Simulation Training for Interprofessional Education (STRIPE)

12th June 2013

BACKGROUND

Western Health secured some funds (HWA Simulated Learning Environment) to conduct a project titled 'STRIPE PROJECT – Achieving the best in the West – Pilot Program'. The Optimizing Patient Safety in the West project aimed to deliver a simulation-based inter-professional learning pilot program to professional-entry students and graduate workforce. Phase two of this project focused on delivery of the STRIPE program to the graduate workforce group. The curriculum focused on areas such as communication and teamwork, patient assessment, chronic disease, and the deteriorating patient in an acute setting.

This multi-faceted program provided inter-disciplinary graduates with the unique opportunity to practice clinical skills in a safe, open, learning environment. A potential outcome of this approach is quality and safety improvement across the continuum of care for patients in the Western Metropolitan CPN using the methodology of simulation-based education and training.

All training was performed at the Simulation Centre, Western Centre for Health Research & Education, Sunshine Hospital. The session focused on responding to patient deterioration.

AIM

The primary aim of this report is to detail the opinions of graduates (Nursing and Allied Health) regarding their experiences whilst enrolled in the 'STRIPE 2 Simulation Based Education Program' in relation to Inter-Professional Participation, Simulation for Work Preparation and Patient Safety.

METHOD

A total of 13 staff participated in the group interview sessions: 10 females and 3 males, and 2 nursing staff, 7 social workers, and 4 physiotherapists. Group interviews were used in a modified Nominal Group Technique (NGT) process to generate and classify ideas that were analysed by content analysis (Pokorny *et al.* 1988, Tague 2005), a process that provides all members with an equal opportunity to participate and for their input to be considered. Strengths of this technique include minimal preparation by participants, task completion and immediate dissemination of results to the participants, and reduced researcher-bias.

The NGT process started with the presentation of a specific question to the group. All members of the group were asked to generate answers to this question. Each answer is accepted. In the second phase all ideas are shared among the group members.

In the first phase, the Crawford Slip Method (Crawford & Demidovich 1983) was used as a basis for initiating discussion related to the question and for generation of ideas. This brainstorming technique used notepaper as a method of generating and organising data. Interaction between group members was discouraged during the idea-generating phase but encouraged in the second phase. Members were asked two questions during the first phase: 'What did you enjoy most about the STRIPE 2 program?' and ''What did you enjoy least about the STRIPE 2 program?' Each participant of the group session was asked to record their responses to the two questions on separate pages of notepaper provided to them for the purpose of data generation and collection. Responses were collected by the facilitator at a later stage.

After the group session, data was transferred from the notepaper into an Excel spreadsheet. Categories were derived from the data after reading the text several times and creating headings in the margins. Next, categories with similar meanings were combined. Finally, the categories were reviewed and main categories were created. At this stage, the data was searched and relevant notepaper responses were placed into a category. The number of responses in each main category were counted. All group responses were considered in the analysis and accounted for by the categorisation.

In the second phase, responses to each question were recorded on a whiteboard, discussed by group members and then sorted into general categories. The session was taped (with participants' permission) and transcribed. Data was analysed by thematic analysis.

FINDINGS

Nominal Group Technique

Five main categories were identified, as shown in Table 1 (positive aspects) and Table 2 (negative aspects).

Positive aspects included: 'Translation of learning into practice' [n = 25], 'Teamwork [n = 14] and 'Process' [n = 11].

Translation of learning into practice

> *I think it was good that most of the participants were working at similar levels, so most of us were just starting out, and the situations were appropriate to my everyday work.*
> *Being able to problem solve in a safe environment, observing interactions between the members of the group.*
>
> *Opportunity to practice how you respond to a crisis outside of a natural crisis.*
> *It generally made me more confident in my own abilities to manage a crisis situation. Reinforce the need to escalate situations early in crisis situations and to recognise the early signs.*

I think we were lucky with that in that although it's simulation it's very realistic. You're getting ECG, getting [stats], you're getting heart rate. You've got stuff - equipment that you can use. So although it's simulated it's as realistic as you can make it in a safe environment.

Teamwork

Realising that no matter what profession you have or you are you always have a role that you can play in a medical emergency or crisis situation.

Before this simulation if there was a code blue - even if I'm in the room - doctors arrive, I step back, it's in their hands; whereas, now, I realise if you're there you have a role. You will have some part to play. It doesn't necessarily have to be medical, but it can be something. Every role's important, which goes back to the positives in knowing that, no matter what, everyone has a role to play in crisis [unclear].

I think it's good knowing what I could rely on the other teams to deal with, rather than try and have to deal with it myself.

Negative aspects included: 'Process' [n = 25] and 'Realism' [n = 17].

Process

I would like more of a focus in debriefing sessions on the multidisciplinary [unclear], as opposed to ... response to coping with the situation ... it was ... responded to, as opposed to how we could work together. I would have preferred a lot more time to be introduced to those that we were working with; again, that scenario to introduce ourselves more ... more time to debrief and feedback. It was rushed, the feedback and debrief.

There could have been a little bit more information about what was actually going to be required, in a way, before it began. Another was communication between the different members of the group. Sometimes everyone would stand there just looking at each other, waiting for somebody to do something and not really talking about it.

