RIPE - Interprofessional Education and Collaboration Utilising a Simulation Training and Resource Package

South Eastern Sydney Local Health District – Prince of Wales Hospital (POWH)
Prince of Wales Clinical School, UNSW Medicine
Faculty of Pharmacy University of Sydney
RIPE - Interprofessional Education and Collaboration Utilising a Simulation Training and Resource Package

• The RIPE program consists of a standalone 3 hour faculty-led simulation exercise for undergraduate health professionals on clinical placement.

• RIPE utilises the six phases of the simulation cycle to enhance the learning experience and provide an authentic environment with which to teach intercollaborative practice. This primary focus of interprofessional collaboration makes it a unique experience for students on placement at POWH.

• The RIPE program has been running since 2011 at POWH, but sustainability has always been of concern as it is a resource intensive activity.
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Students split into two groups (1 from each discipline – A and B)

Phase ONE

Group A take part, Group B observe (30 minutes)

Debrief

Short debriefing (10 minutes)

Phase TWO

Group B take part, Group A observe (30 minutes)

• 3 Simulated patients – played by RIPE faculty
• Students expected to identify issues and collaborate together to find a solution to these or refer to someone who can help
RIPE - Interprofessional Education and Collaboration Utilising a Simulation Training and Resource Package
Primary Objectives

Objective 1
To develop a comprehensive training and resource package that may be utilised to expand the pool of health care professionals able to facilitate interprofessional education and collaboration via use of ward simulation both within SESLHD and potentially across other NSW Local Health Districts.

Objective 2
To utilise the expanded group of RIPE facilitators from a wide range of disciplines to enable simulation sessions to be run more frequently and be more accessible to a wider and more varied cohort of students, thus increasing student capacity with minimal impact at a departmental level.

Objective 3
Development of an interprofessional learning culture within the Local Health District whereby clinical teams and the various clinical disciplines can learn from each other and practice skills development together.
Primary Outcomes

Outcome 1
Over 200 students have participated in the RIPE program since commencement. Results demonstrated by student evaluations have shown an increased competence and experience of health undergraduates in the areas of patient centred communication and interprofessional team collaboration.

Outcome 2
A comprehensive resource package has been compiled allowing future training of faculty in the RIPE program within POWH and across other LHDs, including a repository of workable simulation scenarios that may be utilised for medical, nursing and a wide variety of allied health students.

Outcome 3
With 29 new RIPE facilitators being trained from a variety of health disciplines, the RIPE faculty has greatly expanded its capacity and as such will be able to run the RIPE Simulation sessions more frequently to an expanded cohort of students.
Conclusions and Lessons Learned

The number of faculty trained in facilitating the RIPE program has been extended both within POWH and across other LHDs in NSW Health.

A wide variety of allied health professionals trained means that there are increased opportunities for undergraduate health professionals from various disciplines to participate in the RIPE program.

Both the RIPE student simulation exercise and the Facilitator training and resource package have continued to be developed over the course of the project based on feedback received from participants.
Conclusions and Lessons Learned

One of the major challenges associated with this project has been availability of personnel to facilitate the RIPE simulation sessions and workshops. Each RIPE simulation session in this project requires a minimum of 8 faculty members in attendance to perform the various roles and co-ordinate the sessions. Advanced planning is essential to ensure availability of clinicians and students.

The amount of information covered during the facilitator workshops was difficult to fit into the 4 hours allocated. In the future workshops should be held as a full day program, or potentially over multiple sessions in order to maximise learning outcomes.

Another limitation for the RIPE simulation sessions and facilitator workshops was the availability of the Glenn McEnallay Simulation Centre at POWH – future workshops need to be worked into a permanent timetable.

One option to reduce the faculty burden of the simulation exercises is to utilise some of the hospital volunteers to act as our “patients” following a suitable training program.
Implementation and Sustaining

There is now a culture of interprofessional learning at the Prince of Wales Hospital with the RIPE Simulation Sessions recognised as a nexus for interprofessional education on the Randwick Campus.

