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Original Research

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Summary

The literature emphasises the vital importance of interprofessional communication during clinical handover as being paramount to patient safety. At Charles Sturt University, Bathurst, New South Wales, we explored how simulation can be employed in an interprofessional education exercise exposing paramedic and nursing students to a high-pressure emergency department wherein they must engage in patient handover. Effective communication, especially during clinical handover, is of paramount importance for patient safety. Reports from our students confirm that even this simulated experience can be daunting. It is possible for academics to work across disciplines to prepare students to meet these pressures, and interprofessional education through simulation is a useful method.

Keywords

interdisciplinary communication; paramedics; emergency medical services

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Introduction

Compounded by the growing demands and stressors in today's work environment, interprofessional communication between paramedics and emergency nurses can, at times, be difficult (1). Despite these challenges, the literature emphasises the vital importance of clinical handover as being paramount to patient safety (1,2). Clinical education practices between healthcare disciplines that begin in the tertiary education setting can be an effective tool to begin to address this issue (3,4). Research on contemporary education strategies describes the value of interprofessional education, postulating that those who train together will ultimately work better together (5). At Charles Sturt University (CSU) in Bathurst, New South Wales (NSW) we explored how simulation can be employed in an interprofessional education (IPE) exercise exposing paramedic and nursing students to a high-pressure emergency department

(ED) where effective communication skills are imperative (1,6,7). This educational approach – new to both our students and academics – prompted a reflective journey among the authors, leading us to articulate here what we hope will be seen as a valuable learning experience for others seeking to facilitate interdisciplinary communication.

Background

Endorsed by the World Health Organization (WHO) in 1988 in response to the increasingly complex nature of patient care and prevalence of medical error (8), IPE has become more commonplace in tertiary healthcare education today (5,8-10). Interprofessional education is defined by the Centre for the Advancement of Interprofessional Education as 'those occasions when members (or students) of two or more professions learn with, from and about one another to improve

collaboration and the quality of care' (11). Typically, IPE can either be offered as a standalone exercise or be embedded as part of a larger program (8). Some of the key principles of IPE are to ensure it is patient focused, that it promotes equitable learning between disciplines, and that it encourages disciplines to learn from each other as they search for common ground (11).

To facilitate high quality IPE scenarios, simulation has become a popular tool in the tertiary education setting (4,8,12,13). Defined by Gaba (14) as 'a technique – not a technology – to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner', simulation offers students a proxy to real life encounters while helping to bridge the theory to practice gap they encounter upon graduation (15,16). As a well-accepted pedagogical approach, simulation provides a safe environment to teach students a range of procedure based, leadership and interpersonal skills (12,17,18). What simulation offers students is the opportunity to engage in immersive and experiential learning as they experience real life situations while beginning to examine how and why they act as they do (19,20). In the context of reducing medical error, simulation education has been widely adopted as one strategy towards improving patient safety (16,18,21,22).

Communication between practitioners during clinical handover is a key area that has been identified as a source of medical error (1,6,23) where it is the patient who pays the price when communication breaks down (2,6). Collaboration and effective communication between disciplines positively impacts patient outcomes (24), a key point as paramedics interact with emergency nurses as part of their daily role (1). This exposure begins the first time they handover a patient to the ED and continues throughout their career. Hospital and emergency services are busy places where resources are strained, workload is growing and ambulance offload delay has become a regular occurrence (7,25). Despite best efforts, these factors can work against paramedics and nurses by compromising the communication process in the ED (1).

Given the importance of paramedic to nurse interaction during times such as clinical handover (1,6,23,24), it is critical that practitioners develop strong communication skills and interprofessional relationships early, ideally during undergraduate education (26). Where do these good interprofessional communication skills originate and how are they fostered? There is some empirical evidence to suggest that communication among disciplines can be developed and improved through shared IPE, especially in simulated emergency resuscitation settings wherein patient safety is paramount (1,4,10,26-29). Kenaszchuk et al (8) explain how IPE has evolved from a strategy primarily used to reduce interdisciplinary tensions to one that now allows disciplines to unite in a joint goal of improving patient safety. Despite its demonstrated value, documented IPE experiences

exploring patient safety and communication within Australia have been limited to date, with timetabling and resources identified by educators as key barriers (3,28). With the majority of paramedics in Australia now being educated in tertiary settings alongside nursing students (30), we feel that university educators are well positioned to develop IPE programs in support of these novice practitioners as they begin to develop their communication skills. Building on the success of international educational programs that incorporated IPE to attain interprofessional competence (10,31), we too sought to enhance our own students' communication and clinical handover skills. Given the barriers to IPE identified in the literature and the overall paucity of evidence supporting large-scale paramedic and nurse interdisciplinary exercises, we believe our experience can add to the current body of knowledge and potentially reduce future communication missteps between paramedic and emergency nurses.

