneficial and to make continuous feedback-based improvements. Overall the programme was viewed as a success due to the very positive feedback it received and the regular high numbers of attendees. It was also praised by the students for facilitating a smooth transition into their working life.

### Video analysis of registrar feedback on premature baby ward rounds

Deb Colville

Mercy Hospital for Women, MCSHE

#### **Introduction:**

Although feedback is acknowledged to be an essential aspect of postgraduate training, little educational research specific to ward rounds is published.

#### **Method:**

Ethical approval for reflections on video of ophthalmologist, eye registrar, eye nurse, parents and babies was obtained. Brief extracted video clips containing feedback interactions within the consultant-registrar dyads were identified. These were subsequently replayed, and a brief discussions about reflections on the interaction were audiotaped, providing data for qualitative analysis.

#### **Results:**

Justification for educational research into everyday practice was argued to be important, and ethical approval process for video in high stakes environment that involved liaison with nursery staff and parents of often extremely unwell premature babies was negotiated. The preliminary results indicate that feedback was difficult (but not impossible) to identify, and an iterative process of improving feedback as part of the process of video reflexive ethnography / action research is proceeding.

#### **Discussion:**

Evolving skills by the dyad in naming feedback as such are considered the next step to achieving an optimal level of feedback between consultant and training registrar in a surgical specialty, ophthalmology.

#### **Conclusion:**

Video reflexive-ethnography is becoming established as an educational research method. It appears promising modality to both explore and change clinical practice in relation to clinical feedback.

# Supporting psychology students' transition from student to professional

Rachel M. Roberts<sup>1</sup>, Anna Chur-Hansen<sup>1</sup>, Helen Winefield<sup>1</sup>, Simon Patten<sup>1</sup>

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

## Introduction/background:

The training of students to become psychologists differs markedly from other health professional programs. Unlike medicine/nursing, psychology programs admit substantial numbers of students into Year 1, and then, select students down to a relatively small number in Year 4, the Honours year. Subsequent selection takes place for entry to Year 5, based on academic merit and an interview to determine suitability for the profession. The first four years are entirely academic in focus, with no practitioner training permitted under accreditation rules. In Year 5 students register with AHPRA and become provisional psychologists. Year 5 is thus a transition year. They enter the program with no formal education in personal and professional behaviour, such as taking responsibility for their own learning and professional development needs, engaging in self-reflection and supervision, and taking on feedback from clients, supervisors and mentors.

## Aim/objectives:

This transition, from academic scholar to fledgling practitioner under supervision in a clinical setting, requires a steep learning curve, given the limited preparation offered by previous years of study. In order to facilitate the transition, we designed a simulated client encounter exercise (a videorecorded OSCE).

## Methods:

Students (N=18) engaged with two clients, to demonstrate their Motivational Interviewing skills. Supervisors provided feedback on the recordings in 1:1 mentoring feedback sessions, and students reflected in a written piece, on their performance and how the mentoring facilitated the transition from scholar to professional.

## Results:

Positive behaviours, both personal and professional were demonstrated by all students.

## Discussion/Conclusions:

This innovative method contributed to professional development and preparation for clinical placements.

## Engaging learners through new technologies

Eleri Clissold<sup>1,2</sup>, Naomi Heap<sup>1</sup>, Megan Gingell<sup>1,2</sup>, Ian Wallace<sup>1,2</sup>

<sup>1</sup>Waitemata District Health Board, Auckland, New Zealand

<sup>2</sup>Univeristy of Auckland, Auckland, New Zealand

## Introduction:

Junior doctors are recruited via a third party and rotate through our organisation quarterly. They work antisocial hours and have high workloads. It is little wonder that a meaningful dialogue around training needs and engagement with institutional values is challenging.

## Objective:

We deployed a bundle of technological solutions to improve junior doctor training experience and streamline work processes in three inter-connecting areas.

## Method:

Communication: Our intranet sub-site was overhauled and a branding strategy developed. This branding was carried through to a weekly newsletter promoting house officer relevant content. We analyse when our newsletter is being read, by whom and which content is accessed. This means we are able to improve its relevance week-by-week.

**Feedback:** User needs analysis and teaching feedback is now electronic. We review collated feedback with our clinical teachers immediately following the session via tablet. A link to the feedback survey is also included in the weekly newsletter.

**Learning:** Session-relevant resources are provided online, supporting self-directed and shared learning. A 'learning bite' is integrated into our weekly newsletter. Using analytics we review the proportion of our learners who access this material, identify the most relevant content and integrate this into their curriculum.

**Results:**

Intranet sub-site traffic has doubled. We have quadrupled teaching feedback collected and increased specificity. Costs are minimal, the overall administrative burden has dramatically decreased. This has been sustained over a 6-month period.

**Conclusion:**

Regardless of technological literacy it is possible to implement these processes in any department to improve workflow and ultimately training experience.

**Dialysis patients: A potential avenue for medical students to interact with patients on a regular basis**

Nicole Koehler<sup>1,2</sup>, Erica Schmidt<sup>1,2</sup>, Matthew Roberts<sup>3</sup>, Margaret Curtis<sup>3</sup>, Jenepher Martin<sup>1,2,3</sup>

<sup>1</sup>Monash University,

<sup>2</sup>Deakin University,

<sup>3</sup>Eastern Health, Melbourne, Australia

**Introduction/background:**

The current in-patient hospital setting is not conducive to students following a patient over a period of time. Unlike hospital patients, haemodialysis patients attend a dialysis unit, in an ambulatory/out-patient setting, three times per week over a long time period. Thus, these patients may provide an optimal avenue for students to regularly engage with patients in the same setting throughout the academic year to assist students develop skills associated with practicing patient-centred care.

**Aim/objectives:**

The aim of the study was to explore ways in which dialysis patients could contribute to teaching and learning opportunities of medical students through longitudinal patient-student interactions.

**Results:**

Twenty-seven patients were interviewed at four Eastern Health dialysis units, of which 25 indicated that they would be willing to regularly interact with students. Patients willing to interact with students indicated that they would permit students to conduct a range of activities (e.g., taking a medical history). All are willing to provide students with verbal feedback of their interactions with them. However, only 12 patients are willing to provide written feedback. Patients stated various reasons for not wishing to provide written feedback.

**Discussion:**

Dialysis patients could provide students with the opportunity to interact with a patient over an extended period of time as long as students are matched with willing patients.

**Conclusions:**

Haemodialysis patients could potentially provide students with the opportunity to follow a patient's journey through different stages of their condition (i.e., not just briefly seeing acutely ill patients in hospital settings).

## **My Learning: evaluation of online palliative care learning modules for health professionals**

D Rawlings<sup>1</sup>, J Tieman<sup>1</sup>

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

### **Introduction:**

'My Learning' is a suite of free online learning modules that demonstrate how to find relevant evidence, and how to use evidence resources in the CareSearch website ([www.caresearch.com.au](http://www.caresearch.com.au)) to make a difference in clinical care. CareSearch has evaluated the effectiveness of My Learning on users practice

### **Aim:**

To address user's intent to change practice: do the modules influence their palliative care practice and change their understanding of CareSearch and what it offers?

### **Methods:**

The modules were reviewed for currency, were refreshed, re-branded and re-promoted. A set of evaluation questions were incorporated pre-module (demographics). Post-module we ascertained any intent to change practice as a result of their learning. The My Learning resources were re-released on March 29<sup>th</sup>, 2016.

### **Results:**

At the 4 month point, over 90% (n=349) found them easy to use, intended to use information found in their practice, intended to visit CareSearch in the next 3 months, intended to undertake another module and intended to recommend them to a colleague. We will undertake a formal evaluation of their effectiveness at the 1 year mark.

### **Conclusions:**

Early indications are that these modules, which are aimed at multidisciplinary audiences, can have an effect on practice.

## **Pod 2 11:15-12:00**

### **Is anxiety an issue for first year nursing students enrolled in a bioscience unit of a Bachelor of Nursing course?**

Sheila Mortimer-Jones<sup>1</sup>, Peter Wall<sup>1</sup> and Susan Russell<sup>1</sup>

<sup>1</sup>Murdoch University, Mandurah, Western Australia

### **Introduction:**

Knowledge of the biological sciences is an integral part of nursing care and hence an essential component of the Bachelor of Nursing (BN) course. Although bioscience content is relevant to nursing, students traditionally find bioscience difficult and anxiety-provoking. This has important ramifications, as anxiety can hinder comprehension and lead to poor exam performance.

### **Aim:**

To assess whether nursing students are more anxious in bioscience laboratory classes compared to clinical laboratory classes.



**Methods:**

N=188 full time students were recruited from the first year, first semester 2015 BN programme at Murdoch University. The self-report State-Trait Anxiety Inventory (short form) was administered at the start of the bioscience and clinical laboratory classes and two control theory classes. Anxiety scores of students between the units were compared using paired t-tests, and repeated measures ANOVA was used to measure anxiety scores within units over time.

**Results:**

There was no significant difference between the bioscience and clinical laboratory anxiety scores at any time point. Anxiety levels rose significantly at the third time point in all units except the bioscience unit. These anxiety levels dropped significantly at the end of the semester in the clinical laboratory unit ( $p < .01$ ) but remained high in both the theory units.

**Conclusion:**

There were no significant differences in anxiety levels of students in the bioscience laboratory classes and the clinical laboratory classes. Students were significantly more anxious in both the control theory classes than either the bioscience or the clinical laboratory classes.

**Transitions. Perceived knowledge and skills gaps of interns in regards to medical school training.**

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<sup>3</sup> Department of Neurosciences, St Vincent's Hospital, Melbourne, Australia

<sup>4</sup> Department of Emergency Medicine, St Vincent's Hospital, Melbourne, Australia

**Background:**

Progression from student to intern is a major transition for junior doctors. Understanding trainee perspectives of this process assists medical schools and hospitals in optimising the transition experience.

**Aims:**

1. To evaluate intern views on medical competency on completing student training and identify concerns or gaps in the student training program
2. To identify opportunities for collaboration with hospital educators to optimise transition to internship

**Methods:**

A 13 question survey was administered to interns 10 months post-graduation in 2013 and 2015. Quantitative data and descriptive comments were collected over the two years. Frequencies and percentages were calculated for responses. Descriptive comments were tabulated to identify concerns or gaps with subsequent mapping against the student curriculum to confirm delivery.

**Results:**

A 25% (30/120) response rate was achieved. The majority of interns reported feeling competent in the areas of communication (97%), teamwork (93%), clinical decisions (92%) and procedural skills (100%). Concerns/gaps identified by interns included clinical pharmacology, common pages, common clinical problems and procedural skills. Subsequent mapping confirmed that the curriculum had covered identified concerns/gaps.

**Discussion:**

The results indicate that although most interns feel prepared to be doctors by the end of student training, they also have topic area/skills of concern. There were no major gaps in content delivery which may suggest transition anxiety influences these perceived gaps.

**Conclusion:**

Working with hospital intern programs may assist in the transition to internship. Further research is required to assess for reduction in perceived gaps/concerns following informed changes to the intern program.

**Happiness of preclinical medical students is influenced by teaching and learning factors, student's motivation and behavior as well as academic achievement**

Nipith Charoengam<sup>1</sup>, Chantacha Sitticharoon<sup>1</sup>, Pailin Maikaew<sup>1</sup>, Thanapat Vanichnatee<sup>1</sup>, Punyapat Maprapho<sup>1</sup>

<sup>1</sup>Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

**Introduction/background:**

Stressful medical study leads to high stress level and decreased happiness in students.

