

## Attaining and verifying the interprofessional capabilities learners will need for a changing world

Gary D. Rogers MBBS, MGPPsych, PhD, FANZAHPE, FAMEE, PFHEA

Professor of Medical Education and Deputy Head of School (Learning & Teaching), School of Medicine and

Program Lead for Interprofessional and Simulation-Based Learning, Health Institute for the Development of Education and Scholarship (Health IDEAS)

**Griffith University,  
Queensland, Australia**



## What is this thing called IPE?

---

*Interprofessional education (IPE) occurs when members or students of two or more professions learn with, from and about each other to improve collaboration and the quality of care and services<sup>1</sup>*

1. Centre for the Advancement of Interprofessional Education: Statement of purpose. (2016). Fareham, UK. Retrieved from: <https://www.caipe.org/>.

# Interprofessional collaborative practice (IPCP)


---

*Health and community service professionals working together using complementary knowledge and skills, to provide care to patients, clients and communities, based on trust, respect and an understanding of each others' expertise<sup>2</sup>*


2. Rogers, G.D., Thistlethwaite, J.E., Anderson, E.S., Abrandt Dahlgren, M., Grymonpre, R., Moran, M., & Samarasekera, D.D. (2017). International consensus statement on the assessment of interprofessional learning outcomes. *Medical Teacher* 39(4), 347-359.



## How is the world changing?

 Into the future, health and community service professionals will increasingly need to work in collaborative, supportive teams ... in fact most already do (or should)

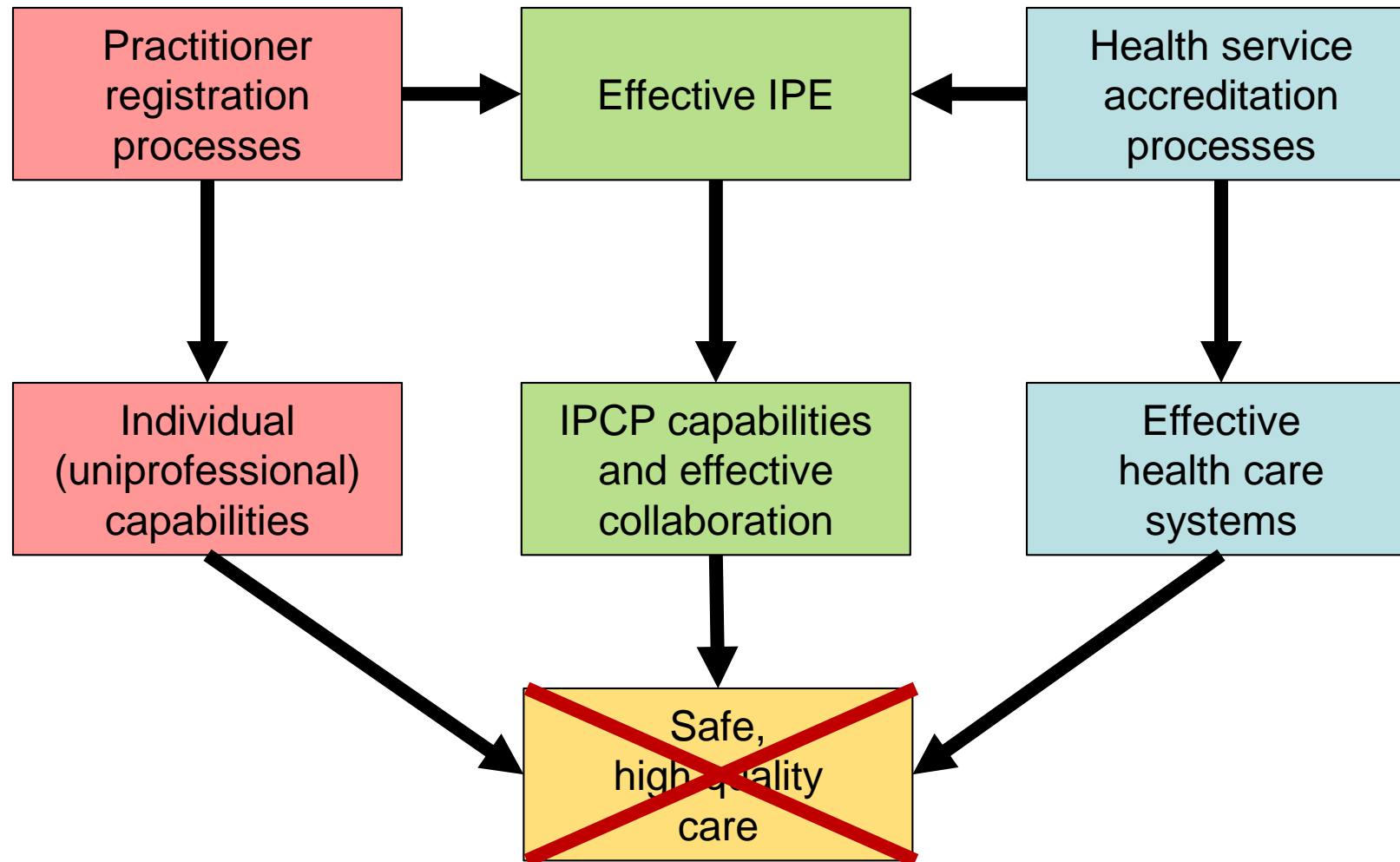


 Evidence from multiple enquiries that adverse health outcomes are often linked to failure of effective teamwork and interprofessional communication<sup>3, 4, 5, 6</sup>



3. Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.) (2000). *To err is human: Building a safer health system*. Washington DC: National Academy Press.
4. Bristol Royal Infirmary Inquiry. (2001). *Learning from Bristol: The report of the public inquiry into children's heart surgery at the Bristol Royal Infirmary 1984-1995*, London: Stationery Office.
5. Garling, P. (2008). *Final report of the special commission of inquiry: Acute care in NSW public hospitals*.
6. Francis, R. (2013). Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. London: National Archives. Retrieved from <http://webarchive.nationalarchives.gov.uk/20150407084231/http://www.midstaffpublicinquiry.com/report>

## The 'wicked problem' of patient safety



## How is the world changing?

### Particular settings that exemplify importance of IPCP:

- ▶ Acute care – health care misadventure
- ▶ Aged care, multiple morbidity, complexity
- ▶ Mental health care and promotion
- ▶ Rural and remote settings
- ▶ Health of indigenous populations



## *Sydney Interprofessional Declaration*

### Declared at the fifth world All Together Better Health conference in 2010:

*All users of health and human services shall be entitled to fully integrated, interprofessional collaborative health and human services (Article 1).*

*Health worker education and training prior to practice shall contain significant core elements ... of interprofessional education. These ... shall contain practical experiences ... [and] ... will be formally assessed (Article 3).*




7. Participants of the fifth All Together Better Health Conference .(2010). *Sydney Interprofessional Declaration*. Retrieved from:  
[https://docs.wixstatic.com/ugd/363deb\\_37b0abb8249c443ba98b0cc9c2247462.pdf](https://docs.wixstatic.com/ugd/363deb_37b0abb8249c443ba98b0cc9c2247462.pdf)

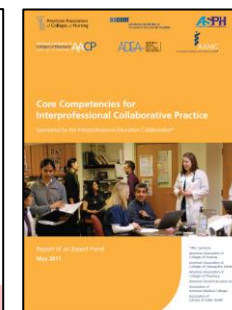
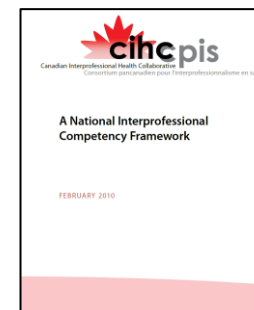
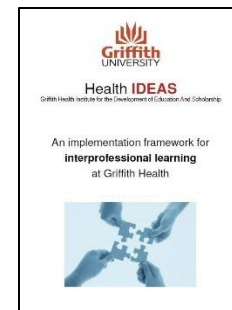


## Now broad consensus on required IPCP capabilities

On completion of their program of study, graduates of any professional entry-level healthcare degree will be able to:

- Explain interprofessional practice to patients, clients, families and other professionals
- Describe the areas of practice of other health professions
- Express professional opinions competently, confidently, and respectfully avoiding discipline specific language
- Plan patient/client care goals and priorities with involvement of other health professionals
- Identify opportunities to enhance the care of patients/clients through the involvement of other health professionals
- Recognise and resolve disagreements in relation to patient care that arise from different disciplinary perspectives
- Critically evaluate protocols and practices in relation to interprofessional practice
- Give timely, sensitive, instructive feedback to colleagues from other professions, and respond respectfully to feedback from these colleagues

 ... but no consensus yet about how they should best be attained

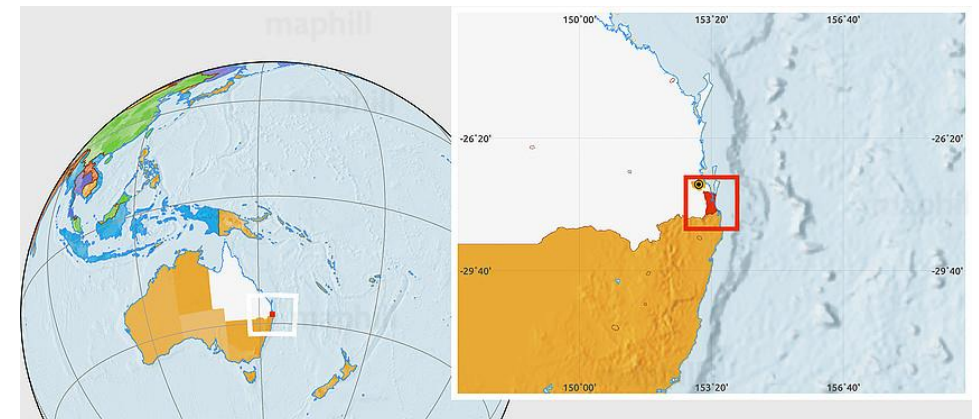


8. O'Keefe, M., Henderson, A., & Chick, R. (2017). Defining a set of common interprofessional learning competencies for health profession students. *Medical Teacher* 39(5), 463-468.