Methods

Planning and expected outcomes

At CSU we sought to address and remove previously identified barriers to IPE and explore how simulation might be used to improve interprofessional communication between and among our paramedic and nursing students, especially during patient handover. The simulation environment provided students with a safe and effective learning environment where they could practise both practical and interpersonal skills and using reflection, improve their own performance (8,20).

The opportunity that brought these undergraduate students together was an interdisciplinary learning exercise; an educational experience designed by CSU staff in the schools of Biomedical Science and Nursing, Midwifery and Indigenous Health. Initially borne out of a desire to collaborate over an educational experience that would benefit both disciplines, CSU lecturers planned an 'intensive tutorial' exercise for approximately 130 third-year paramedic and 70 second-year nursing students. Simulations are an integral part of the curriculum for FPS300 Foundations of Paramedic Care, a trauma integration subject in the paramedic program. Similarly, nursing students studying NRS293 Clinical Nursing Practice 1 participate in weekly low and high fidelity simulation exercises also using the joint CSU Interprofessional Simulation Centre. Although the paramedic academic team provided leadership during the initial phases, the nursing lecturers and laboratory staff were involved early, contributing to all aspects of project planning, implementation and evaluation. Our implementation team also included experienced working paramedics and third-year peer-support students who 'tutored' the student groups during the exercise.

The project spanned approximately 7 weeks from initial planning stages through to completion and had the following informal joint aims and expectations:

Expected 'operational' outcomes

- To provide an opportunity for paramedic and nursing students to learn and work together, focusing on aspects of interprofessional communication during clinical handover
- To give nursing students practise receiving initial and ongoing radio communication from the paramedic crew
- After patient packaging and transport, to have paramedic students provide patient information at handover to the nursing students in the ED
- To have paramedic and nursing students collaboratively provide initial and ongoing care to the patient
- To have the paramedic students stay and assist the resuscitation if asked after handover
- To simulate a realistic ED where nurses had to receive a critical patient and concurrently manage a stable interfacility transfer
- To debrief and collect feedback after the event with both disciplines present
- To debrief student groups and academics in order to elicit post exercise feedback as part of a formative evaluation.

Anticipated 'interprofessional' outcomes

- To build stronger working relationships between the nursing and paramedic academic groups
- To use the Interprofessional Simulation Centre in the manner for which it was originally designed – with a vision toward IPE
- To maximise the use of common resources
- To leverage expert discipline knowledge by respective disciplines
- To develop a foundation towards future IPE research projects between paramedics and nursing at CSU aimed at patient safety.

The scenario

There is a definite rhythm in the ED this morning. Nurses move from bed-to-bed, assessing, treating, and documenting on emergency patients, as well as organising the transfer of an elderly woman with a femur fracture. Two ambulance crews are waiting at the triage desk, ramp delays are expected and the bed manager is still trying to admit last night's patients. Reaching for the trauma line as it rings, the triage nurse thinks to herself - surely we are already busy enough!

'ED Triage, Unit 243 - we are on the scene of a car versus pedestrian. We have a 25-year-old male struck by a truck travelling at high speed. It looks like multisystem trauma with a closed head injury, rib fractures and an unstable pelvis. We've applied spinal precautions, initiated ventilation, and just started an IV en route. We will be there in five minutes ... maybe less.'

The mood in the ED quickens and the usual questions are forming: how bad is it, how far away are they? Moving quickly, nurses assemble a resuscitation team in the trauma bay. Roles are assigned, equipment checked, crash cart positioned, and the doctor is paged. There is a feeling of anticipation and even excitement. Soon, the ambulance bay doors open and the

paramedic crew arrives ...

On this particular day, however, the scenario was unique in that the ED was set in the Interprofessional Simulation Centre at CSU in Bathurst, New South Wales. The nurses and paramedics were students and the patients were high fidelity manikins operated remotely.