The RIPE program has continued to run following the completion of the Facilitator training program, and our new faculty members have been involved. The repository of new patient scenarios have been accessed for simulation exercises.

Further student follow up in 12 months will aim to identify if the RIPE program has lead to implementation of these skills into workplace practice, improving quality patient care and staff safety practices.
Implementation and Sustaining

It is hoped that by training educators and clinical supervisors from other hospitals within SESLHD and also from other LHDs across NSW that the networking between educators and different professional disciplines will help to facilitate the development of a similar program in other hospitals.

The training package could be easily transferable to other sites utilising a train the trainer approach and access to online resources.

The RIPE Simulation sessions are utilised to provide interprofessional education with minimal impact on the ward environment and can potentially be offered as a standalone clinical placement in the future.
RIPE Student Responses

What can you take from the RIPE experience to incorporate into your own work setting???

“Being aware of the different professionals and what they can offer.”

“I have learned the importance of maintaining open channels of communication with other health professionals.”

“Take into consideration where allied health and other health professionals fit in the work environment and try and better integrate my own skill set.”

“Communicating with other team members more often. More understanding of role of other team members.”

“Talking more to other disciplines rather than just reading the notes.”
What is IP Education and Collaboration?

Arvin Damodaran, BScMBBS(Hon) MMedEd FRACP
Director, Clinical Teaching Unit, POWCS, UNSW
Rheumatologist, Prince of Wales Hospital, Randwick
arvin@unsw.edu.au
plan

• terminology
• IP history and context
• evidence
• conceptual frameworks
• sustainability
• RIPE model
the ‘terminology quagmire’

• the shared part
  – Trans – where boundaries *overlap*
  – Multi – experienced *with*
  – Inter – *with* and *from*
  – Also shared, collaborative, team etc.

• disciplinary (*✗*) or professional (*✓*)

• education or learning and practice or collaboration
definitions

• **Interprofessional education (IPE):** “When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (CAIPE, 2002)

• **Interprofessional collaborative practice (IPC):** “When multiple health workers from different professional backgrounds work together with patients, families, carers, and communities to deliver the highest quality of care” (WHO, 2010)

• **Interprofessional team-based care:** Care delivered by work groups in health care, recognized as having a collective identity and shared responsibility for a patient or group of patients, e.g., rapid response team, palliative care team, primary care team, operating room team
IPE context

- IPC works
  - communication/teamwork failures cause sentinel events in healthcare (and other complex, high risk endeavours like aviation)
  - better patient outcomes in collaborative care (e.g. stroke, trauma, aged care, primary care, community mental health etc)
  - politically seen as part of the solution to global shortage of healthcare workers
- IPE → IPC (right?)
  - interest gradually building since the 1990s
  - definitions established in early 2000s
  - Internationally: policy maker interest, new IP journals, societies, remodelled curricula
  - Locally: resources from HWA, new focus from HETI
Figure 1. Health and education systems

Local context

Health & education systems

Improved health outcomes

Strengthened health system

Optimal health services

Collaborative practice

Collaborative practice-ready

Present & future health workforce

Interprofessional education

Local health needs

Fragmented health system

Framework for Action on Interprofessional Education and Collaborative Practice

WHO, 2010
IPE learning objectives

• Teamwork:
  – be able to be both team leader and team member
  – know the barriers to teamwork

• Roles and responsibilities:
  – understand your own roles, responsibilities and expertise, and those of other health workers

• Communication:
  – express your opinions competently to colleagues
  – listen to team members

• Learning and critical reflection:
  – reflect critically on one’s own relationship within a team
  – transfer interprofessional learning to the work setting

• Relationship with, and recognizing the needs of, the patient:
  – work collaboratively in the best interests of the patient
  – engage with patients, their families, carers and communities as partners in care management