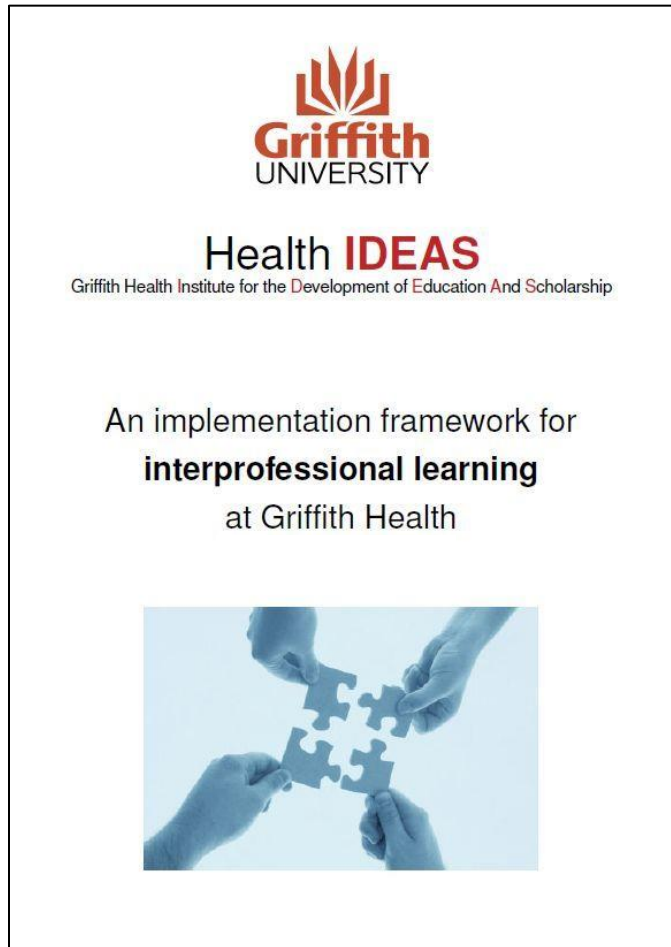
## Griffith University Health Group

 Almost 10,000 health students across 8 schools and 5 campuses

- Medicine
- Nursing
- Dentistry
- Dental technology
- Environmental health
- Exercise physiology
- Health services management
- Medical laboratory science
- Midwifery
- Nutrition and dietetics
- Occupational therapy
- Paramedicine
- Physiotherapy
- Psychology
- Public health
- Rehabilitation counselling
- Speech pathology
- Social work



## Griffith Health Interprofessional Learning (IPL) Framework<sup>9</sup>



- Devised in 2010/11 through an interprofessional collaborative process and recently (2017) reaffirmed with minor revisions
- Aims to ensure that all health professional graduates from Griffith University have the capabilities required for IPCP
- Ten threshold learning outcomes that all health professional graduates need to meet
- Three-phase pedagogy ...

9. Griffith Health Institute for the Development of Education and Scholarship. (2010). Retrieved from: [https://www.griffith.edu.au/\\_\\_data/assets/pdf\\_file/0010/475768/GriffithHealthIPLFramework.pdf](https://www.griffith.edu.au/__data/assets/pdf_file/0010/475768/GriffithHealthIPLFramework.pdf).

## Timing of IPE activities

🔥 Traditionally, two opposing arguments:

- ▶ Should occur **early** in the program, **before students are acculturated** to tribal perspectives and stereotypes concerning other professions from within their own profession<sup>10</sup>
- ▶ Should occur **later**, so that students have a **sense of their own professional identity** and so can make more sense of the IPE encounter<sup>11</sup>

🔥 False dichotomy: need to do different things at different times<sup>12</sup> → programmatic approach to IPE



10. Horder, J. (1996). The Centre for the Advancement of Interprofessional Education. *Education for Health* 9(3), 397-400.

11. Pirrie, A, et al. (1998). Multiprofessional education: Part 2 – promoting cohesive practice in health care. *Medical Teacher* 20(5),409-416.

12. Harden, R.M. (1998). Multiprofessional education: Part 1 – effective multiprofessional education. *Medical Teacher* 20(5), 402-408.