Spanning a 4-day period, the team facilitated high-fidelity trauma simulations involving student paramedic crews of four. In the primary scenarios outlined above, the paramedic crew responded to a pedestrian struck by a vehicle where they assessed, treated and then physically transported the patient to a trauma bay in the simulated ED. Standing by to receive the patient and participate in the clinical handover were teams of four student nurses. As described, the ED environment was simulated to be very busy. To further complicate things the nurses also had to multitask and manage a pending stable outbound patient transfer. Each group had the opportunity to engage in professional dialogue with their counterparts, practising important communication skills while under pressure. The academics and tutors were close at hand to offer support to the students throughout. With four scenarios running simultaneously, the action packed simulations were hectic, exhilarating and rewarding. See Appendix 1 to view the schedule for one day of the simulation week.

Evaluation process

Both throughout and upon completion of the intensive tutorial week we engaged in a semi-structured, informal evaluation process involving all stakeholders. This formative evaluation was conducted primarily to determine the overall merit of the project in order to assist with future project planning (32). In keeping with what is described as the 'cognitive assimilation of experience', the facilitators followed Lederman's post-experience simulation debriefing model at the conclusion of each scenario with both disciplines present (33). As is commonly done in simulation education, students were encouraged to recount the events that occurred and then reflect on how they felt about the experiences in an attempt to make sense of them (20). Additionally, at the close of each day of the 4-day exercise, academic staff facilitated debriefings and feedback sessions between and amongst the nursing and paramedic students. To guide the discussions, the facilitators prompted the students using four standard questions:

1. What went well today for you?
2. What did not work well?
3. What 'stumped' you?
4. What would you do differently?

Student team members were asked to recount their respective roles, to comment on aspects of communication they experienced and to reflect on the importance of good interprofessional communication. Although a few students had to leave early due to conflicting appointments, the vast majority of the 200 students participated in the debrief sessions. Their

combined, non-identified feedback was manually recorded on a MS Word document, then summarised and published as a WIKI on the CSU subject website. These responses were then grouped and further analysed to generate themes.

The same four questions were then posed to the academics (n=6), paramedic tutors (n=4) and technical support staff (n=5) who were also invited to provide general written feedback at the end of the exercise. Each staff member was asked the following questions:

1. What was your role in the event?
2. What did you consider to be the major accomplishments of the exercise?
3. What (if any) limitations to the exercise did you identify?
4. What overall comments do you have regarding intensive week?

The academic debrief responses were recorded in the same manner as for the students. Results were collated and used as the basis for a formative evaluation report circulated to key stakeholders. As we engaged in academic reflective practice in order to understand how to enhance our performance for future IPE projects and grow professionally (34), we realised that our experience could be of interest to others. We used the evaluation report as a foundation for this reflective practice exercise aimed at determining and sharing lessons learned from this valuable experience.

Results

Through their debriefing responses and written evaluations,

some common themes related to interprofessional communication and IPE emerged amongst the students and staff. Students shared that they felt that the Interprofessional Simulation Centre was suitable for this type of exercise and simulated a realistic situation. They found themselves unprepared in some situations and noted the importance of planning ahead to treat and receive patients. At times they felt frustrated if equipment was missing or faulty. With respect to interprofessional interactions, the student responses were especially positive. They found that the experience of working with another discipline added value to the scenarios and gave them the opportunity to practise communicating with each other. This included both radio and face-to-face communication.

Some of the students reported uncertainty when it came to radio use and feeling awkward when expected to perform clinical handover. Without a standardised handover tool, some students expressed frustration at feeling disorganised when trying to communicate clinical information. They noted the importance of assigning team roles and having clearly identified team leaders. During the debriefings, students indicated that they felt the simulation environment allowed them a safe place to practise these communication skills as well as to perform patient care while gaining valuable insights into the practices of another discipline.

It was also noted that they enjoyed debriefing together as a multidisciplinary group. Overall, the students enjoyed the challenge and reported a desire to do more joint simulations to further their learning. The themes identified in the student feedback are presented in Table 1.