• Ethical practice:
  – understand the stereotypical views of other health workers held by self and others
  – Acknowledge that each health workers views are equally valid and important

  • adapted from WHO, 2010
evidence for IPE

• evidence for positive changes in attitudes
  – generally well received
  – enables knowledge and skills necessary for collaborative working
  – positive modification of reciprocal attitudes

• little evidence as yet for patient outcomes

• uncertainty as to whether benefits are preserved

• adapted from WHO, 2010
A cross-sectional survey examining the extent to which interprofessional education is used to teach nursing, pharmacy and medical students in Australian and New Zealand Universities

Samuel Lapkin¹, Tracy Levett-Jones¹ and Conor Gilligan²

¹School of Nursing and Midwifery, ²School of Medicine and Public Health, The University of Newcastle, Callaghan, Australia

A web-based cross-sectional survey was used to gather information from Australian and New Zealand universities offering nursing, pharmacy or medical programs. Responses were received from 31 of the 43 (72%) target universities. Eighty percent of the participants indicated that they currently offer IPE experiences, but only 24% of these experiences met the accepted definition of IPE. Of the participants who offer IPE, 71% reported difficulties with the integration of IPE into their programs.
IPE conceptual frameworks

• Contact hypothesis/Intergroup contact theory

• Adult learning theory

• Classification and framing concepts
contact hypothesis

- Attributed to Gordon W. Allport (1954), the notion that intergroup contact, under the right conditions, can reduce prejudice.
- WWII survey of US troops,
  - 62% of soldiers in White only units disliked the idea of serving in semi-integrated units.
  - White soldiers currently in semi-integrated units reported 7% dissatisfaction.
- Requires 4 criteria to be present
  1. Equal Status
  2. Common Goals
  3. Intergroup Cooperation
  4. Support of authorities, law or customs

adult learning theory

• principles
  1. Adults are internally motivated and self-directed
  2. Adults bring life experiences and knowledge to learning experiences
  3. Adults are goal oriented
  4. Adults are relevancy oriented
  5. Adults are practical
  6. Adult learners like to be respected

• Use authentic professional dialogue/activities (e.g. collaborative problem solving in sim environment)
• Create a safe environment where participant knowledge, values and attitudes are expressed, discussed and integrated with new learning and experience (e.g. brief/active participation in sim/debrief)
power and control

• IPE introduces a pedagogy with its own classification and framing that seeks, indeed has as one of its purposes, to weaken the classification and framing of the professions’ unique knowledge.

• By its (undermining) influence on the constructs of traditional knowledge, IPE attempts to achieve its dual aims of sensitising students to the role of other health care disciplines and teaching the delivery of interprofessional care (Schmitt, 1994).

• The new terrain of IPE knowledge will result in ‘new power relations’ that will compete for ‘resources and influence’ (Bernstein, 1996, p. 24).

• Wilmot (1995, p. 258) reminds us that ‘conflict can be creative in interdisciplinary practice’ and is ‘probably inevitable’.
  • Hammick, 1998, J Interprof Care
sustainability

- Time and money
- Endorsement by professional groups
- Training program accreditation (note AMC)
- Joint planning between hospitals and universities
- Development of evidence base
the RIPE program

• pros
  – close alignment to conceptual frameworks
  – ~200 students since Nov 2011
  – surveys indicate well received, positive impact on inter-role understanding and attitudes
  – funded for a second time in expansion phase

• cons
  – very faculty heavy
  – challenge of large student numbers

• lots of good will and positive spin offs for IP faculty
some IPE resources

- Australian and New Zealand Association for Health Professional Educators (ANZAHPE)
  - Initially mostly medical educators – ANZAME, formed in 1972
- Australasian Interprofessional Practice and Education Network (AIPPEN)
  - Formed 2006, website 2009
- Centre for the Advancement of Interprofessional Education
  - Formed 1987, based in Ireland
- Also Canadian and European equivalents
- Journals
  - Journal of Interprofessional Care
  - Journal of Research in Interprofessional Practice and Education (from 2009)
The Secret To Setting Up A Successful RIPE Scenario