## Risk of harm

---

FOCUS ON HEALTH PROFESSIONAL EDUCATION: A MULTI-DISCIPLINARY JOURNAL, VOL. 12, NO. 2, 2010

---

### Interprofessional learning sessions: Assessing the impact on medical and pharmacy students

*H.L. Hattingh<sup>1</sup>, T. McGuire<sup>2</sup> & G.D. Rogers<sup>3</sup>*

---

#### **Abstract**

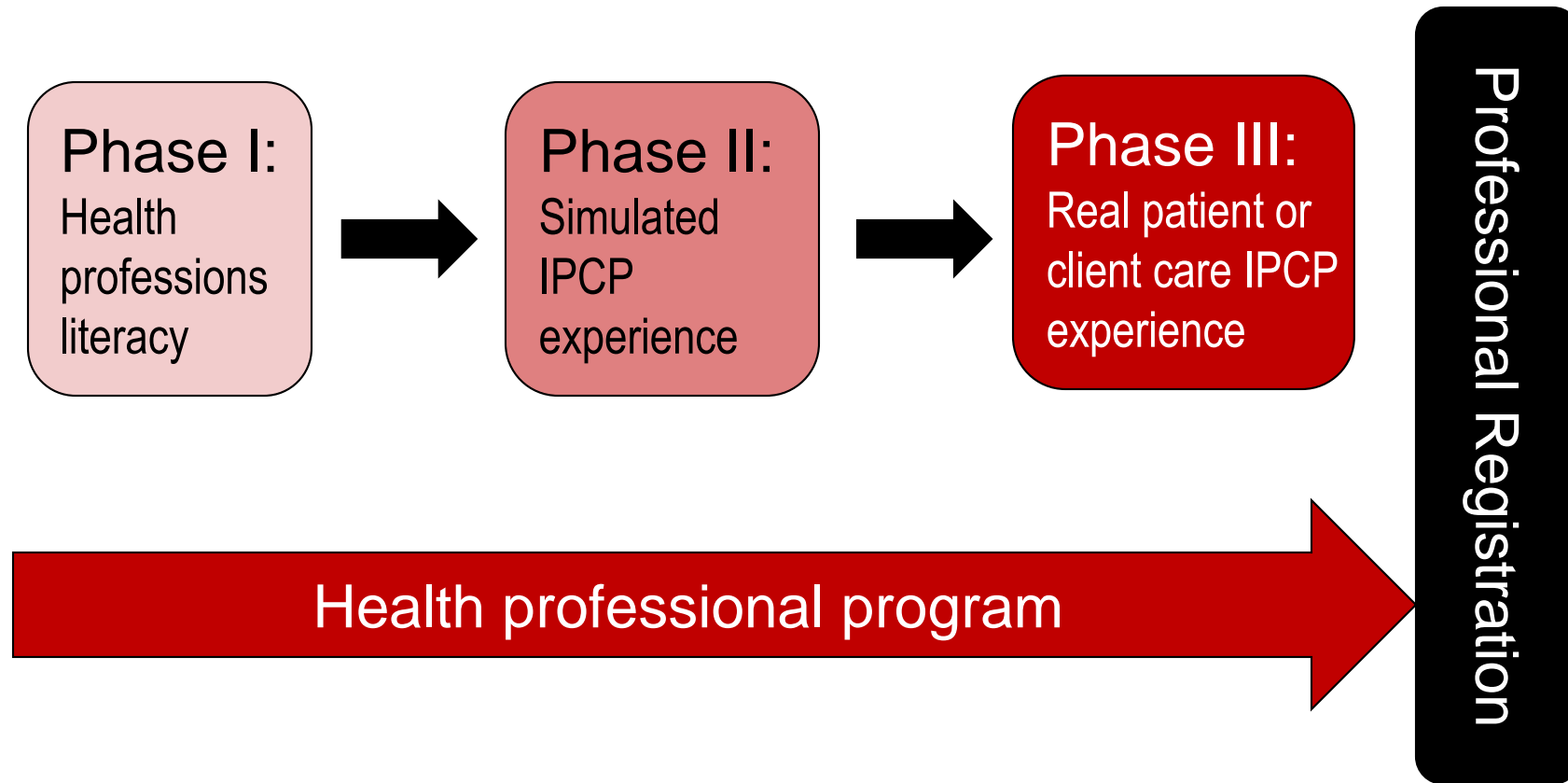
**Aims:** To investigate the feasibility of introducing interprofessional learning (IPL) sessions between senior medical and pharmacy students, and to assess their impact.

their attitudes towards interprofessional collaboration. The post-survey also rated their 'readiness' for IPL on the Readiness for Interprofessional Learning Scale (RIPLS).

**Results:** Ninety medical and 56 pharmacy students completed the

13. Hattingh, H.L., McGuire, T., & Rogers, G.D. (2010). Interprofessional learning sessions: Assessing the impact on medical and pharmacy students. *Focus on Health Professional Education* 12(2), 48-61.

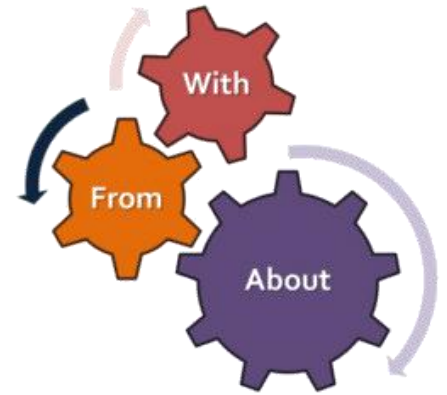
# Griffith three-phase interprofessional pedagogy<sup>14</sup>



14. Teodorczuk, A., Khoo, T.K., Morrissey, S., & Rogers, G.D. (2016). Developing interprofessional education: putting theory into practice. *The Clinical Teacher*. 13, 7-12.