**Aim/objectives:**

To determine factors influencing happiness in preclinical students especially in aspects of teaching and learning, students' motivation and behaviour, and academic achievement.

**Methods:**

Questionnaires were sent to the first and the second year preclinical students enrolled into different academic years, with 84.3% (554/657) being returned.

**Results:**

From open-ended questions, the first top 3 ranking factors increasing happiness included teaching of instructors, content satisfaction, and content understanding. Factors that had positive influence/association with increased happiness of preclinical students were high motivation to study medicine, satisfaction of study outcome, subject content, and learning material, high percentage of reading to level of expectation, lower time spent for recorded e-lecture, lower time of late+absence/year, lower stress level, and higher academic achievement ( $p < 0.05$  all).

**Discussion:**

Happiness of preclinical students was mainly determined by teaching of instructors and content they provided. So, appropriate teaching and learning environment is important to promote students' happiness. Motivation of students to study medicine is also an important factor maintaining their happiness during their study. Good behaviour of students including regular lesson review to obtain adequate reading to level of expectation, good attention during class to spend lower time for recorded e-lecture, lower time of late+absence, should be encouraged.

**Conclusions:**

Happiness of preclinical students was influenced by satisfaction in teaching and learning, their attitude and behaviour, and academic achievement. Students' behaviour and academic achievement might be used as tools to monitor students' happiness throughout their study.

**Transition to Clinical Rotations: A capstone pre-clinical semester**

Cherri Ryan<sup>1</sup>, Michelle Chong<sup>1</sup>, Janet Clarkson<sup>1</sup>, Sharon Darlington<sup>1</sup>, Louise Green<sup>1</sup>, Tammy Smith<sup>1</sup>

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

**Introduction/background:**

A new case-based learning (CBL) model was introduced into the Clinical Science courses when the medical program at the University of Queensland transitioned to an MD in 2015. Alongside this introduction was a resequencing of learning activities such that the second semester of year 2 ("Semester 4") became a capstone semester where concepts covered in the preceding three semesters were revised, reinforced and extended ahead of the progression of these students into their clinical rotations.

**Aim/objectives:**

This innovation was developed in parallel to the CBL model to address concerns that students were becoming disengaged from the former problem-based learning model by the end of their second year of pre-clinical studies. The aim of the capstone semester was to challenge students and develop clinical reasoning skills by presenting cases that were not grouped by system, but by presentation. Cases were selected to represent common and serious conditions that students could be expected to face in their clinical years.

**Discussion:**

The capstone semester was rolled out for the first time in semester 2, 2016. Preliminary results from student and tutor surveys, from informal feedback and from OSCE results indicate that the model has largely achieved its primary objective of developing clinical reasoning skills and extending learning in the clinical sciences. The concept will be further refined in 2017 to address identified overlaps and gaps in the curriculum.

**Readiness to transition from high school to PBL in medical training**

Loretta Garvey<sup>1</sup>, Samuel Henry<sup>1</sup>, Margaret Hay<sup>1</sup>  
<sup>1</sup>Monash University, Clayton, Victoria, Australia

**Purpose:**

The purpose of this presentation is to establish the unique requirements and levels of these necessary to successfully engage in Problem Based Learning (PBL) in an undergraduate medical student population. The readiness of direct entry medical students to undertake PBL in Year 1 transitioning from high school will be ascertained.

**Method:**

Data collection took place in 2013. Direct entry undergraduate medical students from a hybrid PBL medical curriculum in Australia and Malaysia undertook anonymous online surveys. Measures included: California Critical Thinking Skills Test (CCTST), Patient Practitioner Orientation Scale (PPOS), Self-Directed Learning Readiness Scale (SDLRS), Approaches and Study Skills Inventory for Students (ASSIST) and the Problem Based Learning Behavioural Evaluation Tool (PBLBET). Frequency distributions, analysis of variance (ANOVA) and standard multiple regression (SMR) analysis were used to determine students' level of readiness for PBL and compare readiness between student groups.

**Results:**

Frequency distributions determined that direct entry undergraduate medical students displayed the required level of readiness to undertake PBL on all elements except patient centeredness. ANOVA and SMR analyses found no significant differences between Year 1 and 2 students on multiple elements required to undertake PBL. Year 1 students displayed significantly higher levels of self-directed learning and deep approaches to learning relative to Year 2 students.

**Conclusions:**

The results suggest that Year 1 direct entry undergraduate medical students in this study have the required capacity to undertake PBL at the commencement of their medical training directly from their transition from high school. This may provide the opportunity to extend these students in their learning earlier in their training thereby providing potential opportunities for improved learning outcomes.

## **Supporting students' transitions to the 'real thing': a volunteer simulated patient program**

Vicki Skinner<sup>1</sup>, Dimitra Lekkas<sup>1</sup>, Clinton Kempster<sup>1</sup>, Tracey Winning<sup>1</sup>

<sup>1</sup>Dental School, The University of Adelaide, Adelaide, Australia

### **Background:**

Learning to communicate with patients in the dental clinic is demanding. Junior dental/oral health students face a critical program transition in student clinic: from providing simple/preventive treatment for known patients to providing increasingly complex treatment for unknown public patients. Therefore, we implemented a volunteer patient communication program (VPCP) incorporating videos, workshops, and simulated patients (SPs).

### **Aim:**

To use a multi-level framework (perceptions, learning, performance) to evaluate the VPCP's impact on students' communication development.

### **Methods:**

Surveys addressed students' perceptions of the VPCP and confidence/ability in patient communication. Exam performance analysed student learning. Patients' ratings assessed student performance.

### **Results:**

Students (n=130; 85% response rate) rated videos as authentic (>67%); workshops/SP role-plays as relevant to future clinic experience (>88%). Students' learning was supported by the online videos (>65%), workshops (>66%) and tutorials (>78%). Students considered their ability (>63%) and confidence to communicate post-VPCP had improved (>71%). All students achieved the required competency in written examinations (e.g., students' average scores ranged from 55%-100% for questions of varying difficulty). Patients' ratings (percent excellent) of third-year students' communication skills who completed the VPCP were >70% for all communication aspects which were higher than ratings of previous third- and fifth year students (i.e., pre-VPCP).

### **Discussion:**

In response to the VPCP success we implemented more complex scenarios to support senior students' transitions to more complex patient care and communication.

### **Conclusion:**

Our multi-level evaluation framework showed that: students perceived the VPCP was valuable; the VPCP supported students' learning and performance in this critical transition in patient communication development.

## **Focussing on the positives: Learning and opportunities on rural placement**

Laura Major<sup>1</sup>, Bill Haigh<sup>1</sup>, Deborah Hewetson<sup>1</sup>, Lane Johnson<sup>1</sup> and Cathy Haigh<sup>1</sup>

<sup>1</sup>Monash University: School of Rural Health

### **Introduction/background:**

Initiatives addressing the medical workforce maldistribution in rural areas of Australia include placement experiences designed ultimately to enhance recruitment to, and retention of, medical graduates in under-serviced areas.

### **Aim/objectives:**

The aim of this study was to explore the immediate impact of an early exposure short-term rural placement program on Year 2 students' knowledge of and attitudes towards rural health placement and practice.

**Methods**

Forty-eight students who elected to undertake a rural placement were invited to participate in pre- and post-placement surveys that were completed on-line. 92% completed the first questionnaire and 79% the second.

The initial survey asked about students' understanding of rural health issues and canvassed their knowledge of and attitudes towards rural health practice. The second explored students' perceptions of rural health challenges, potential learning opportunities on rural placements and the unique features of rural practice.

**Results:**

Students had a sophisticated appreciation of rural health issues regarding patient demographics, presentations, and typical risk and protective factors for developing disease or presenting with injuries. Post-placement they were able to articulate ideas as to how these issues could be optimally managed, incorporating solutions that emphasised primary and preventive health care, encouraged collaboration across multidisciplinary teams and anticipated the appropriate application of technology. Students appreciated the more personalised and active learning opportunities available on rural placements while acknowledging the greater scope of exposure to patient conditions in metropolitan settings.

**Discussion / Conclusion:**

Early rural placements should make explicit the positives regarding rural placements and practice and highlight how technology and collaboration across disciplines is supporting optimal provision of healthcare services and scaffolding lifelong learning opportunities.

**Preparation for internship: the outcomes of the Wollongong medical program.**

Kylie J Mansfield<sup>1</sup>, Mark Wilson<sup>1</sup>, Jodie Douglas<sup>1</sup>, Belinda Smith<sup>1</sup>, Wilf Yeo<sup>1</sup>, David Garne<sup>1</sup>,

<sup>1</sup>School of Medicine, University of Wollongong, Wollongong, Australia

**Introduction:**

The major aim of medical schools is to graduate students who can perform successfully as interns. The Wollongong medical program is innovative with the inclusion of a year-long longitudinal integrated clerkship, undertaken in a rural or regional setting rather than in a major metropolitan teaching hospital – the traditional clinical placement for medical student training.

**Aim/objectives:**

This project aimed to evaluate if the Wollongong medical program is successfully preparing graduates for internship and to identify areas of strength or weaknesses as part of a quality improvement process.

**Methods:**

After 4-6 months of internship 100 students, from five cohorts, completed a survey about the way their medical degree prepared them for internship. The survey contained components evaluating ways the medical program did/didn't prepare them for internship as well as the results of their most recent intern performance evaluation.

**Results:**

On average 98% (95% CI 95-100%) of students agreed or strongly agreed that the medical program prepared them to work as an intern. This was supported by the results of their last performance review with 60% (95% CI 50-70%) of graduates graded above the expected level. 65% (95% CI 56-74%) of students reported that they were well prepared in terms of their practical/clinical skills and clinical knowledge. There was little consensus in relation to clinical domains where students felt unprepared.

**Discussion and Conclusions:**

This evaluation of intern preparedness has provided positive feedback to the school. It was particularly pleasing that a longitudinal integrated clerkship as the penultimate clinical placement has prepared students well for the internship.

## Pod 6 11:15-12:00

### The clinical nurse educator – a congruent clinical leader

Tracey Coventry<sup>1</sup>, Kylie Russell<sup>1</sup>

<sup>1</sup>University of Notre Dame Australia, Fremantle, Australia

**Introduction/background:**

The acute care hospital clinical environment is characterised by increasing patient acuity and chronicity, increasing nurse shortage and workload issues, and increasing accountability and financial constraints. Drivers to meet the positive patient centred care outcomes desired by healthcare organisations includes an investment in the leadership of the graduate nurse workforce through attributes that inspire and motivate positive graduate attitudes, behaviours and values. The supernumerary clinical nurse educator (CNE), who may or may not have a formal position of leadership, actively engages with newly qualified graduate registered nurse (GRN) to promote patient safety and quality of care, provide access to resources and empower change for the benefit of patient outcomes. To articulate the CNE clinical leadership the GRN was used as the lens through which the CNE clinical leadership was evaluated.

**Aim/objectives:**

To evaluate the clinical leadership style of the CNE.

**Results:**

The CNE leadership attributes align with the congruent leadership style. This includes: is approachable, is clinically competent, has integrity and honesty, is supportive, is an effective communicator, inspires confidence, sets direction and copes well with change.

**Discussion:**

The CNE leadership is not always recognised or esteemed at management level, but is valued by nurses at the point of care. The congruent leadership attributes underpin the ongoing clinical support which is effective and valuable in advancing the safe practice and positive patient outcomes of the GRNs' at the frontline of care.