What worked well?	What did not work well?	What stumped you?	What would you do differently next time?
<p>Enjoyed practising clinical handover</p> <p>Found it valuable to communicate with another member of the health-care team</p> <p>Found it helpful to debrief together with another discipline</p> <p>Appreciated taking time for reflection</p> <p>Enjoyed using the Interprofessional Simulation Centre for this exercise</p> <p>Valued having experienced clinicians facilitating the scenarios alongside academic staff</p>	<p>Some equipment issues with missing and faulty items</p> <p>Would like to be more prepared regarding the use of equipment and technology</p> <p>The length of the simulation days and lack of breaks</p>	<p>The expectation to perform ongoing and continued care</p> <p>Challenged when not given clearly defined protocols or tools to organise information</p> <p>Difficult dealing with handover in a high pressure situation</p> <p>Unsure how to communicate over the radio or with each other</p>	<p>Would define team roles and assign a team leader</p> <p>Perform better handovers</p> <p>Improve our documentation</p> <p>Include non-acute settings in simulation</p> <p>Continue to integrate paramedics and nursing students</p>

Table 1. Themes in student feedback

Feedback elicited from the academics, tutors and laboratory staff also indicated that they were very satisfied with the outcomes of the intensive week. The academics noted how well the paramedic and nursing students communicated at handover and throughout the scenario. The paramedic tutors made the point that the learning experience for both groups of students was enhanced by having them work together, whilst still allowing each group time to focus on their individual competencies. They also noted that the opportunity to debrief together positively

impacted the shared experience and provided an opportunity to understand the role of the other healthcare professionals in the overall patient journey. Laboratory staff shared that they were happy with how well a large scale ‘first ever’ exercise went while noting that a better restocking plan was required for next time. Staff members also observed that the pre-planning was worth the time and that it would be ideal to include joint simulation as a standard part of the curriculum. A summary of staff feedback is provided in Table 2.

Areas of strength	Areas for improvement
Simulations were very realistic	Some equipment and stock issues, needed a better restocking plan
Scenarios demonstrated the need for students to be prepared	The exercise was very labour intensive
Joint debriefings were valuable and enhanced student learning from each other	Could expand on scenarios, ie. retrieval, nurse, escort, remote area
Each discipline gained insight into the other’s roles	Timetabling challenges and time limitations
Students became more confident working and communicating with each other	Students wanted more break time
Paramedic and nursing students working together allowed for teamwork and communication	Some students needed to be better oriented to equipment and manikins
Excellent use of the Interprofessional Simulation Centre for IPE as it was designed	
Students requesting more joint simulations, had a positive experience	
Preplanning the exercise was important	
Excellent teamwork demonstrated by the staff members	

Table 2. Themes in staff feedback

Reflections and discussion

Although academics typically try to instil in students the value of reflective practice, it is often challenging to find the time to do this oneself. As noted by Ghaye (35), it is important that the teacher also views themselves as the learner. Furthermore, the use of personal reflection has been found to improve the practice of those who facilitate simulation (36). In our case, we elected to utilise the model of structured reflection initially developed for nursing education by Johns (37), which was then adapted to suit any workplace context by Cox (38). In accordance with Cox’s revised model, the reflective practitioner must first describe their experience before reflecting upon the outcomes. This is followed by a review of influencing factors and finally, one’s thoughts and feelings on the actual learning and conclusion (38). Having described the experience in the

methods and results section, we will now explore the actual outcomes and the lessons we shared throughout this project as well as the factors that influenced the process.

As mentioned, the impetus for this joint exercise came during a meeting of laboratory and academic staff from both the nursing and paramedic disciplines. There was a realisation that both groups were vying for the same resources, namely the utilisation of our Interprofessional Simulation Centre and laboratory staff assistance during the same point in the semester. The idea of not only sharing the space, but also running IPE scenarios with a common purpose was tabled and embraced. From that point on the exercise was jointly planned and saw a development of the aforementioned objectives. To be successful, it was clear at the outset that both disciplines needed to maintain engagement and support each other throughout the planning and implementation phases.

Initially, we discovered that the first step in facilitating effective interprofessional communication among our students was to achieve good interprofessional communication among our own staff members. Surprisingly, this is something we found to require considerable time and effort in both planning and implementation. Our project team met bi-weekly and exchanged numerous emails and telephone calls before we could finalise the eleventh draft of the plan and timetable. Admittedly, we encountered similar challenges as others before us have (28) and found that developing a collaborative simulation exercise for 200 students takes a significant amount of resources, including time, equipment, and personnel (39). As we learned from the feedback, simulations did not always run smoothly with reports of incomplete kits, some faulty equipment and time overruns. The scale of the event dictated that the resources were going to be stretched to the limit and it was a balancing act to make sure the students had an authentic learning experience while maintaining a tight schedule. As one staff member noted, we needed 'a better restocking plan' between scenarios and should have provided 'more breaks for students'. Ultimately, the academics, tutors and laboratory staff felt that we worked well as a team and were proud of the outcome.