## CAIPE definition of IPE

*Interprofessional education occurs when members or students of two or more professions learn **with**, **from** and **about** each other to improve collaboration and the quality of care and services<sup>1</sup>*

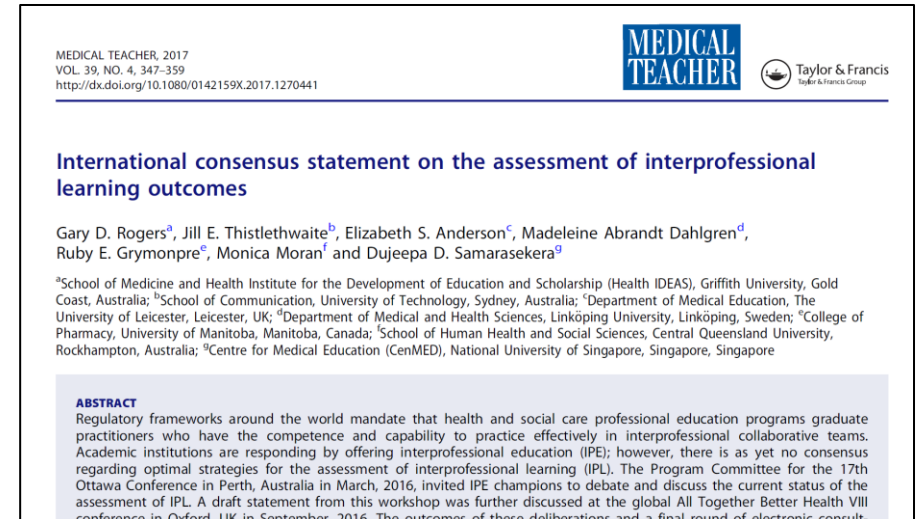


- 🔥 Critical that stand-alone IPE activities meet this definition to be effective, but ...
- 🔥 Within a **program** aimed at achieving interprofessional learning (IPL) outcomes, the definition can be met **across** the whole program
- 🔥 The effectiveness of (difficult and expensive) ‘CAIPE-compliant’ activities can be enhanced by other, less complex, activities earlier or later in the program

1. Centre for the Advancement of Interprofessional Education: Statement of purpose [internet]. 2016. Fareham, UK; [cited 2017 Jun 3]. Available from: <https://www.caipe.org/>.

## Assessment of interprofessional learning outcomes

- 🔥 Summative assessment is critical to verify that outcomes have been met and to **message importance** to learners and other stakeholders ...
- 🔥 ... but no guidance until recently on how
- 🔥 International consensus process in association with 17<sup>th</sup> Ottawa Conference in Perth March 2016 and eighth All Together Better Health conference in Oxford September 2016
- 🔥 Published in *Medical Teacher*, 2017<sup>2</sup>
- 🔥 75 IPE scholars from 15 countries



2. Rogers, G.D., Thistlethwaite, J.E., Anderson, E.S., Abrandt Dahlgren, M., Grymonpre, R.E., Moran, M., Samarasekera, D.D. (2017). International consensus statement on the assessment of interprofessional learning outcomes. *Med Teach*, 39(4), 347-359.



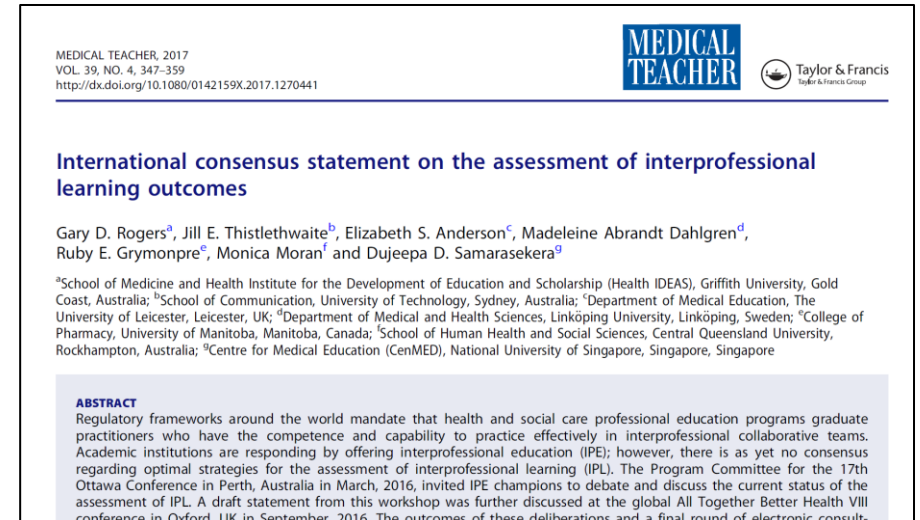
## Assessment of interprofessional learning outcomes

🔥 Agreement that assessment of IPL outcomes should include, as a minimum:

- Conventional assessment of 'role understanding' in relation to the major health professions
- Observational assessment of individuals' IPCP behaviours either in simulation or in practice or both

🔥 Recommends further research on techniques to assess development of interprofessional values via reflective journaling and learning consolidation through critical evaluation of teams observed

🔥 Recommends **not** to use learner-completed tools or assessments of teams at this stage



MEDICAL TEACHER, 2017  
VOL. 39, NO. 4, 347-359  
<http://dx.doi.org/10.1080/0142159X.2017.1270441>

**MEDICAL TEACHER** Taylor & Francis  
Taylor & Francis Group

**International consensus statement on the assessment of interprofessional learning outcomes**

Gary D. Rogers<sup>a</sup>, Jill E. Thistlethwaite<sup>b</sup>, Elizabeth S. Anderson<sup>c</sup>, Madeleine Abrandt Dahlgren<sup>d</sup>, Ruby E. Grymonpre<sup>e</sup>, Monica Moran<sup>f</sup> and Dujeepa D. Samarasekera<sup>g</sup>

<sup>a</sup>School of Medicine and Health Institute for the Development of Education and Scholarship (Health IDEAS), Griffith University, Gold Coast, Australia; <sup>b</sup>School of Communication, University of Technology, Sydney, Australia; <sup>c</sup>Department of Medical Education, The University of Leicester, Leicester, UK; <sup>d</sup>Department of Medical and Health Sciences, Linköping University, Linköping, Sweden; <sup>e</sup>College of Pharmacy, University of Manitoba, Manitoba, Canada; <sup>f</sup>School of Human Health and Social Sciences, Central Queensland University, Rockhampton, Australia; <sup>g</sup>Centre for Medical Education (CenMED), National University of Singapore, Singapore, Singapore

**ABSTRACT**  
Regulatory frameworks around the world mandate that health and social care professional education programs graduate practitioners who have the competence and capability to practice effectively in interprofessional collaborative teams. Academic institutions are responding by offering interprofessional education (IPE); however, there is as yet no consensus regarding optimal strategies for the assessment of interprofessional learning (IPL). The Program Committee for the 17th Ottawa Conference in Perth, Australia in March, 2016, invited IPE champions to debate and discuss the current status of the assessment of IPL. A draft statement from this workshop was further discussed at the global All Together Better Health VIII conference in Oxford, UK in September, 2016. The outcomes of these deliberations and a final round of electronic consult-



2. Rogers, G.D., Thistlethwaite, J.E., Anderson, E.S., Abrandt Dahlgren, M., Grymonpre, R.E., Moran, M, Samarasekera, D.D.(2017). International consensus statement on the assessment of interprofessional learning outcomes. *Med Teach*, 39(4), 347-359.

## Griffith Interprofessional Pedagogy: Phase I

---

🔥 Aimed at students gaining foundational  
'health professions literacy'

*= an understanding of the history, theoretical underpinnings,  
philosophy, roles and contributions of the major health  
professions, including participants' own<sup>14</sup>*

🔥 Need not be learnt interprofessionally – though ideally  
would be

🔥 Can be learnt through video/online presentations,  
augmented by large or small group interactive discussion



14. Teodorczuk, .A, Khoo, T.K., Morrissey, S., & Rogers, G.D. (2016). Developing interprofessional education: putting theory into practice. *The Clinical Teacher* 13:7-12.

## Learning for health professions literacy

- 🔥 *It takes a team* — phase I activity with video-based online learning package
- 🔥 Narrative film about a man with many health risk factors who has a car accident and starts to encounter health professionals for the first time
- 🔥 Interview with each practitioner about their profession
- 🔥 High production values to engage Gen Y learners
- 🔥 Assessed through pre- and post- scenario-based MCQs
- 🔥 Prospective study has confirmed enhanced health professions literacy immediately after utilisation<sup>15</sup>



15. Morrissey S, Rogers GD, Chan PC, Kerkow EJ, Desbrow B. Establishing 'health professions literacy': Evaluation of a video-based learning package in a three-phase curriculum. Oral presentation (p168) at the All Together Better Health VII conference, Pittsburg, USA, June, 2014.

## Griffith Interprofessional Pedagogy: Phase II

- 🔥 **Simulated** interprofessional practice experience with learning supported by critical reflection (fully ‘CAIPE-compliant’)
- 🔥 Can be as simple as a shared paper PBL case ...
- 🔥 ... or more sophisticated, like:
  - shared communication skills workshops with human patient simulation,
  - mental health workshops utilising video trigger materials,<sup>16</sup>
  - the CLEIMS program.<sup>17</sup>



16. Morrissey, S., Davidson, G., McAllister, M., McAuliffe, D., McConnell, H., Reddy, P., Henry, J., Judge, K. (2011). *Preparing Mental Health Practitioners for Multidisciplinary Mental Health Placements: A Distributed Leadership Approach to Cross-Disciplinary Education and Training*, Office of Learning & Teaching. Retrieved from <http://www.olt.gov.au/>
17. Rogers, G.D., McConnell, H.W., Jones de Rooy, N., Ellem, F., Lombard, M. A randomised controlled trial of extended immersion in multi-method continuing simulation to prepare senior medical students for practice as junior doctors, *BMC Medical Education* 14, 90. Retrieved from: <http://www.biomedcentral.com/1472-6920/14/90>