**Conclusions:**

CNE leadership is associated with the congruent leadership style.

### The awareness and applicability of the Community of Inquiry framework among Australian nursing educators

Omar Smadi<sup>1</sup>, Steve Parker<sup>1</sup>, David Gillham<sup>1</sup>, Amanda Muller<sup>1</sup>

<sup>1</sup>Flinders University of South Australia, South Australia, Adelaide.

**Introduction:**

The adoption of e-learning in higher education is growing exponentially. However, there is a lack of rigorous evidence to guide the development of e-learning. The Community of Inquiry (CoI) framework offers the potential for designing deep, meaningful, and interactive online experiences in higher education. In Australia, the degree of awareness and applicability of this framework for online nursing education has not been reported in the literature.

**Aim:**

The team is undertaking a project to investigate the awareness and applicability of the Col framework among Australian nursing educators.

**Discussion:**

An online national survey of nursing educators was undertaken during 2016 with 135 respondents. The majority of the respondents currently use blended learning for their courses and support this approach. The preliminary results of the survey show that 21.5% of the respondents were “familiar” or “extremely familiar” with the Col framework and that the majority of this percentage drew on the framework to design and evaluate their online or blended courses. The respondents rated the elements of the Col framework as highly applicable. 85%, 82% and 77% indicated that teaching, cognitive, and social presences respectively, are “somewhat applicable” to “strongly applicable” in nursing curriculum design and evaluation. Despite 90% of the respondents indicating that instructional designs or frameworks are essential to building online courses, 67% do not use an explicit theoretical framework to design and/or evaluate their own courses. Further content analysis of a number of online nursing courses along with a number of educators’ interview would be appropriate.

**Task supervisors’ and field educators’ experiences of and attitudes toward supervising international social work students in Australia**

Bella Ross<sup>1</sup>, [Averil Grieve](#)<sup>1</sup>

<sup>1</sup>Monash University, Caulfield, Australia

**Background:**

In recent years, there has been a significant increase in the number of international students enrolling in qualifying masters courses in social work across Australia. With the increasingly international cohort, difficulties have been reported by international students in finding quality placement opportunities and in dealing with issues such as language and cultural barriers, and racism. These issues cause students anxiety in dealing with the transition from course work to placement and professional practice. The attitudes of those supervising international students have not been examined in detail.

**Aims:**

The aim of this research is to explore task supervisors’ and field educators’ experiences of and attitudes toward supervising international social work students in Australia.

**Methods:**

Our research is a pilot study of task supervisors and field educators working with Monash University social work students. Participants were asked to complete an online anonymous survey. 83 respondents had experience supervising one or more international students. Survey results were analysed thematically using NVivo.

**Results:**

Results reveal that respondents saw both advantages and challenges to supervising international students. Advantages included students’ different cultural perspectives, breadth of experience and knowledge, and willingness to learn. This was seen to broaden supervisors’ perspectives, providing them with insights into other cultures and social work practices in other countries. Challenges related primarily to language and cultural barriers, and a lack of knowledge of Australian systems.

**Conclusions:**

The findings of this research reveal the specific transitional issues experienced by both students and their supervisors, and will inform future training and professional development for task supervisors and field educators working with international social work students.

## **Transitions in sessional dental clinical staff support: Establishing, embedding & sustaining support using quality enhancement processes**

Dimitra Lekkas<sup>1</sup>, Tracey Winning<sup>1</sup>

<sup>1</sup>Dental School, The University of Adelaide, Adelaide, Australia

### **Background:**

Sessional teachers are critical for providing core learning and assessment support in clinical placements. Recognising that sessional staff supervising students in clinic need appropriate academic and professional development to achieve quality learning experiences, we planned and implemented a range of initiatives over the past 15 years to support our clinical supervisors.

### **Aim:**

We used a continuous improvement cycle (i.e., plan, do, check and act) as the framework to monitor the scope and effectiveness of our sessional staff support initiatives.

### **Discussion:**

There were three phases in our sessional staff support initiatives. The first phase (2002-2006), identified a need to improve students' experiences of clinical assessment resulting in implementing professional development support with a particular focus on clinical assessment. The middle (2007-2010) and current phases (2011-present) focused on recruiting, training, evaluating, and integrating our sessional staff into the academic team. Having local change agents with initial institutional support and a dedicated academic and administrative staff team, with assigned roles and clearly defined procedures to systematically manage the needs of sessional staff enabled the implementation of new support initiatives as well as sustaining previous strategies. Using the 'sessional staff voice' was constructive in moving forward on further improvements.

### **Conclusion/Implications:**

Using key frameworks and recommendations from the literature enabled implementation of a systematic approach to design and review support strategies. Sessional staff have ongoing needs related to giving assessment feedback and grading student performance. Our approach would be useful for other institutions who employ sessional staff from a profession or industry.

## **Transfusion education for Australian junior medical officers - a focus group study**

C Flores<sup>1</sup>, B Qusted<sup>1</sup>, T Spigiel<sup>1</sup>, A Thomson<sup>2</sup>, B Saxon<sup>1</sup>

<sup>1</sup>Australian Red Cross Blood Service, Adelaide SA Australia

<sup>2</sup>Australian Red Cross Blood Service, Sydney NSW Australia

### **Background:**

The early years of postgraduate training as a junior medical officer (JMO) is considered a critical period to develop skills and to influence a JMO's future clinical practices.(1, 2) Little is known about JMOs transfusion knowledge and how they apply the many and varied existing transfusion education when providing care for patients who may need a transfusion. This study aimed to explore JMOs experience of transfusion education and identify tools to assist their everyday practice.

### **Methods:**

This qualitative study conducted focus groups in six teaching hospitals in Adelaide, Melbourne and Sydney. Participation was voluntary and JMOs gave signed consent to participate. The focus group lasted between 40 to 60 minutes. Transcripts of audio recording were analysed using discursive analysis.



**Results:**

52 JMOs participated in the focus groups. Five themes emerged: safe practice and professionalism; confidence; learning style; accessibility; and insights. JMOs preferred in-person education by experts; print tools e.g. lanyard cards, posters, checklists; and a single app which could encompass all transfusion practice. The common transfusion topics that they want learn about include: adverse events management; how to assess a patient's response to transfusion; practical aspects of how to write a transfusion; and how to consent for all blood products. A senior colleague is the most valued transfusion education provider.

**Conclusion:**

JMOs want immediate, practical, reliable transfusion information from credible sources like senior colleagues, transfusion lab or hospital intranet. They prefer in-person education, print tools, and one multipurpose app to assist their learning about transfusion. Their educational needs are driven by real time case management and not by exam-style assessment. These insights will be considered for designing improved transfusion education initiatives for JMOs.

## **Creating a 'thinking routine' by *explicitly* embedding the Research Skill Development Framework (RSDF) into coursework.**

Clinton Kempster<sup>1</sup>,

<sup>1</sup> School of Dentistry, The University of Adelaide, Adelaide, South Australia.

**Background:**

The development of robust research skills for undergraduate health care professionals is critical. The patient experience and their specific health care outcomes hinge on effective research skill employment by the health professional. Historically research skill development within some undergraduate courses has been left as an implied intention behind content delivery and assessment. Alternatively, research skills are taught as a separate unit. There is strong evidence for making research skill development explicit to students in *all* coursework learning design. Doing so can create a powerful sense of 'usefulness' amongst students, enhance autonomous student performance and develop a successful 'thinking routine'.

**Objective:**

Creating pedagogical transparency aimed at assisting students to develop a systematic 'thinking routine' as they transition from a novice to experienced researcher / health care provider.

**Discussion:**

*'Why are we studying health promotion? It won't help me to clean or fill teeth any better'* – quote from a second year undergraduate oral health student in 2010. This student couldn't see relevancy in the content and scarce opportunity to develop an appreciation for the pedagogy. When undergraduate students can see and think about the pedagogical intent, attitudes tend to change. Examples will be provided where undergraduates have become more amenable to the learning on offer when the parallels between scholarly research and the process of making decisions in everyday life and indeed work, become more apparent. Students feel more work ready and are also better prepared to contemplate a postgraduate pathway.

**Issues:**

Can explicit research skill and 'thinking routine' development enhance undergraduate transition?

## How graduate nurses adapt to individual ward culture

Caterina Feltrin<sup>1</sup>, Jennifer Newton<sup>1</sup>, Georgina Willetts<sup>1</sup>

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

### **Introduction/background:**

Being a graduate nurse and transitioning from a novice to a beginner Registered Nurse (RN) in the first year of practice is stressful, challenging and overwhelming due to steep learning curves and adjusting to working in professional environments. How graduate nurses socially adapt and fit in to ward cultures is a hurdle to successful transition and can be challenging.

### **Aim/objectives:**

To gain an increased understanding of the strategies graduate nurses utilise on a day to day basis to integrate themselves into pre-existing social frameworks.

### **Methods:**

A qualitative constructivist grounded theory methodology was utilised. Seven graduates were interviewed using open ended questions in an unstructured format. Transcripts were transcribed verbatim. Data analysis processes included initial coding, focused coding, theory building, memo-writing and theoretical sampling.

### **Results:**

Four core strategies: self, identity, differences and navigating the social constructs were found to describe the main ways graduate nurses facilitate adaptation into complex clinical environments and ward cultures.

### **Discussion:**

This study sheds light on graduate nurse adaptation to individual ward culture. The study also explains how graduate nurses begin to understand professional boundaries and how they find the delicate balance between being a friend and colleague, to fit in, and become socially accepted within their ward.

### **Conclusions:**

Understanding these coping strategies can inform improvements in graduate nurse transition programmes. Teaching opportunities need to focus beyond patient care, to facilitating and enhancing graduate nurse adaptation as the vanguard to creating more resilient nurses ready to face the challenges that exist in today's work environments.

## Changes of VARK learning style of preclinical students from the first to the second preclinical years

Punyapat Maprapho<sup>1</sup>, Chantacha Sitticharoon<sup>1</sup>, Nipith Charoenngam<sup>1</sup>, Pailin Maikaew<sup>1</sup>, Thanapat Vanichnatee<sup>1</sup>

<sup>1</sup>Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

### **Introduction/background:**

Learning preference of each individual can be predicted by many models, including the visual-aural-reading-kinaesthetic (VARK) model.

### **Aim/objectives:**

To determine changes of VARK learning style from the first preclinical year (1<sup>ST</sup>Preclinic) to the second preclinical year (2<sup>nd</sup>Preclinic).

**Methods:**

Questionnaires were sent to same group of students at the end of the 1<sup>ST</sup>Preclinic and 2<sup>nd</sup>Preclinic with 85.11%(280/329) and 86.32%(284/329) being returned, respectively. Students were classified into 5 groups according to the highest score in each VARK module and multiple (M) group was assigned when the highest score was fallen into >1 categories.

**Results:**

The modality of learning was K(28%)-V(24%)-A(22%)-M(16%)-R(10%) in 1<sup>ST</sup>Preclinic and A(26%)-V(25%)-K(21%)-M(18%)-R(10%) in 2<sup>nd</sup>Preclinic. Surprisingly, although the proportion of VARK type was not much different between the 1<sup>ST</sup>Preclinic and the 2<sup>nd</sup>Preclinic, there was a tremendous change (69%) of learning style in individuals from the 1<sup>ST</sup>Preclinic to the 2<sup>nd</sup>Preclinic. The VARK module that mostly changed from the 1<sup>ST</sup>Preclinic into other groups in the 2<sup>nd</sup>Preclinic was the R group (85.2%), followed by the M(80.9%), K(66.7%), A(58.1%) and V(51.6%) groups.