Joanne Rimington
Jessica van Schreven
RIPE Training Program
Learning objectives

1. Examine the processes required to design a successful scenario
2. Identify the processes required to deliver a successful scenario
3. Demonstrate planning and writing of a scenario
4. Identify challenges in delivering scenarios
How to write a scenario

• Planning
• Fidelity
• Use of scenario templates
• Moulage
• Props
Simulation phases

- Preparation
  - Briefing
  - Simulation activity
  - Debriefing/feedback
- Evaluation
- Reflection

[Logo: Health NSW Glenn McEnallay Simulation and Learning Centre]
How do you achieve “reality” in simulations?

• Equipment reality
• Environmental reality
• Psychological reality
  – Degree to which the trainee perceives the simulation to be a believable surrogate for real patient encounter
  – Allows learner to make conceptual sense of the scenario
Fidelity

FIGURE 3
The interplay of the components of ‘Perception Fidelity’

- Scenario Design
- Simulation Centre Design
- Students’ Perception of Simulation etc.

- Temporal Fidelity
- Action Fidelity
- Environmental Fidelity
- Individual Factors

- Psychological Fidelity

- Equipment Fidelity

- Perception Fidelity

**KEY:**
Influencing Factors
Direct Relationship
“Reality” in simulations

- Physical environment
  - in situ, photo backdrops
- Sounds
- Smells
- Moulage
  - Make up, actors
- Equipment
- Drugs, fluids etc
- Actors, confederates etc
  - Avoid funny names etc
What do you need to create the RIPE ward environment?

- **Props**
  - Medical notes
  - Medication charts
  - Obs charts
  - Clothing and patient belongings
  - Medications
  - Equipment e.g. stethoscope, BP, IV poles
  - Handover sheet

- **Actors**
  - Patient
  - Carer and family

- **Other Confederates**
  - NUM
  - Other staff
Personnel

• SIMULATED PATIENT

• CONFEDERATES
  An individual other than the patient who is scripted in a simulation to provide realism, additional challenges, or additional information for the learner (e.g. paramedic, family member, NUM)
Previous RIPE Sessions
Previous RIPE Sessions
Previous RIPE Sessions
Moulage

- Moulage may be as simple as applying pre-made rubber or latex "wounds" to a healthy "patient's" limbs, chest, head, etc., or as complex as using complicated makeup and theatre techniques to provide elements of realism (such as blood, vomitus, open fractures, etc.) to the training simulation.
Moulage
Scenario Templates

• Aids scenario preparation and set up
• A road map for the simulation
• Helps to focus scenario planning – look at the big picture but helps to remember all the small details
• Gives a timeframe for simulation
• RIPE has two phases - extra props, change notes etc
Scenario templates

Neurology Simulation - BRITTANY MCKAY

Learning Objectives:

- Demonstrate a broader understanding of the roles of health care professionals in delivering Interprofessional team based care
- Explore the features of Interprofessional collaboration
- Identify the barriers to effective interprofessional communication and teamwork
- Consider how Interprofessional collaboration can be improved in the workplace

Personnel: Patient, Carer
Faculty in ward simulation: NUM, Observer (Debrief) x 2, Other observers if appropriate
Faculty in Briefing Room: Facilitator for briefing

Participants: 10 students (2 from five of following disciplines – medicine, nursing, social work, pharmacy, physiotherapy or OT)

Props and Resources needed:
- Bedside Locker
- Chair for Sister
- MMP
- Medication Charts
- Medical notes in folder (Phase 1 and Phase 2 separated)
- Observation charts
- Patients own medications
- Black and red makeup for wound on heel
- Bandage for wound on heel
- Can of V
Where could it all go wrong??