We determined that with a highly motivated team, IPE can be successfully facilitated in a large-scale simulated setting. This experience confirmed to us what other authors have noted, that collaborative simulation can present significant logistical challenges (3,5,31) yet the ability to deliver simulation education to large cohorts makes this worthwhile and is especially desirable in IPE (5). We did learn, however, that while we may see efficiencies in one respect, large-scale IPE projects might cause inefficiencies in another. Though we anticipated that our intensive week would create student-timetabling challenges (13,40), it was somewhat surprising to see just how much of a time commitment was required of our academics. This has led to discussions of inevitable compromise as we recognise that although valuable, future IPE projects cannot be allowed to negatively impact concurrent subjects. Albeit difficult to measure, we have definitely developed a stronger working relationship between our two disciplines and have plans for future collaborative research using IPE. Looking back, we feel satisfied that we met the majority of our anticipated 'interprofessional' outcomes of our IPE project.

With respect to the key operational objectives, the structure of our intensive week was effective in ensuring we could readily meet these. The program design allowed for the nursing and paramedic students to practise their respective clinical skills in a realistic environment, all the while receiving timely and constructive feedback. This was important as providing authentic simulation is considered best practice for skill development (5). In addition to experiencing for ourselves that IPE is indeed an effective tool for developing communication skills (8,26,28,39), we noted as the week progressed that interprofessional communication could be developed using a range of scenarios. That is, communication did not need to be the primary objective of the simulation in order to

practise it. Although not necessarily a focus of each session, the students continued to hone their interpersonal skills throughout all scenarios. The students told us that 'handing over to student nurses was a positive learning experience' and that the exercise provided a 'great opportunity to work with nursing students, especially doing the handovers'. Overall we found that the use of simulation for IPE had positive outcomes on interpersonal skills similar to those found in the literature, including an increase in student confidence and their ability to collaborate and work as part of an interdisciplinary team (4,8,17,31). Unfortunately, determining if any improvements to interprofessional communication during handover had any potential impact on patient safety was beyond the scope of the study.

The evaluation did offer us valuable feedback on our overall approach to and delivery of the simulations. We discovered that utilising working paramedics as tutors alongside academics added richness to the simulation exercise. Their current and ongoing exposure to these high-pressure clinical environments lent to the realism of the scenarios. They were able to offer additional authenticity to the simulations. This finding was supported by comments from within the students' WIKI as well as by all members of the project team. As one student commented, 'having a combination of practising clinicians and full time academics was great'. Given that the literature emphasises the positive relationship between quality facilitators and student satisfaction in simulation (7), the contribution of our tutors was certainly key to our success. Additionally, we realised that not everything can be 'scripted' and that in some cases it is better for the ultimate structure of a simulation experience to unfold organically as the interdisciplinary staff members draw on their combined clinical and teaching experiences.

The final step of our reflective practice journey involves us considering how we felt about the experience and noting how this experience will influence future practice (38). Overall we were very satisfied with our IPE project and feel that our experience can serve to inform others with similar learning needs. In fact, we feel that the success of this exercise sends a strong signal to the university and professional accreditation bodies about the usefulness of such an approach and we suggest that a joint IPE event be embedded in each disciplines' respective curriculum going forward. We support the assertion by other authors that the tertiary undergraduate setting provides the ideal starting point for paramedics and nursing students to begin their journey towards interprofessional competence and effective communication (26,31,41). We are cognisant that IPE projects are at risk of being 'one offs' (39) and are ready to build on our successes, address any limitations and begin planning for our next large-scale exercise.

Limitations of this study

Our purpose here has been to illuminate fresh insights, in this case on teaching interprofessional communication,

through a process of an informal formative evaluation and exercise in academic reflective practice. It has been a generative process rather than a process more typical of empiricist research and so this may be considered a limitation. Also, we did not use or measure against a validated communication tool in order to quantify the effectiveness of using IPE to improve patient handover. Additionally, we did not administer a pre-project survey and the feedback we elicited from participants was only obtained post-exercise and combined. A more formalised pre- and post-evaluation process that allows for the theming of responses by discipline is something we would recommend for future projects. Notwithstanding these limitations, we believe that this work adds to the growing platform of knowledge in the area of IPE, specifically involving paramedic students, and opens a way for other researchers to apply a range of methodologies to the topic.