**Discussion:**

From the 1<sup>ST</sup>Preclinic to the 2<sup>nd</sup>Preclinic, more than two-third of students changed their learning style. The small change of distribution of VARK learning style may obscure the change of VARK in individuals if only focusing in general perspective. These results suggested that students could adapt their learning preference to different academic environment.

**Conclusions:**

VARK learning style could be changed in students of different preclinical years which might be due to changes of subjects, content, and teaching-learning methods as well as past experiences.

## Pod 7 13:30-14:15

### Using videos to enhance teamwork preceding transition to clinical training placements.

Heidi Waldron<sup>1</sup>

<sup>1</sup>The University of Notre Dame Australia, Fremantle, Australia

**Background:**

As healthcare students' progress thorough clinical learning placements, they develop a sense of professional identity, understandings of role expectations and skills needed to work effectively as a member of the inter-professional team. This work looks to embed teaching about inter-professional teamwork before workplace learning commences.

**Aims:**

At Fremantle School of Medicine, a multi-institutional collaboration between university, hospitals and health department resulted in creation of video resources that address 'Clinical Deterioration' management in the hospital setting. Themes addressed include clinician roles and responsibilities, teamwork and communication. Throughout 2016, a pilot project using these videos in teaching occurred at multiple sites throughout Western Australia. Anecdotal responses indicate videos were perceived to be clinically relevant and useful teaching tools. This research seeks to formally evaluate clinical educators' experiences and perceptions of video utility. While the videos were used in both under-graduate and post-graduate learning settings, this study is specifically focussed upon use with health students prior to clinical placements in hospital settings.

**Methods:**

Survey and Focus Group methodology will obtain quantitative and qualitative data. Educators were invited to use the videos and participate in this research using snowball approach. Data collection and analysis will occur throughout 2017.

**Conclusions:**

Videos modelling effective and ineffective team interactions highlight the attitudes, behaviours and skills required to work together in teams. If this formal evaluation confirms anecdotal educator satisfaction with videos, this would support wider dissemination before clinical placements. Health professional's capability to work collaboratively in teams has flow on effects to providing quality patient care.

**Enhancing student engagement using technology: putting theory into practice**

Sufyan Akram<sup>1</sup>, Hasnain Baloch<sup>2</sup>

<sup>1</sup>Human Biology Division, School of Medicine, International Medical University, Kuala Lumpur, Malaysia

<sup>2</sup>E-Learning Department, International Medical University, Kuala Lumpur, Malaysia

**Introduction/background:**

Student engagement has been identified as a major factor in collaborative learning. "...productive engagement is an important means by which students develop feelings about their peers, professors and institutions that give them a sense of connectedness, affiliation, and belonging, while simultaneously offering rich opportunities for learning and development" (Bensimon, 2009). Concept of flipped learning has also been around for a while. However, provision of pre-reading material does not equate with actual pre-reading being done. Several studies have shown lack of student compliance. Technology, in recent times, has reshaped the teaching-learning landscape, tracking students' involvement and engagement (e.g; gamification). Use of online tools for learning and designing engaging content for students holds much promise, but requires careful planning and innovation.

**Aim/objectives:**

Enhancing student engagement in the learning process by adopting a flexible approach, using technology.

Designing lesson plans according to learning pedagogy and selecting the tool accordingly.

Providing a continuum of learning by keeping students engaged before, during and after the face-to-face session.

**Methods:**

We identified some physiology topics in the medical program (semester 1 to 4). A plethora of online tools were used for pre-lecture, during lecture and post-lecture student engagement. Students were asked to go through the content before coming to the actual session. Students had the option to post questions before the actual classroom session. In the class, concepts which were identified by students that needed more explanation were elaborated upon, followed by an interactive formative quiz. An online interactive message board was created and students continued to engage with the lecturer. Feedback was solicited at each stage.

**Results:**

Data on student perception was collected from different cohorts. Continuous online interaction was appreciated by students. Initial analysis also shows higher student-teacher interaction. Utilization of online tools has potential to increase audience's engagement.

**Discussion:**

Our data suggests that by providing engaging pre-reading material and a continuous platform to interact using appropriate technology, students felt involved and it led to active student engagement in the learning process.

**Conclusions:**

Technology can enhance student engagement and provide a continuum of learning across teaching-learning landscape. Choice of appropriate learning tool should be based on lesson plan, learning pedagogy, and accessibility.

## **Transitioning to a model-based communication curriculum: a review of models**

Sarah White<sup>1</sup>, Shannon Saad<sup>2</sup>, Morgann Quilty<sup>2</sup>

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

<sup>2</sup>University of Notre Dame Australia, Sydney Australia

### **Introduction/background:**

Communication is an essential part of the medical curriculum. Increasingly models of communication are being adopted to provide a structure for communication learning in medical programs. Such models assist in ensuring minimal gaps and overlaps in the curriculum and to provide a cohesive approach across clinical disciplines.

### **Aim/objectives:**

The objective of this review was to identify the most comprehensive, current and usable model(s) for use within a medical curriculum. The 18 models for review were identified through a combination of information gleaned from the European Association for Communication in Healthcare (EACH) and by a database search. The team created a three-tier rubric to assess these, considering aspects of applicability, usability, currency, and evidence base.

### **Discussion:**

In deciding which model or models to recommend for mapping and enhancing the current communication curriculum, the team took into account the ranking from the rubric as well as the reviewers' comments, identifying models that would be suitable to use. Through this process, three models were identified as possibilities for integration into the medical curriculum. Each of these models scored well using the rubric: they have been through multiple iterations with recent editions available, are comprehensive and practical, and are thoroughly evidence-based. In order to support a comprehensive, coherent and structured approach, a combination of these three models is suggested, which can be tailored to the needs of the relevant curriculum.

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

How might these models be effectively integrated within existing curricula?

Are these models applicable to other clinical fields?

## **The Evolution of the Dedicated Education Unit (DEU) at Counties Manukau Health: interprofessional education in the perioperative setting.**

Victoria Crisp<sup>1</sup> Sharon Rydon<sup>2</sup>

<sup>1</sup>Ko Awatea, Counties Manukau Health, Auckland New Zealand,

<sup>2</sup>Manukau Institute of Technology, Auckland, New Zealand

### **Background:**

A Dedicated Education Unit (DEU) is collaboration between education and clinical providers to create an environment where all staff are focused on teaching and learning.

An Interprofessional (IP) DEU has been established in the perioperative setting at Counties Manukau Health, to support Bachelor of Nursing (BN) and Bachelor of Nursing Pacific (BNP) students from Manukau Institute of Technology (MIT) and fourth year Medical Students from the University of Auckland (UoA) South Auckland Clinical School.

Current efforts to improve education focus on enabling undergraduate students from a variety of professions to learn together with the intent that this will assist them to work together collaboratively in the future. Interprofessional learning has benefits that include assisting students to communicate with other disciplines, to better understand teamwork, their professional roles and the roles of others. The DEU concept has provided a proven clinical education model in which to encourage collaborative, interprofessional learning.

**Aims:**

Support interprofessional learning (IPL) for students (Nursing and Medicine) in the peri-operative setting.

Support IPL and collaborative practice through shared learning opportunities for students and staff in this DEU.

**Methods:**

Qualitative descriptive design, student questionnaires, focus groups with students, perioperative staff and DEU operational group with thematic analysis of data collected.

**Results:**

Four key themes have been identified:

Working in a Team

Learning Together

Recognising Challenges

Feeling Supported

**Conclusions:**

The evaluation has shown benefits to students' teamwork, skills, confidence and role awareness.

This presentation will summarise research results and highlight the student experience from inter-professional placement.

## **Evaluation of a workshop to promote an interdisciplinary educational approach to paediatric incontinence**

Patrina Caldwell<sup>1,2</sup>, Karen Scott<sup>1</sup>, Deborah O'Mara<sup>1</sup>

<sup>1</sup>Sydney Medical School, Australia;

<sup>2</sup>The Children's Hospital at Westmead, Sydney, Australia

**Introduction/background:**

Paediatric incontinence has traditionally been managed by doctors, nurses, physiotherapists and psychologist, each with a discipline-specific approach to management. We conducted an interprofessional educational workshop to promote an interdisciplinary approach to managing paediatric incontinence, with speakers from different disciplines discussing their discipline specific contributions in the management of bedwetting, daytime incontinence, faecal incontinence and neurogenic bladder.

**Aim/objectives:**

To assess the effect of the workshop on increasing health professionals' knowledge, confidence and willingness to involve other disciplines in managing children with incontinence.

**Methods:**

Workshop attendees completed surveys before the workshop, on the day of the workshop and 6 months later. Descriptive analysis was used to compare differences between disciplines and changes in clinicians' knowledge, confidence and experience in managing incontinence before and after the workshop.

**Results:**

77 participants attended the workshop (53% doctors, 25% allied health, 22% nurses). Despite reasonable knowledge and confidence prior to the workshop, most participants reported increased knowledge (including an increased appreciation of the contribution of other disciplines), and willingness to involve other disciplines in managing their patients.

**Discussion:**

Presenting an interprofessional workshop with a team of speakers from various disciplines to promote an interdisciplinary educational approach may help participants identify their own and others' unique disciplinary contribution to management and increase their willingness to adapt an interdisciplinary or multidisciplinary approach in their own practice.

**Conclusions:**

Educating through an interdisciplinary approach and increasing clinicians' awareness of the role of other disciplines can promote interdisciplinary collaboration in the workplace, enabling a more effective and patient-centred model of care.

**A snapshot of OSCE practices at Australian Medical Schools**

Clare Heal<sup>1</sup>, Karen D'Souza, Bunmi Abdul, Richard Turner, David Garne, Peta-Ann Teague, Lizzi Shires

<sup>1</sup>The ACCLAIM Collaboration

**Introduction:**

The Australian Collaboration for Clinical Assessment in Medicine (ACCLAIM) consortium comprises 15 out of a total of 19 medical schools in Australia. The objective of this collaboration is to provide benchmarking and quality assurance of Objective Structured Clinical Examinations (OSCEs) on a national basis.

**Aims/Objectives:**

We aimed to design and administer a questionnaire with the objectives of 1) providing a snapshot of current OSCE practices within medical schools in Australia and 2) Comparing these practices with current gold standard according to guidelines.

**Methods:**

A semi-structured questionnaire was designed and administered to each of the 19 medical schools in Australia, including the 15 consortium members. Questions were included about the OSCE process, analysis, and administration.

**Results:**

The results of the survey will be available for ANZAPHE 2017.

**Discussion/Conclusion:**

We hope that the results of our survey will provide a snapshot of current OSCE practices and allow participating schools to reflect on their current OSCE practices in relation to other medical schools in Australia, and recommended gold standard practices.

**Allied health guideline development – reflections on an elephant pregnancy.**

Name: Blayden, Carmel<sup>1</sup>; Hughes, Sonia<sup>2</sup>; Nicol, Jennifer<sup>3</sup>; Sims, Susan<sup>4</sup>.

Origin: <sup>1</sup>NSW Children's Healthcare Network, Western Region, Australia; <sup>2</sup>NSW Children's Healthcare Network, Northern Region, Australia; <sup>3</sup>NSW Children's Healthcare Network, Southern Region, Australia; <sup>4</sup>NSW Children's Healthcare Network, Southern Region, Australia.