## CLEIMS

---

- 🔥 Senior health professional students have extensive clinical exposure but are seldom called upon to make their own clinical decisions and experience their consequences
- 🔥 **C**linical **L**earning through **E**xtended **I**mmersion in **M**ulti-method **S**imulation
- 🔥 ‘Like a PBL case on steroids’
- 🔥 Learners experience an accurate extended simulation of a realistic period from their likely future professional lives ...
- 🔥 ... interspersed with related workshops and seminars
- 🔥 Aims to **contextualise** the learning prior to each seminar or workshop — ‘**deep end therapy**’



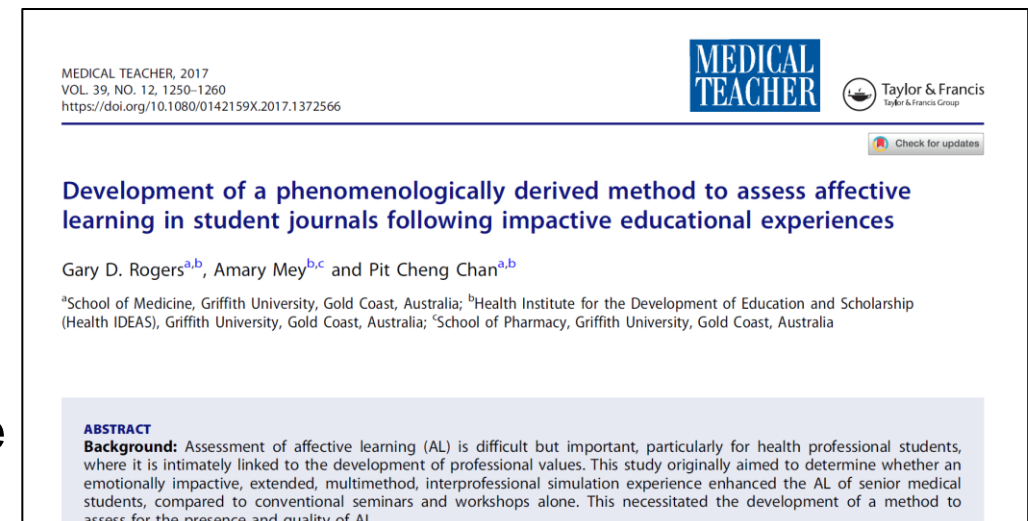
## CLEIMS

- 🔥 Medical students work in ‘clinical teams’ of up to five – 1 ‘registrar’ and up to 4 ‘interns’, randomly selected
- 🔥 Manage one patient over the week in Year 3 – eight patients with interlocking stories in Year 4
- 🔥 Real time plus ‘time lapses’
- 🔥 Live simulated patients and family members
- 🔥 Students from other professions work with SPs in parallel at times and then join ward rounds, team meetings and discharge planning as they would in a real hospital
- 🔥 Technological simulation for emergencies
- 🔥 Simulated documentation, investigation and treatment



## CLEIMS

- 🔥 Telephonic consultation between medical and pharmacy students
- 🔥 Simulated 'on call' overnight for medical students
- 🔥 'Break character' discussions with facilitators and other professions about their approach and feedback from SPs
- 🔥 Narrative contrivances and guided reflection to enhance achievement of learning outcomes
- 🔥 Learners become aware that they lack the knowledge, understanding or skills they will need → 'curiosity gap' (Loewenstein, 1994)
- 🔥 Assessed through direct observation and facilitator rating of interprofessional (simulated) practice ...
- 🔥 ... and phenomenologically-derived technique to verify presence and quality of affective learning in learner journals<sup>18</sup>



MEDICAL TEACHER, 2017  
VOL. 39, NO. 12, 1250-1260  
<https://doi.org/10.1080/0142159X.2017.1372566>

**MEDICAL TEACHER** Taylor & Francis  
Taylor & Francis Group

Check for updates

**Development of a phenomenologically derived method to assess affective learning in student journals following impactful educational experiences**

Gary D. Rogers<sup>a,b</sup>, Amary Mey<sup>b,c</sup> and Pit Cheng Chan<sup>a,b</sup>

<sup>a</sup>School of Medicine, Griffith University, Gold Coast, Australia; <sup>b</sup>Health Institute for the Development of Education and Scholarship (Health IDEAS), Griffith University, Gold Coast, Australia; <sup>c</sup>School of Pharmacy, Griffith University, Gold Coast, Australia

**ABSTRACT**  
**Background:** Assessment of affective learning (AL) is difficult but important, particularly for health professional students, where it is intimately linked to the development of professional values. This study originally aimed to determine whether an emotionally impactful, extended, multimethod, interprofessional simulation experience enhanced the AL of senior medical students, compared to conventional seminars and workshops alone. This necessitated the development of a method to assess for the presence and quality of AL.