Be prepared – have a contingency plan

Plan A

Plan B
Now its your turn

- **Group A1** - Jo Rimington
  - Simulation session Tuesday 16\textsuperscript{th} April
    - 8.30 – 12.30pm

- **Group A2** – Jess van Schreven
  - Simulation Session Tuesday 16\textsuperscript{th} April
    - 1pm – 5pm

- **Group C1** – Lis Long
  - Simulation session Tuesday 14\textsuperscript{th} May
    - 8.30 – 12.30pm
What happens on the simulation day?

• Must delegate the roles people will play and provide them with the resources they need
• Preparation is critical – set up must be finished well before students walk through the door! Remember the small details...
• Make sure your equipment works!!
• Have a contingency plan if (or when) something goes wrong!
BRIEFING – Setting yourselves up for success

Jenny Broe & Jessica van Schreven
RIPE Group
March 2013
Outline of Presentation

• Why is briefing a simulation so important?

• What is involved in briefing?
  – Outlining the Learning Objectives
  – Confidentiality Agreement
  – Fiction Contract
  – Introduction to Simulation (orientation to environment)

• Tips for a good simulation experience for all involved

• Resources available
Learning Objectives

• By the end of the session you will be able to:
  – State why the briefing process is important for simulation
  – Identify the steps involved in the briefing process
  – Explain how the ‘fiction contract” is essential for a successful simulation session
A technique to replace or amplify real experiences with guided experiences, often immersive in nature, that evoke or replicate aspects of the real world in an interactive fashion'.

(Gaba 2004)
Importance of Briefing

• What happens without effective briefing......

• Learning objective

• Confidentiality

• Practice / demonstration
Importance of Briefing

• What should briefing involve?
  – Outlining the Learning Objectives
  – Confidentiality Agreement
  – Fiction Contract
  – Introduction to Simulation (orientation to environment)
Learning Objectives

- Need to be explained to participants during the briefing process
- Keep to 3 (max 4) for the entire simulation experience
- Brief, measurable
- Good verbs include: Demonstrate, Explain, Define, Formulate
- Form the background of the debrief as this is where you will cover whether the objectives have been reached
Confidentiality Agreements

• Goal is to create a safe learning environment where it is okay to make mistakes
  – What happens here stays here
  – We will pick apart what was done in great detail, but once the debrief is over, it is over
  – We are playing roles too, and may not do what we would in ‘real life’
  – Please do not disclose details of scenarios - works better if participants do not anticipate what is going to happen
Fiction Contract

• The fiction contract
  – Willingness to suspend disbelief to ensure that there is an environment that becomes realistic for the purpose of teaching and learning
  
  – Willingness to engage in the simulation activity
FIGURE 3
The interplay of the components of ‘Perception Fidelity’

- Scenario Design
- Simulation Centre Design
- Students’ Perception of Simulation etc.
- Temporal Fidelity
- Action Fidelity
- Environmental Fidelity
- Individual Factors
- Psychological Fidelity
- Equipment Fidelity
- Perception Fidelity

KEY:
Influencing Factors
Direct Relationship

Simulation in Healthcare Education: Building a Simulation Programme: A Practical Guide
Kamran Khan
Serena Tolhurst-Cleaver
Sara White
William Simpson
Orientate to Environment

• Walk through / orientation
• What resources do they have available
  – Collaborators (NUM for questions)
  – Props
    • Medication charts
    • Nurses station
    • Bedside set up (what equipment actually works, where might “answers” come from)
  – Time constraints
• Use your templates / checklist
RIPE Briefing

• How to brief RIPE:
  – Why Simulation?
  – Fiction Contract
  – Intro to Inter-professional Education
  – Learning outcomes
  – Icebreaker
  – Outline of session
How can they work together if they don’t learn together?
Why Simulation?

- A safe learning environment
  - Not looking at clinical skills
  - Non judgemental
  - Consequences of mistakes are low
  - What happens in sim stays in sim!!!
Fiction Contract

• The fiction contract
  – Willingness to suspend disbelief to ensure that there is an environment that becomes realistic for the purpose of teaching and learning
  – Willingness to engage in the simulation activity
Interprofessional what?