**Introduction/background:**

A clinical guideline is a set of recommendations based on systematic identification and synthesis of the best available scientific evidence to make clear recommendations for the care, health professionals provide. The NSW Children's Healthcare Network Allied Health Educators have led the development of several guidelines to support clinical practice and provide a framework for continuing education of allied health (AH) professionals who work with children.

**Aim/objectives:**

This presentation aims to reflect on the experiences of AH guideline development and identify key issues for consideration and future application.

**Discussion:**

The development of AH guidelines based on best evidence and expert consensus has been time consuming and resource-intensive. Despite the range of resources produced to support this process, the development of guidelines for use by AH professionals relating to non-acute areas of clinical practice has raised particular issues for consideration.

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

AH guidelines are broader in scope and less prescriptive than acute guidelines. The scope will determine and be determined by the identified need, target audience, development group and document format. There may be conjecture as to whether AH guidelines meet the definition of a clinical practice guideline. This has implications for governance, adoption and evaluation.

The composition, dynamics and longevity of the development group contributes significantly to the successful completion of a guideline.

Clinical guidelines are most effective when used in conjunction with other continuing education. In addition to supporting the translation of knowledge, existing resources can provide a foundation from which the need, scope, content and adoption of a guideline can be built.

## Pod 5 14:15-15:00

### Attitude of medical students toward the flipped classroom in pediatric dermatology learning

Arucha Treesirichod<sup>1</sup>

<sup>1</sup>Faculty of Medicine, Srinakharinwirot University, Bangkok, Thailand

**Introduction:**

The flipped classroom reverses the traditional learning methods by providing online instruction outside the classroom and by moving activities into them. This technique encourages students to engage in concepts in the classroom with the guidance of a mentor.

**Objectives:**

To assess the attitudes of the students toward the flipped classroom in pediatric dermatology learning at the Faculty of Medicine, Srinakharinwirot University.

**Methods:**

The study was conducted among 137 medical students during their clinical year. Self-administered questionnaires were used to determine the attitudes following the pediatric dermatology class.

**Results:**

Regarding the opinions of medical students toward the flipped classroom, the majority of them have agreed that it develops their self-directed learning skills (86.1%), increases their individual responsibility (81.1%), provides better retention of knowledge (83.2%) and improves the students' comprehension (83.2%). They disagree that the flipped classroom decreases the learner/teacher interpersonal relationships (68.6%) and the teachers' roles (79.5%). The majority of the students have indicated that the flipped classroom is better than conventional methods (83.2%) and should implement the flipped classroom into the clinical years (83.2%).

**Discussion:**

The key to the success is that students are able to take responsibility for their own learning. The positive attitudes of the student and teacher's roles are the most frequent factors which influence performance and learning in the flipped classroom. Advantages of this approach include increased opportunities for interaction between the students and teachers.

**Conclusions:**

The results indicate that medical students have an optimistic attitude toward the flipped classroom and can provide better opportunities in enhancing their self-directed learning skills.



# **Initial transitions from patient to dentist: our students' experiences of flipping tooth morphology.**

Tracey Winning<sup>1</sup>, Fizza Sabir<sup>1</sup>, Sophie Karanicolas<sup>1</sup>, Catherine Snelling<sup>1</sup>

<sup>1</sup>Dental School, The University of Adelaide, Adelaide, Australia

## **Introduction/background:**

Accurately identifying teeth is a key first-year outcome for becoming a dentist. Learning with natural teeth is ideal, however resource limitations means students struggle learning this core skill. Therefore, to improve access to resources outside classes, videos of a student identifying teeth were used within a flipped learning design.

## **Aim/objectives:**

This study investigated students' experiences following participation in flipped learning activities using videos and quizzes, both pre- and in-class.

## **Methods:**

Data collection involved observation of classes, student surveys and focus groups (25 students). Key criteria included relevance, theory-practice links, expectations, coherence, active learning and support.

## **Results:**

Survey results (61/71; 86% response rate) showed 72% of respondents completed the pre-class activities. Students reported they spent between 19-30min reviewing each video (n=6) and questions. Respondents (>75%) recognised the relevance, theory/practice links and that colleague/staff interactions supported learning; made links between concepts; actively participated in learning activities; were clear about expectations and that assessment required application. Classroom observations were consistent with students' perceptions of the learning activities. Areas for improvement (69-72%) included supporting students to learn effectively from various activities. Focus group feedback showed students valued the pre-activity in preparing them for class and that issues were clarified in class and highlighted issues with visualising key dental features.

## **Discussion:**

Evaluation of the flipped design identified aspects that worked and areas needing improvement. Revisions to student induction, support and video format are being implemented

## **Conclusions:**

Overall, students identified the flipped design supported their learning of this core skill.

## **Acknowledgements:**

First-year students; OLT

## **Cross-cultural collaborative teaching of Evidence Based Medicine in China – an action research project.**

Patrina Caldwell<sup>1,2</sup>, Xun Li<sup>3</sup>, Lily Yuen Wan<sup>4</sup>, Yutong Fei<sup>3</sup>, Hui-Juan Cao<sup>3</sup>, Jin Sun<sup>3</sup>, Ning Liang<sup>3</sup>, Karen M. Scott<sup>1</sup>

<sup>1</sup>Sydney Medical School, Australia;

<sup>2</sup>The Children's Hospital at Westmead, Sydney, Australia;

<sup>3</sup>Centre for Evidence-Based Chinese Medicine, Beijing University of Chinese Medicine, China;

<sup>4</sup>University of Southampton, Primary Care and Population Sciences, UK.

### **Introduction:**

Evidence based medicine (EBM) is increasingly embraced by complementary and alternative medicine. Academics from China, Australia and UK developed a Summer School EBM course for Traditional Chinese Medicine (TCM) students. The culturally different teaching styles, language and approaches to health between TCM and Western medicine made this task challenging. We used Action Research to explore course redesign and teacher development.

### **Aim:**

To evaluate and redesign an EBM course that is engaging and relevant for TCM students.

### **Methods:**

We systematically analysed the 2015 course and student and teacher evaluations to inform the 2016 course design. When implementing the 2016 course, we analysed teacher and student responses before and after the course, and measured attitudes, knowledge and intention of application of EBM in TCM practice. Focus group, teachers' diaries, field notes and survey data were analysed using descriptive statistics for quantitative data and thematic analysis for qualitative data.

### **Results:**

Students and teachers found the course content engaging and relevant for their practice. Chinese teachers adopted interactive teaching methods that were less commonly used in China, and believed they improved student engagement and learning. They reported teaching and learning in English was challenging but appreciated the exposure to English. Overall, students embraced the concepts of EBM and performed beyond their and their teachers' expectations.

### **Discussion:**

Teaching a culturally challenging topic in a foreign language using unfamiliar teaching methods is demanding but results in changes in beliefs and practice.

### **Conclusions:**

Cross-cultural collaboration enables teacher development and course improvement through sharing reflections and ideas.

## **Attitudes towards junior medical officer teaching at a Sydney tertiary hospital.**

McGrath, J.P.<sup>1,2</sup>, Malouf, N.<sup>1</sup>, Hosie, P.H.<sup>1,2</sup>, Lucena, T.<sup>1</sup>, Bosco, A. A.<sup>1,2</sup>

<sup>1</sup>Prince of Wales Hospital, Sydney, Australia.

<sup>2</sup>The University of New South Wales, Sydney, Australia.

### **Background:**

Junior medical officer (JMO) training is an essential responsibility for public hospitals within NSW Health, with adequate protected teaching time a requirement of the Health Education and Training Institute. At Prince of Wales Hospital, one hour a week of protected teaching is respectively allocated each to post-graduate year one and post-graduate year two trainees, however attendance has been sporadic in recent times.

**Aims:**

The authors aimed to elucidate reasons for declining teaching attendance and determine preferences for teaching content and delivery amongst the JMO cohort. This was achieved via the dissemination of an online survey to JMOs, with a 79% (66/84) participation rate.

**Discussion:**

Responses indicate that there is a substantial interest in JMO teaching, and satisfaction regarding its quality and content. However, despite this interest, only 20% of the JMO cohort attends over 70% of teaching sessions. The timing of teaching, ward duties and the opinions of seniors were raised as significant barriers preventing attendance. It is important that these barriers are specifically addressed to encourage regular attendance, and hence facilitate a higher level of training amongst junior staff. A preference for increased teaching from senior medical staff was expressed, as well as the increased provision of clinical, procedural and professional development skills. Survey data are being used to create a new JMO-centered training program at our hospital, and are translatable to other institutions providing JMO training.

**Issues:**

Teaching attendance; teaching content; teaching delivery; senior opinion towards teaching; skills-based teaching; junior medical officer training curriculum.

**Experiences in a co-designed teaching programme**

Eleri Clissold<sup>1,2</sup>, Naomi Heap<sup>1</sup>, Ian Wallace<sup>1,2</sup>, [Megan Gingell](#)<sup>1,2</sup>

<sup>1</sup>Waitemata District Health Board, Auckland, New Zealand

<sup>2</sup>Univeristy of Auckland, Auckland, New Zealand

**Introduction:**

Waitemata District Health Board (WDHB), New Zealand was tasked with creating an education programme for second year doctors. This rotational group are transitioning from house officer to registrar, have diverse experiences and career aspirations and work anti-social hours. Engagement can be challenging, with traditional approaches often yielding generic outcomes.

Co-design is a well-practiced approach traditionally used for designing care systems with patients.

**Objective:**

Create a high-quality education programme using a novel co-design process with house officers.

**Method:**

A house officer was as a medical education fellow. They undertook an initial user needs analysis, literature review and consultation. This formed the basis of a continuous co-design process. House officers work with subject matter experts to develop sessions. Feedback is electronic and reviewed with educators in real time, meaning a continuous plan-do-study-act cycle is underway. Learning needs are mapped by tracking access to online learning materials and an e-newsletter.

**Results:**

An evaluation was conducted at 6 months. Survey data from stakeholders suggests the education programme is delivering against stated aims. It has an 88% learner approval rating (80.5% survey response rate) and 86% attendance rate. Mean self-rated confidence in skills teaching rose from 3.3/10 to 7.95/10 (n=12). The programme has the support of learners, services and the Medical Council of New Zealand.

**Conclusion:**

We believe this innovative approach to health professional education is scalable, transferrable and successful. We intend to apply a similar process to orientation and work to ensure the sustainability of this programme.

# Using student designed videos incorporating error detection and correction to improve clinical skills performance in Optometry

Nahal Saboohian<sup>1</sup>, Samantha Widjaja<sup>1</sup>, Viki Nikas<sup>1</sup>, Jasmine Alm<sup>1</sup>, Jane Li<sup>1</sup>, Yong Su<sup>1</sup>, Hunter Wang<sup>1</sup>, Alex Jaworski<sup>1</sup>

<sup>1</sup> Optometry, Flinders University, South Australia

## **Introduction/background:**

Students and health care providers work in challenging and complex cognitive settings, and error recognition and recovery has been recognised as an essential component of teaching patient safety in these complex environments.<sup>1</sup> There has been a shift from the directional or avoidance approach where students are instructed what to do and what not to do, to fostering a 'culture of safety' where students are able to make and learn from errors.<sup>1</sup>

## **Aim/objectives:**

This study is aimed at identifying if student-designed videos, demonstrating low-stakes error recognition and correction, improves the performance of clinical skills of near-student peers in Optometry. The presentation will detail the rationale and design features of this student-based study, including video design and production.