17. Rogers, G.D., McConnell, H.W., Jones de Rooy, N., Ellem, F., & Lombard, M. A randomised controlled trial of extended immersion in multi-method continuing simulation to prepare senior medical students for practice as junior doctors, *BMC Medical Education* 14, 90. Retrieved from: <http://www.biomedcentral.com/1472-6920/14/90>
18. Rogers, G.D., Mey, A., & Chan, P.C. Development of a phenomenologically-derived method to assess affective learning in student journal following impactful educational experiences. *Medical Teacher* 39(12), 1250-1260.





## Griffith Interprofessional Pedagogy: Phase III

- 🔥 Real patient or client care IPCP experience
- 🔥 Originally planned to implement interprofessional **student service teams** (per Linköping model<sup>19</sup>) ...
- 🔥 ... but very difficult to achieve **at scale** (for all students)
- 🔥 Now utilising an individually-completed **critical assessment activity** based on students' conventional clinical placements with interprofessional **practitioner teams**<sup>20</sup>



19. Wilhelmsson, M., Pelling, S., Ludvigsson, J., Hammar, M., Dahlgren, L.O., & Faresjo, T. (2009) Twenty years experiences of interprofessional education in Linköping – ground-breaking and sustainable. *Journal of Interprofessional Care*. 23(2),121-33.
20. Rogers, G.D., Parker-Tomlin, M., Clanchy, K., Townshend, J., & Chan, P.C. Utilising a post-placement critical assessment task to consolidate interprofessional learning, in S. Billett, J. Newton, G.D. Rogers, C. Noble (eds). *Augmenting Health and Social Care Students' Clinical Learning Experiences*, Springer, Berlin; (in press).

## Griffith Pedagogy: Phase III

---

- 🔥 Learner placed in a *critical* posture ...
- 🔥 ... asked to describe (1000 – 1500 words) an interprofessional team that they have observed during placement:
  - Give examples of **effective** IPCP observed and why
  - Give examples of **less effective** IPCP observed and why
  - Make suggestions about how the team might improve its IPCP
- 🔥 Aims to *consolidate* learning from prior elements in the programmatic approach
- 🔥 Trialled in 2016 with 149 medical, 61 pharmacy and 21 exercise physiology students



## Griffith Pedagogy: Phase III

---

- 🔥 Almost all students demonstrated high level achievement of IPL outcomes in their written assignments, verifying learning across the program
- 🔥 Multiple clear examples of *consolidation* of IPL through completion of the activity, eg:

*As a junior medical student, I remember thinking that interprofessional learning seemed intuitive and unnecessary to focus on as a teaching point. I was under the impression that all disciplines understood and respected one another, and everyone knew their place in the hospital system. However, after experiencing both ends of the interprofessional collaboration 'spectrum', I know now that the difference between good and poor communication across disciplines can often also be the difference between good and poor patient outcomes. I feel as though being a medical student offers a very unique opportunity to observe interprofessional teams from a third-person perspective. Many interactions I have witnessed in the hospital have been ones where I was able to sit back and examine the dialogue between different roles, which has helped to develop a gauge of what constitutes good interprofessional collaboration, and where it can be improved.*

## Conclusions

---

- 🔥 Preparing health professional students appropriately for collaborative IPCP is a critical, but difficult, component of health professional education for a changing world
- 🔥 A *programmatic* approach to IPE can optimise learning and may not require that **all** activities be fully 'CAIPE-compliant'
- 🔥 Innovative simulation methodologies balance high effectiveness, through the use of specific strategies, with feasibility, for the primary achievement of interprofessional learning outcomes
- 🔥 Learning from expensive and difficult-to-arrange fully 'CAIPE-compliant' activities may be optimised by simpler activities earlier and later in health professional education programs
- 🔥 Learning in each phase needs to be summatively assessed through the application of appropriate methods



# Health IDEAS

Griffith Health Institute for the Development  
of Education and Scholarship



**SUSTAINABILITY**  
for Health Professions Education  
Hotel Grand Chancellor, Hobart  
1 - 4 July, 2018  
[www.anzahpeconference.com.au](http://www.anzahpeconference.com.au)

ANZAHPE  
Australian & New Zealand  
Association for Health  
Professional Educators

Hobart waterfront  
copyright Stuart Gibson

**ANZAHPE 2018**



**Basel, Switzerland**  
**25-29 August 2018**

**AMEE2018**



**Collaborative Practice and Interprofessional Education**  
Transforming the Landscape of Healthcare - Ohomairangi te Hauora Manaaki

[www.atbhix.co.nz](http://www.atbhix.co.nz)   [events@aut.ac.nz](mailto:events@aut.ac.nz)   +64 9 921 9676

**ALL TOGETHER BETTER HEALTH IX**  
3 - 6 SEPTEMBER 2018, AUCKLAND

[g.rogers@griffith.edu.au](mailto:g.rogers@griffith.edu.au)