- **Interprofessional education (IPE):** “When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010)

- **Interprofessional collaborative practice (IPC):** “When multiple health workers from different professional backgrounds work together with patients, families, carers [sic], and communities to deliver the highest quality of care” (WHO, 2010)

- **Interprofessional team-based care:** Care delivered by work groups in health care, recognized as having a collective identity and shared responsibility for a patient or group of patients, e.g., rapid response team, palliative care team, primary care team, operating room team
RIPE Learning Objectives

• Demonstrate a broader understanding of the roles of health care professionals in delivering interprofessional team based care

• Explore the features of interprofessional collaboration

• Identify potential barriers to effective interprofessional communication and teamwork

• Consider how interprofessional collaboration can be improved in the workplace
What happens now?

• Split into two groups A and B
• A – Simulation phase 1 followed by short debriefing (B act as observers)
• B – Simulation phase 2 (4 days later) (Group A acts as observers) followed by debriefing
• Fill out post evaluation simulation forms!!

• Walk through to the ward for orientation...
Orientation Checklist

- Enter ward (curtains open, patients in place)
- Introduce patients (non-interactive)
- Introduce NUM
- Show charts and progress notes available
- Explain can touch patients and what equipment available e.g. BP monitors and that NUM will provide results when required
- Advise to talk loudly during simulation
- Explain that observers can walk up to line on floor
Any Questions?
Resources

• *Simulation in Healthcare Education. Building a Simulation Programme: A Practical Guide.* Khan, K et al.

• *Simulation in clinical teaching and learning.* Jennifer M Weller et al. MJA 196 (9) · 21 May 2012

• *Understanding Medical Education: Evidence, Theory and Practice.* Edited by Tim Swanwick © 2010 The Association for the Study of Medical Education. ISBN: 978-1-405-19680-2


Debriefing questions for RIPE Simulation Exercise

The following steps outline the debriefing process for the RIPE interprofessional simulation exercise:

1. Welcome students to the debriefing session & introduce yourself.

2. Outline the process, “we will spend time finding out from you how you found the exercise, what you liked, what you would change if you did it again, lessons you walk away with for your own clinical practice. After you have shared your thoughts and observations we will ask for any feedback from the RIPE team.”

3. Remind students of the learning objectives of the exercise (put up slide 5 of Student briefing):

   At the end of this session, you should be able to:

   ● Have a deeper understanding of your role and, the roles of the other health professionals in delivering interprofessional team based care.
   ● Have explored and reflected on some of the features of good teamwork (e.g. patient centred team motivation, communicating effectively with colleagues, role clarity and leadership, interprofessional learning) as well as barriers to effective teamwork as applied to patient care.
   ● Consider how interprofessional collaboration can be utilised and improved in your work context to improve patient care outcomes.

   Suggested debriefing questions (remember these are a guide you need to also listen to the comments the students make & respond accordingly):

   ● How did you find the exercise?
   ● What worked well?
   ● What could be improved? Or what would you do differently if you had your time again?
   ● How well do you think you worked together as a team? Strengths? Improvements?
   ● How did the team work with the patient? How do you think the patient experienced the team?
• What did you learn about the other roles in the team?
• How did “leadership” work in this context?
• Overall lessons learnt?
• What did you learn about another profession that you didn’t know before?
• What can you take from this exercise back to your clinical setting/placement?

**NB: Give students time to think about the questions you pose? Avoid rushing in to fill the silence. It’s important they do the work to process the learnings from the exercise.**

4. After the students’ debrief, the facilitator(s) can ask the observers (RIPE faculty and the other students) and “patients” to join the group (move their chairs into the half circle) & ask them whether they wanted to give the students any feedback (again it needs to be related to the learning outcomes) or share any observations.

5. At the conclusion of the debrief, ask students to complete the questionnaire/evaluation forms and invite them to have refreshments.