## **Discussion:**

The use of high quality videos has been shown to be an effective adjunct in clinical training to improve student performance of clinical skills.<sup>2,3</sup> Peer assisted learning has also shown to be an effective teaching strategy, increasing student knowledge, confidence, collegiality and fostering the development of leadership, cognitive and psychomotor skills<sup>4,5</sup>. These approaches were combined to explore the effect of demonstration of error detection and correction on the clinical performance of Optometry students. The underlying rationale will be discussed, in addition to the student design of videos and peer-assessment. It is anticipated that the findings of this work will assist in best preparing Optometry students for clinical practice, and are transferrable to other disciplines and higher stakes error detection and correction.

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

Project challenges and recommendations

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## **On the right track with TRACS WA**

Helen Mclean<sup>1</sup>, Jessica Sharp<sup>1</sup>, Sandy Dumas<sup>1</sup>

<sup>1</sup>WA Department of Health, Training Centre in Subacute Care Western Australia (TRACS WA)

## **Introduction:**

TRACS WA facilitates clinicians to learn with, from and about each other to improve patient experiences and cultivate a culture of best practice compassionate care in Subacute care (SAC) WA.

**Aim/Objectives:**

Our key aims are to enable the exchange of learning for all clinicians in SAC WA and are facilitated through Community of Practice (COPs) forums, interactive individual site workshops, telehealth, use of simulation videos, skills exchange programs and our interactive website. We hold bi-monthly COPs meetings linking up to 200 clinicians, transitioning likeminded professionals to share big ideas, tackle thorny dilemmas, promote best practice, and positively impact improved patient care. We have developed our flagship 5 module SAC learning comprising of Principles of Rehabilitation, Person Centred Care, Goal Setting, Evidence based Care and Team building which has been widely delivered across metropolitan and rural WA. Additional in 2016 we provided innovative formats enabling creative conversations and a “think tank approach” to transition changes in SAC services WA through engaging key stakeholders at a Stroke Study Day, a Parkinson’s workshop, and a Subacute Care World Café. Further niche resources comprise of our interactive website ([www.subacutecare.org.au](http://www.subacutecare.org.au)) simulation videos, rehabilitation pathway maps, learning funds, and skills exchange programs.

**Discussion:**

TRACS WA is confident it is supporting Interprofessional education for WA SAC clinicians resulting in a culture of improved clinical care. Reinforced by feedback: “the value of the whole team attending training is incredible, we were able to push forward and make plans and goals for our whole service.”

Pod 3 10:30-11:15

## Can simulated patients authentically portray mental health scenarios for post-graduate medical student education?

Sanaz Khanlari<sup>1</sup>, Alison Rutherford<sup>1</sup>

<sup>1</sup>Graduate Medicine, University of Wollongong, Australia.

### Introduction/background:

Our institution uses a large cohort of volunteer simulated patients (SPs) to play roles in history taking and examination clinical skills lessons. Traditionally however, the mental health history taking lessons delivered to year 2 students recruited paid “expert SPs” who were working in mental health services to the roles.

### Aim/objectives:

To ensure the program remained sustainable, we introduced and evaluated a training program to upskill selected volunteer SPs to play mental health scenarios.

### Discussion:

A training workshop covering the portrayal of mental health issues and how to provide more complex and specific feedback to students was developed and run across 2 campuses with the participation of 38 SPs. The following year all of these SPs elected to participate in the mental health history taking lesson. The acceptability of this initiative for SPs and medical students was evaluated. A number of issues were encountered such as SPs finding it difficult to gauge how severely to portray symptoms. The following year we introduced new content to the training and again evaluated the program. Trained SPs reported increased confidence from the training and a greater sense of role satisfaction from playing the more challenging scenarios.

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

Are volunteer SPs with no particular experience in mental health able to authentically and safely portray patients with mental illness for the purposes of medical student history taking lessons?

## GI MDT: Transition to simulated learning environment

Suzanne Rayner<sup>1</sup>, Jennifer Pollard<sup>1</sup>, Rosalyn D Shearer<sup>2</sup>, , John L Duncan<sup>1,2</sup> Stephen McNally<sup>1,2</sup>

<sup>1</sup>NHS Highland, Inverness, United Kingdom

<sup>2</sup>University of Aberdeen, United Kingdom

### Introduction/background:

UK GMC guidance on undergraduate medical education highlights the need to learn and work effectively within a multi-professional team. Multi-disciplinary team (MDT) meetings are a core component of clinical practice, and provide an excellent opportunity for students to develop skills skills including leadership, decision making and team working.

### Aim/objectives:

To redesign gastrointestinal cancer teaching for medical undergraduates into a more effective learning experience.

**Discussion:**

Standard MDT teaching incorporated observation of a clinical GI MDT meeting, followed by a didactic tutorial. Feedback identified that this approach was 'too high level' and 'hard to follow'.

Following development, simulated GI MDT meetings were held using using clinical cases. Students were allocated a professional role each week and given material to prepare relevant to the specialty they were representing. Sessions were run as a clinical MDT with students contributing as per their allocated roles. A faculty member was present to answer questions and facilitate discussion.

Focus group interviews demonstrated that students had a positive learning experience and enjoyed the interactivity of the sessions. Facilitators commented that students appeared more engaged with the teaching and adapted well to the simulated learning environment..

This approach appears effective and allows a greater understanding of the topic and the differing contributions of the MDT members. It would be readily applicable to other areas of undergraduate teaching.

**Simulation-based evaluation of a publically funded homebirth service prior to commencement**

Louise Botha<sup>1</sup>

<sup>1</sup>ACT Health, Canberra

**Introduction:**

The use of simulation to evaluate new healthcare services, offers unique opportunities to observe, analyse and improve resourcing, whilst exposing systems issues that might otherwise go unnoticed. This promotes patient safety and generates cost savings in the short and long term

**Aim:**

The purpose of the simulations was to identify clinical risks and patient safety issues in the provision of a new publically funded homebirth service prior to implementation of the new service.

**Discussion:**

3 realistic birthing scenarios were delivered as simulated events. 2 were held in the planning for service phase and 1 was held immediately prior to first client being accepted into the service. Simulations were held in the home of a volunteer that fit the criteria relating to the catchment area for the service. The scenarios included both maternal and neonatal emergencies and sought to: assess deficiencies in resources, identify system issues, and assess communication with external agencies (Ambulance). Each scenario included transfer to hospital of mother, baby or both. A consumer representative was present at the 3<sup>rd</sup> simulated event and feedback was sought from her perspective.

**Issues:**

Despite these simulations being an activity related to process, rather than clinical ability, emotions and reflections on clinical ability were evidenced in the participants who were actively participating in the simulations

Simulations will now form part of an ongoing clinical practice opportunity for midwives to practice clinical emergencies .These simulations have assisted ACT to implement a safe home birth service that increases birthing options for Canberra women.

## Using Mask-Ed™ simulation to assess inter-professional learning of health students

Jane Frost<sup>1</sup>, Jane Kellett<sup>1</sup>, Tanya Lawlis<sup>1</sup>, Stephen Isbel<sup>1</sup>

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

### Introduction/background:

Clinical simulation creates realistic opportunities for students to enhance contextual learning through experience as part of their pre-clinical training. As the Australian health care system is characterised by a diverse multidisciplinary workforce, the need to educate health students in an inter-professional way is essential to enable the best possible patient outcomes.

### Aim/objectives:

To assess student inter-professional learning (IPL) utilising Mask-Ed™ in a pre-clinical simulation training pilot program. Nursing and allied health students (n=10) were exposed to an acute care ward experience with simulated treatment on each Mask-Ed™ character, a case conference and a family conference, over two days in August 2016. Before and after the simulation, students were asked to complete two surveys: (1) The Interprofessional Collaborative Competencies Attainment Survey (ICCAS)© and (2) Kiersma-Chen Empathy Scale©. A focus group was also conducted where participants were asked about their IPL experience and pre-clinical learning skill development.

### Discussion:

Statistically significant improvements in all 6 domains of the ICCAS (collaboration, roles and responsibilities, patient centred approach, conflict management and team functioning) were found. There were no significant changes seen in empathy. Focus group analysis generated four themes: authenticity, mistakes are ok, roles and responsibilities and learning. The ICCAS and focus group results confirmed that the Mask-Ed simulation is a method that can be used to teach IPL and that students report the value of this type learning experience.

## Identifying fundamental elements of learning in a simulated clinical setting using a Delphi technique.

Jessica Young<sup>1</sup>, Martyn Williamson<sup>1</sup>, Ben Daniel Motidyang<sup>2</sup>, Jim Ross<sup>1</sup>, Tony Egan<sup>1</sup>

<sup>1</sup>University of Otago, Dunedin School of Medicine, Dunedin, New Zealand

<sup>2</sup>University of Otago, Higher Education Development Centre, Dunedin, New Zealand

### Introduction/background:

The Safe and Effective Clinical Outcomes (SECO) clinic simulation was designed to allow medical students to learn from adopting the doctor role in a high fidelity environment. This study was prompted by the depth of students' reflections on their learning experiences in the SECO clinic. The data for the analysis comprise the 55 codes generated from a thematic analysis of 50% of all 4th year medical students' reflective essays in 2011, 2012 (n=77).

### Aim/objectives:

To use an online consensus Delphi technique to validate the student learning themes derived from previous SECO research.

### Methods:

Eleven international faculty were provided with code definitions and asked to assign the codes to the most appropriate of the six original themes or to suggest new themes. We defined consensus as more than 50% of participants agreeing on the assignment. The second round required participants to indicate if they agreed or disagreed that the codes were a good fit within each theme. Any new themes were included in round two.



**Results:**

There was 100% agreement on the six original themes - professional identity, self-awareness, outcomes/safe practices, learning setting, clinical ability, relationships – and majority agreement on the suggested theme engagement/motivation.

**Discussion:**

The themes could be regarded as educational outcomes achievable in a clinical setting or simulation. The codes under each theme could be thought about as enablers, definers or triggers for the outcome. We are interested in how these can be operationalised in other settings?

**Conclusions:**

The themes appear to us to represent some fundamentals of clinical learning.

**Risk Aware: Enhancing students' clinical competence in risky environments through a blended simulation-based learning program.**

Rachel M. Roberts<sup>1</sup>, Jade Sheen<sup>2</sup>

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

<sup>2</sup>Deakin University, Burwood, Australia

**Introduction/background:**

Students across the healthcare field engage in clinical placement as a component of their education. Unfortunately there are a number of physical, psychological and environmental risks associated with clinical placement.

**Aim/objectives:**

Risk Aware is a simulation-based education program designed to address the challenges inherent in clinical placement, enhancing students' clinical awareness and competence in risky environments.

**Methods:**

The seven modules and their content were determined by a literature review, stakeholder interviews and student surveys.

**Results:**

Risk Aware enables students to identify and manage placement related risk. Risk Aware consists of: 1) Seven online learning modules that provide an academic and theoretical context for student learning; and, 2) Authentic simulation-based learning experiences that allow students to apply their theoretical knowledge and practice newly acquired skills.

**Discussion/Conclusions:**

This innovative program provides universities with a package to enhance psychology students' clinical competence and safe practice in risky environments and create work-ready graduates.

## Pod 8 10:30-11:15

### Levels of medical student debt in New Zealand: how concerning?

Antonia Verstappen,<sup>1</sup> Phillipa Poole,<sup>1</sup>

<sup>1</sup>University of Auckland, Auckland, New Zealand.

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

Concerns are often expressed about impacts of debts on medical graduates, and whether debts affect career decisions.