Conclusion

Paramedics and nurses face many pressures in today's busy workplace where even basic communication can prove difficult. Effective communication, especially during clinical handover, is of paramount importance for patient safety. Reports from our students confirm that the even this simulated experience can be daunting. It is possible for academics to work across disciplines to prepare students to meet these pressures, and IPE through simulation is a useful method. For institutions interested in IPE and simulation we would recommend that:

- IPE and simulation can be very productive for large groups in tertiary settings when all disciplines are willing to commit required resources and work towards common goals
- Careful attention should be paid to pre-planning and timetabling, especially for large cohorts. Notwithstanding this, there needs to be a willingness to let IPE simulation 'unfold' as the different

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disciplines get to know and to learn from one another

- Developing interprofessional communication skills can and should be embedded as an objective in clinical scenarios when possible. It doesn't have to be the primary focus of the simulation for participants to concurrently develop this key skill.

Our students will soon graduate from university and enter the same resource strained workplace presented in the simulation scenario. We hope that these future nurses and paramedics will be able to draw on experiences such as we have outlined here and use them as a platform for further learning when they meet for real in that busy ED. We are mindful that in ways such as this, universities can respond to industry calls for, in this case, '... minimising the barriers that restrict interprofessional practice ...' (42). For our students, the journey towards developing interprofessional communication started with this exercise and will continue for years to come. Finally, our experience not only draws attention to the benefits of IPE using simulation, it also illuminates the value of reflective practice amongst academics. We would encourage others involved in simulation to consider taking a similar approach in order to further develop thinking in this important area.

Competing interests

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Appendix 1. FPS300 Paramedic\NRS293 Nursing

Nursing Group	Time Period	Paramedic high fidelity	Paramedic low fidelity	Paramedic high fidelity	Nursing	Paramedic low fidelity
1	0800 – 0900	Tutor 1: A1 (4 students)	PF 1: B (8 students)	Tutor 3: C1 (4 students)	Inbound trauma	PF 2: D (8 students)
1		Tutor 2: A2 (4 students)		Tutor 4: C2 (4 students)	Outbound trauma	
1	0900 – 1000	Tutor 1: D1 (4 students)	PF 1: A (8 students)	Tutor 3: B1 (4 students)	Inbound trauma	PF 2: C (8 students)
1		Tutor 2: D2 (4 students)		Tutor 3: B2 (4 students)	Outbound trauma	
1	1000 – 1100	Tutor 1: C1 (4 students)	PF 1: D (8 students)	Tutor 3: A1 (4 students)	Inbound trauma	PF 2: B (8 students)
1		Tutor 2: C2 (4 students)		Tutor 4: A2 (4 students)	Outbound trauma	
	1100 – 1200	Break	Break	Break	Break	Break
2	1200 – 1300	Tutor 1: B1 (4 students)	PF 1: C (8 students)	Tutor 3: D1 (4 students)	Inbound trauma	PF 2: A (8 students)
2		Tutor 2: B2 (4 students)		Tutor 4: D2 (4 students)	Outbound trauma	
2	1300 – 1400	Tutor 1: A1 (4 students)	PF 1: B (8 students)	Tutor 3: C1 (4 students)	Outbound trauma	PF 2: D (8 students)
2		Tutor 2: A2 (4 students)		Tutor 4: C2 (4 students)	Inbound trauma	
2	1400 – 1500	Tutor 1: D1 (4 students)	PF 1: A (8 students)	Tutor 3: B1 (4 students)	Outbound trauma	PF 2: C (8 students)
2		Tutor 2: D2 (4 students)		Tutor 4: B2 (4 students)	Inbound trauma	
3	1500 – 1600	Tutor 1: C1 (4 students)	PF 1: D (8 students)	Tutor 3: A1 (4 students)	Outbound trauma	PF 2: B (8 students)
3		Tutor 2: C2 (4 students)		Tutor 4: A 2 (4 students)	Inbound trauma	
3	1600 – 1700	Tutor 1: B1 (4 students)	PF 1: C (8 students)	Tutor 3: D1 (4 students)	Outbound trauma	PF 2: A (8 students)
3		Tutor 2: B2 (4 students)		Tutor 4: D2 (4 students)	Inbound trauma	

The 1-day schedule illustrates the distribution of student groups (A-D) and facilitators (tutor = practising paramedic, PF = third year paramedic student peer facilitator). The trauma scenario was held in the high fidelity room while both student groups used the low fidelity rooms for skill revisions