#### **Aim/objectives:**

To quantify the level of NZ Government Student Loan (GSL) debt accrued during medical study, and investigate the association of this with gender and age.

#### **Methods:**

Each year from 2006-2015, graduating students from one NZ medical programme were invited to complete a career intention survey, including reporting levels of GSL debt and the number of income sources used to support their study.

#### **Results:**

Response rate was 84%. 92% of 1169 domestic students accrued a GSL debt, with 28% having a debt of \$NZD 90,000 or more. The number and proportion of students reporting a student loan debt of \$90,000 or more increased over the decade ( $P < 0.0001$ ). While older students were more likely to have a larger student loan debt than younger students, there was no difference in debt levels by gender. Students with larger student loans relied on a larger number of financial sources. Financial prospects and cost of training rank low as career influences.

#### **Discussion:**

Debt levels are increasing, with the levels in this study likely underreported as we did not look at total debt, nor was there an upper limit in the highest GSL category ( $> \$90,000$ ). Further follow-up is needed to determine the full impact of debt on individuals, especially for those who are older, or entering less well-remunerated careers.

#### **Conclusions:**

At graduation most Auckland medical students have significant levels of debt, but on average, financial concerns have a small effect on career choice at this stage.

### Looking into the crystal ball - Can a pre med human skills course predict students' performance throughout Med School?

Kwong Chan<sup>1</sup>, Linda Humphreys<sup>1</sup>, Cathy Wu<sup>1</sup> and Raymond Tedmon<sup>1</sup>

<sup>1</sup>School of Medicine, Griffith University, Queensland

#### **Background:**

The Griffith Human Skills for Medicine Course is a 10 credit point course delivered by the School of Medicine that started in Semester 2 of 2012. It is a designated course for the Griffith Bachelor of Medical Science (MD provisional entry for school leavers) students.

The aim of the course is to prepare the students to transform their role from being a University student into a "Physician in Training" in the Griffith Medical program. The main focus is to develop students' general communication skills, to provide them with an understanding of how people perceive their experiences in the health environment, and how to apply human skills (eg communication skills and interpersonal skills) in such context. The course also addresses topics such as cultural competency, ethics and professionalism, global health issues and self-care.

**Purpose/Objectives:**

By the end of 2016, the inaugural group of Human Skills for Medicine students will be completing their fourth and final year in medicine. The research team plans to explore whether students' performance in the pre-med Human Skills for Medicine course translates to performance in the Medical program.

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

Selected assessment items between the Human Skills Course and the MD program will be statistically compared. Discussion will focus on the outcome and reasons for the results will be proposed.

**Results:**

Data collection will be up to Semester two 2016, preliminary findings will be available for the conference presentation.

**Conclusion:**

Data collection will be up to Semester two 2016, preliminary findings will be available for the conference presentation.

**What are the learning expectations of allied health students?**

Liz Springfield<sup>1</sup>, Michelle Smith<sup>1</sup>, Louise Gustafsson<sup>1</sup>, Anne E Hill<sup>1</sup>, Tanya Rose<sup>1</sup>, Dave MacDonald<sup>1</sup>

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

**Background:**

Developing students who are life-long learners, understand the process of learning and see that process as valuable, is particularly challenging in a climate of academic entitlement and student consumerism. Information on student expectations and approaches to learning may offer staff the opportunity to engage students in learning strategies that support performance and satisfaction, and promote life-long learning.

**Aim:**

The project aimed to understand student context and establish a clear understanding of learning expectations, learning attributes, and approaches to learning.

**Methods:**

A survey was completed by students from Speech Pathology, Occupational Therapy and Physiotherapy. Demographics; academic control; attitudes about University; study process; beliefs, motivation and goal setting data were collected using established questionnaires.

**Results:**

A total of 364 students across three professions participated. The majority of students were accumulating a HECS debt and receiving support from family for living expenses. Approximately two thirds of students worked in paid employment during the University semester. A quarter of students traveled more than one hour one-way to attend University. Most students reported some level of anxiety. Students demonstrated a range of learning processes and styles. Specific patterns of academic entitlement were evident.

**Discussion:**

Students had high demands on their time from financial, travel and living perspectives. The association between contextual factors and perceptions of academic entitlement and approaches to learning will be explored.

**Conclusions:**

The findings of the study could be used to inform curricula development, and guide the design and implementation of student learning activities for allied health students.

# Assessing professional behaviour in medical students

Bronwyn Herde<sup>1</sup> David Mills<sup>1</sup> Jonathan Newbury<sup>1</sup>

<sup>1</sup>University of Adelaide Rural Clinical School, Australia

## **Introduction/background:**

Assessing professional behaviour remains complex and difficult to implement in many Medical Schools. Students can behave in challenging and complex ways for multiple reasons. Medical school templates for assessment vary and are often completed by supervisors with limited contact or knowledge of student behaviours. The consequences of failing to recognise and manage unprofessional behaviour are likely to persist into graduate years.

## **Aim/objectives:**

We have proposed a multisource professional behaviour assessment template. This is to be completed by medical staff, educators, practice staff, hospital staff and other related educators. The multiple points of assessment will be included in programmatic assessment over the 12 months that students spend in their rural site as part of their 5<sup>th</sup> year of Medicine training. This will provide a more comprehensive picture of student behaviours.

## **Discussion:**

Professional behaviour assessment also needs to consider the consequences of incidents. These may range from minor or possible incidents to major incidents and recurrent unsatisfactory behaviour. The incidents may reflect system problems (hospitals, practices, teams, support), personal problems including depression and personality disorders, and social problems such as relationships and family disruption.

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

Should there be a nationally agreed assessment for professional behaviour in medical schools?

How can assessment in medical schools carry more weight than it currently does?

## **Learning and developing professionalism: a positive experience for students?**

Tiana Della-Putta

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## **Introduction/background:**

Engaging students in the learning and development of professionalism is widely accepted as a challenging area of medical education. The literature indicates that student views of professionalism teaching programs are often ambivalent or negative. Identifying teaching and learning strategies that are viewed positively by students would provide valuable information for medical educators.

## **Aim/objectives:**

To determine if there are specific professionalism learning and teaching strategies associated with positive student perspectives.

## **Methods**

In 2015 a cohort of Year 3 medical students was surveyed using a mixed method study: Likert, free response questions and focus groups. The study questions focussed on an Adelaide Medical School professionalism program with consistently positive student evaluations.

## **Results:**

Quantitative and qualitative results identified several factors contributing to students' positive views of the professionalism program: relevance to students' stage of learning and to the medical curriculum; realistic, integrated clinical cases; small group peer discussion; clinical educators with real-world experience.

## **Discussion**

The results concur with the literature that quality educational programs are dependent on the interaction of several factors: learner; teacher; teaching and curriculum. It is possible to design professionalism programs that are positively viewed by students by attention to the learners' needs; integration with the broader curriculum; discussion of real-world scenarios and ensuring credible educators.

## **Conclusions:**

Students positively view professionalism programs that are appropriately timed, integrated, have clear relevance and which enable discussion with peers and experienced clinicians.

## **Factors affecting preference for surgical specialties amongst Australian medical students**

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<sup>1</sup>Sydney Medical School, Sydney, Australia

## **Introduction/background:**

Understanding the factors driving specialty choice for medical students is key to workforce planning and has significant implications for medical education. Factors that influence career decisions in medical students have been studied in the medical education literature abroad, however studies in Australia are lacking. Research suggests that medical students' preferences for specialty are firmly established during their time at medical school, thus representing a critical period for influencing choice.

## **Aim/objectives:**

To develop a comprehensive list of themes that influence student's preferences for surgical specialties in an Australian medical school.

## **Methods:**

The study was conducted with Year 1 and 3 medical students enrolled in the graduate entry Sydney Medical Program in 2016. A total of seven focus groups (n=38) were conducted. Thematic analysis was used to code and categorise data into themes.

## **Results:**

Identified themes fell broadly into four categories including 1) student demographics (age, family status); 2) interest in specialty area; 3) personal experiences of area (experience on clinical rotations, role models, team dynamics); and 4), lifestyle factors and training requirements (length of training, cost, requirements for research).

## **Discussion:**

Findings reflect literature regarding factors influencing specialty preference in medical students overseas. This project is of relevance for medical educators and work force planning into the future, especially with the trend towards post-graduate education, changing medical student demographics and priorities (e.g. majority female graduates and desire for work/life balance).

## **Conclusions:**

A range of non-modifiable and modifiable factors influence medical student preference for surgical specialties across their medical education.

# Strategies to enhance student skills in translating clinical experiences to attributes of employability in physiotherapy

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<sup>1</sup>Menzies Health Institute Queensland and School of Allied Health Sciences, Griffith University, Gold Coast

## Background:

Graduate employability is important to students, educators and universities. Although students develop employable attributes throughout their study, it is essential that they are also able to effectively communicate those attributes to potential employers.

## Aim/objectives:

To enrich the skills of physiotherapy students for demonstrating university experiences as attributes of employability.

## Methods:

Forty-seven final-year physiotherapy students volunteered and consented to participate. Each student wrote an application for a hypothetical new graduate position in one of four employment sectors. A sector representative evaluated each application, provided written feedback to the applicant and a score to the investigators. Students then underwent training to improve the content and presentation of their applications, before subsequently applying for another position in a different sector and undergoing a mock interview. Sector representatives scored written application and interviews, and provided feedback to the students.

## Results:

Written application scores increased from 6.2/10  $\pm$ 1.8 to 7.2/10  $\pm$ 1.7 ( $p=0.01$ ), with a score of seven significantly more likely to result in an interview ( $p\leq 0.001$ ). Student confidence in communicating attributes of employability through a written application increased from 1.59/5 (0.58) to 2.72/5 (0.58).

## Discussion:

Our findings demonstrate that strategies to improve translating attributes of employability into job applications improve student applications, increase their confidence and may increase the likelihood of students receiving an interview.

## Conclusions:

Strategies aimed at augmenting student skills for communicating attributes of employability into job applications are effective at improving the quality of applications and may increase the likelihood of student progression to interview.

# **New Medical Schools: Frequently Established, Infrequently Published**

Sneha Kirubakaran<sup>1</sup>, Jennene Greenhill<sup>1</sup>, Paul Worley<sup>1</sup>, Koshila Kumar<sup>1</sup>

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

## **Introduction/background:**

New medical schools are established surprisingly frequently. The literature reports that 600+ new medical schools were added to the World Directory of Medical Schools between 2007 and 2014 (Boulet, Bede, McKinley, & Norcini, 2007; Duvivier, Boulet, Opalek, van Zanten, & Norcini, 2014).

However, the literature regarding the establishment of new medical schools is significantly less prolific. And what has been published is more eminence-based than evidence-based – i.e. the advice and opinions of founding leaders based on their experiences rather than by specifically designed research methodology. Certainly, no literature reviews have been published on this topic, to date.

The primary author is a PhD student researching The Establishment of New Medical Schools in Low-Resourced Settings.

## **Aim/objectives:**

To present a comprehensive review of the literature on the factors, processes and challenges involved in the establishment of new medical schools with particular reference to low-resourced settings.

## **Methods:**

The Ovid MEDLINE, Web of Science, Scopus, ProQuest, Cochrane and PubMed databases were searched with key terms relating to the founding, creation, building or commencement of new medical schools. Relevant articles were identified and analysed.

## **Results:**

Key themes in the literature include reasons for establishment, importance of the Founding Dean, financial costs, funding sources, student selection policies, staffing requirements, building and infrastructure requirements, importance of technology and curriculum innovations.

## **Discussion:**

Key challenges include staff recruitment, building delays, accreditations standards and technological constraints.

## **Conclusions:**

The issues involved in the establishment of new medical schools are universal, regardless of locale. In low-resourced settings, the need is frequently greater even though the constraints are more significant.

## **References:**

Boulet, J., Bede, C., McKinley, D., & Norcini, J. (2007). An overview of the world's medical schools. *Med Teach*, 29(1), 20-26. doi: 10.1080/01421590601131823

Duvivier, R. J., Boulet, J. R., Opalek, A., van Zanten, M., & Norcini, J. (2014). Overview of the world's medical schools: an update. *Medical Education*, 48, 860 - 869.

## Pod 4 11:15-12:05

### **Does a Symbiotic Culture of Bacteria and Yeast (SCOBY) represent a cost effective, culturally sensitive alternative to traditional models (pads, pork belly) for teaching suturing and excision, with similar or superior fidelity?**

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<sup>2</sup>Ballarat Health Services, Victoria, Australia

#### **Background:**

The Grampians Clinical School (GCS) uses Ethylene-vinyl acetate (EVA) pads or pork belly to teach suturing and excision skills to medical students. Using pig-based models may be culturally insensitive for some students and burdensome in storage and handling requirements, whilst EVA is costly.

#### **Objectives/Aims:**

To determine whether SCOBY (by-product of Kombucha tea manufacture), has a similar or superior fidelity in representing skin when compared with current suturing/excision models.

#### **Method:**

Ten expert clinicians were invited to suture and excise pork belly, EVA, and SCOBY, and answer open ended questions that identified properties of skin fidelity. A Delphi thematic analysis identified descriptors that define the fidelity profile of skin during suturing and excision. A Likert-type scale, developed from these descriptors, was completed by 33 medical officers after they had sutured and excised the three models.

#### **Results:**

A one-way Anova with post-hoc comparisons revealed that pork belly most closely resembled skin, but there were no significant differences between pork and SCOBY when ranked for skin, cutting and suturing likeness. Pork was preferred over SCOBY with regard to smell and overall look. SCOBY was preferred to EVA in all descriptors other than smell.

#### **Discussion:**

In guiding students transitioning to clinicians, SCOBY offers a viable alternative platform on which to teach suturing and excision. The smell of SCOBY can be minimised by using fresh samples.

#### **Conclusions:**

SCOBY offers a cost effective, culturally sensitive alternative to traditional models for training with similar or superior fidelity to pork or EVA.

## **Optometry transitions in response to advances in allied health education**

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

<sup>2</sup>Flinders University, South Australia, Australia

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

In alignment with changes in Australian optometric education and the Melbourne Model, we have adopted a postgraduate curriculum. With this transition, we have implemented technology and simulation to improve our teachings.

#### **Aim/objectives:**

We evaluated student perception in using an application (app) to deliver feedback to Year 1 students following case seminars, and a simulation-based program for Year 2 and 3 students.



**Methods:**

The app generates immediate constructive feedback, which forms an individualised report emailed to students. It allows comments modification and audio commentary. Students were surveyed assessing feedback quality and app satisfaction.

The simulator integrates a realistic 3D experience, providing students with real-time feedback to refine and consolidate an optometric technique. Students attend six self-directed group sessions.

**Results:**

Together, 90-100% of the students reported that the app-generated feedback was timely, relevant and specific. It allowed critical self-reflection and identification of strengths and weaknesses. When evaluating the effectiveness of simulation, students expressed the simulator as being valuable in contributing to them being more confident and proficient in performing the technique.

**Discussion:**

We have utilised technology that provides highly-valued effective feedback. Implementing a simulation-based environment has delivered a deeply interactive and immersive student learning experience. We anticipate that improvement in students' communication and clinical examination skills will ease transition from pre-clinical training to a real patient in the clinical setting.

**Conclusions:**

In a time- and resource-constrained teaching environment, educators use innovations to augment educational outcomes. Additional studies are warranted to evaluate changes in performance following feedback, and the efficacy of simulation in improving student-perceived proficiency and confidence.

## **Co-designing an effective undergraduate course for the management of medical emergencies in dental practice**

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**Introduction/background:**

Both the community and professional bodies expect that dentists will have the capacity to manage common adverse reactions and medical emergencies that may occur in clinical practice, including rural and remote settings. The Australian Dental Council defines the specific and supporting threshold competencies expected of dental graduates including the ability to manage both dental and medical emergencies. However, without appropriate teaching methods, a significant proportion of dental graduates feel poorly equipped to manage a medical emergency.

**Aim/objectives:**

The aim of this presentation is to share the lessons learnt through five years of co-designing, delivering and assessing medical emergency competency for the JCU Bachelor of Dental Surgery students.

**Discussion:**

Dentists are required to perform invasive and occasionally extensive oral procedures in a community-based setting on diverse patients. An ageing population coupled with advances in medical management and an increased burden of chronic disease means that patients may have significant co-morbidities or risk factors.

This paper discusses the training and assessment methods used to develop JCU dental students' competency in managing medical emergencies in daily practice. Following ongoing review and evaluation, the use of simulated patients and authentic scenarios have been found to be the most effective strategy for enabling undergraduate dentistry students to respond competently and confidently when practising in regional, rural and remote contexts.

## Developing teamwork through Interprofessional Education

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La Trobe University, College of Science, Health and Engineering.

<sup>1</sup> School of Nursing

<sup>2</sup> School of Allied Health

### Introduction:

Interprofessional education (IPE) aims to improve communication and collaboration by interprofessional teams leading to better healthcare delivery. Approximately 400 nursing, medical and allied health students are co-located at the Northern Centre for Health Education and Research in Melbourne presenting an opportunity to develop student interprofessional teamwork skills.

### Aims:

- Investigate the Readiness for Interprofessional Learning for nursing, medical and allied health students
- Explore the impact of interprofessional education on teamwork knowledge and attitudes

### Methods

Students' attended a three-hour activity using the Simulation Training in Interprofessional Education (STRIFE) project. Descriptive exploratory mixed methods were used including the collection of pre-test/ post-test quantitative data and qualitative data from focus groups. Descriptive statistics were used for quantitative data and inductive analysis for qualitative data. Ethics approval was obtained.

### Results:

Fifty students attended the activity: 66% female, mean age of 24.78 ( $\pm 4.43$ ), mean RIPLS scores of 71.13 ( $\pm 10.60$ ) at baseline. When comparing disciplines, RIPLS scores ranged between  $68.25 \pm 8.97$  to  $72.19 \pm 12.84$  with nursing scoring lowest and medicine scoring highest. Preliminary themes from qualitative data include patient centred care; communication as key; understanding roles and team members. Pre and post-test scores are currently being analysed.

### Discussion:

The lower RIPLS score indicated nursing students were less positive toward interprofessional learning experiences. Students recognised the beneficiary of interprofessional teamwork was the patient through patient centred care.

### Conclusions:

Students expressed a largely positive attitude to learning with and from their colleagues. Findings will inform health professional educational curricula and assist in building clinical partnerships.

## Interactive online videos: do they help learning?

Patrick Chau, Nalini Pather

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### Introduction/background:

Although blended learning is widely adopted in higher education, reports on its effectiveness on student engagement and learning varies. Furthermore, there are limited practical studies investigating the impact of multimedia resources on cognitive load.

### Aim/objectives:

This study therefore aimed to evaluate students' perceptions of online video resources and to correlate this with learning preferences and cognitive load.

## **Methods**

Student learning preferences were identified using a validated survey tool. Learning preference profiles were correlated with student performance and with perceived benefit. A cross-over study was conducted to assess students' perceptions of the effectiveness of interactivity on learning. Impact on cognitive load was assessed through focus group interviews.

## **Results:**

Multimodal learning was present in 70.4% of students, with each modality being equally preferred. Comparison of pre- and post-test scores demonstrated a significant improvement ( $p = 0.00$ ) in learning following the use of videos, with more students performing better after the use of passive videos. Engagement was equal across all four learning groups. Visuals, pace and interactivity were perceived to be useful in the learning process. Responses from the focus group revealed perceptions of cognitive load were influenced by video design, with presentation simplicity, embedded quizzing and feedback lessening cognitive load.

## **Discussion**

The results have demonstrated that although students like interactivity in videos, they learn best from passive videos. In developing video content, care should be taken to minimise cognitive overload.

## **Conclusions:**

These results are useful in developing a framework to inform the pedagogical design of activities in blended settings that encourages engagement and learning.

## **An analysis of the need to introduce an interactive, multimedia, web-based learning program in Ophthalmology and ENT to a medical curriculum.**

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## **Introduction:**

Despite the frequency of patient presentations of patients with disorders of the eye, ear, nose and throat across many community and hospital settings, ophthalmology and otorhinolaryngology (ENT) are two specialities that are often only covered briefly in many medical curriculum worldwide. Transition from longer, smaller programs with specific clinical attachments in both disciplines, to shorter ones with increased student numbers and less available placement time, presents challenges when trying to provide sufficient learning opportunities for medical students.

## **Objective:**

Through a comprehensive literature review, this study aims to evaluate the need to introduce MEyeNET, an online, interactive, multimedia case-based program created at Monash University addressing disorders of the Eye, Nose, Ear and Throat.

## **Discussion:**

Upon graduation, junior doctors will commonly need to assess and manage disorders of the eyes and ENT. Patients will present not only to the specific disciplines, but to both primary care and the emergency department. However, both national and international literature describe a need for more education and training in both areas, to ensure that graduates are work-ready. With the transition of medical programs to their current format, there is a need to develop innovative educational approaches, to complement classroom and placement-based teaching. Computer-assisted learning, offers the potential to meet this challenge.

## **Ideas for Discussion:**

We propose that MEyeNET, an interactive online program in ophthalmology and ENT is one such solution. Current work is in progress to evaluate the usability and impact of this resource, with a view to its wider dissemination on an open access platform.

## Quality rural placements for Flinders University Allied Health students

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<sup>1,2</sup> Country Health South Australia Local Health Network/ Flinders University of South Australia, Adelaide, South Australia

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### **Introduction:**

Country Health SA Local Health Network (CHSALHN) and Flinders University of South Australia have partnered together for a clinical education program that is thriving. The partnership agreement, which commenced in 2012, currently sees approximately 40 Physiotherapy (PT) and 24 Occupational Therapy (OT) students undertake clinical placements each year at CHSALHN sites. These rural clinical placements are supported by Senior Clinical Educator (CE) roles (OT and PT) facilitated by Flinders University funding.

### **Aim/objectives:**

To explore the role of the CE in providing quality rural placements for Flinders University PT and OT students within CHSALHN to allow students to transition smoothly from the classroom to clinical placement and then into the workforce.

### **Discussion:**

By providing a valuable link between students' university programs and rural clinical placements within CHSALHN, CEs facilitate positive and supported rural student placement experiences. The role involves building strong relationships between CHSALHN and Flinders University; to build placement capacity, provide appropriate resources and training, support local staff in supervising students, support students with weekly teleconferences and assist with logistics and planning for the placements. CEs lead the CHSALHN Education portfolios and early graduate support within their disciplines, which enables further interaction around these aspects of clinical education. The benefits of the partnership for the ongoing success of the rural placements and promotion of future rural employment opportunities for students will also be discussed.

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

What further strategies can be explored to facilitate quality rural placements with support provided remotely by university CEs?