By the same token, because I wasn't in the room, no-one was observing what I was doing, apart from in the social work [scene] you take out to the corridor. So I was conscious that she was watching me in a very unnatural scene, so I didn't mind feeling watched. I was still talking - yelling - to speak to the actress. Whether she heard or didn't really observe anything anyway - so it was very awkward for the social worker. It would have actually worked better - which is similar to what (…) was saying - it would have worked better if the [unclear] happened inside the room and all of the people who were observing were actually behind the screen. That's all.

Realism

So ... program I know that they wanted to get new [grad] doctors to participate, but ... in my situation, in my scenario, there were no ... I think ... to have them there. I think it was very much a crisis situation. It would be interesting to see [NDT] interaction in a more cognitive scenario ... see on the wards; so not so much a crisis situation, but I don't know. Every day, for me, every day orthopaedic situation or something like that. I felt the whole session was probably a little bit rushed. A little bit more time would have been nice. I think other disciplines could have been included as well, a speech [unclear]

I thought it was an extreme scenario for our profession. I think it was really focused on medical staff, something ... so we could be ... unlikely to encounter that. I don't think that the social worker role was demonstrated adequately. It felt [more like] a security guard.

Very much similar. I felt like there's just not enough time for the case [unclear] very rushed. I feel that the social worker was the only one who had a lot of interaction with the family ... the other two members did. Just the set up of the room; because I had to, obviously, take that family out. When I took her out - and the stuff that I did, the intervention that I did - nobody saw that. So while we were in the room I felt yes, it was a real [unclear] taking her outside, just the atmosphere changed and everything just changed for me a bit.

A few different ones. The facilitators would sometimes come in - so there were some head nurses and things that would come in. At times they had an ear piece in. Sometimes you'd be talking to them, but they'd be listening to their ear piece and not listening to you; so I don't know how you'd write that.

It definitely felt realistic, but just at times you'd have to wait for them to get their orders, so it was a little...disjointed

there was something called the wizard that you could use, like ask for results and things like that, but I didn't feel it was explained well. I didn't know how to ask for it. This was more, I guess, for the nurses and the doctors, but there was a bit of confusion at times - how to administer hypothetical medications and lines; so [unclear] do we actually put it in? Or do we pretend we put it in?

In a realistic situation you're on a ward. You know who you're working with. You know everyone's - you should know really - everyone's strengths and weaknesses, which makes allocation a lot easier. So I can appreciate that it's hard to simulate that, but that was a negative.

Yes. I guess that goes with the other comment about introductions before. Even when we were talking to someone we didn't even know their name. It was a little bit awkward that way, but it

can't be helped. The only other one I had was - apart from what's up there - was we were often being observed by senior clinicians that we work with. So you go well, if I make a mistake... I work with these people and it's going to be a little bit awkward.

The senior clinicians are lovely, but you do have that factor where you worry about you're being observed by your boss, essentially.

I had a few points that just made it feel a bit unrealistic for me. Again, I don't know if that can be helped necessarily. Even having the DVD at the beginning made me anticipate the emergency. I know that's a [unclear] program, but it made me really fast to react. I don't know if that felt as realistic for me. Another thing: just when you have to go out and call for help, I found that everyone's waiting and on edge. Again, I didn't find that as realistic either. You pop your head out and you say can you guys come in? It just didn't seem like a real life situation, not - having to go look for someone or [unclear] and that kind of thing.

I feel frustrated because I was told by the person playing that [unclear] that I must go in with the physiotherapist and do an assessment of the patient's needs. That doesn't occur. We do our own assessment with another professional present, unless it's some really weird circumstance. It doesn't happen on the ward.

Just that the social work role in general was really diminished, I thought. I felt it was very medical focused, wasn't it? Yes, it was. It's just like - it was a very unrealistic scenario for us.

The medical scenario wasn't a good one to reflect everyone's roles.

Maybe what you said earlier - having, actually, not a good ending - so the person dies - that's when [unclear] and that's our role; so dealing more with the grief side of things.

Table 1 – Positive aspects		
Theme	**No.**	**Sub-theme**
Translation of learning into practice	25	Dealing with a crisis situation [2] Made me more confident in my abilities Opportunity to practice Opportunities for feedback [4] Debriefing [5] Unique opportunity Exploring scenarios How to step back and let others lead or step up and lead [2] Gaining experience in a safe environment[2] It was appropriate to my everyday work Importance of quality service delivery to patients
Team work	14	Interesting to see others roles [5] Multidisciplinary[2] All participants were working at similar levels Need for leadership[2]
Process	11	Program well run instructions clear [3] Support of coordinators Equipment/room opportunity to experience [2] Actors [4] Able to make mistakes and learn from them
Communication	5	Interactive Working with people I know Raising good reputation of an organisation
Emotional response	3	Made me reflect on my role in a crisis situation
Realism	2	
Contribution to overall learning/ place in course	2	Importance of ongoing education Training prior to practice
Skills	1	Encouraging patient centered practice Taught me the importance of communication

Table 2 – Negative aspects		
Theme	**No.**	**Sub-theme**
Process	25	Supervisor not present at debrief – no feedback provided Senior observing from corridor rather than behind 2way screen – conscious that she was there Social work intervention happened outside RM [unobserved] Poor time management More time required to complete the tasks[4] More time to debrief and get feedback Need to provide a brief purpose of the program before requesting participation[2] More information about the task and demonstration of the room before the situation began [3] More information about to administer hypothetical medications More explanation of how to use 'wizard' to ask for results Feedback required form different facilitators not just medical personnel[2] Social worker didn't get to interact with the patient At times facilitators entering the room were talking to you then would stop to listen to the ear piece DUD was not that useful Why were we filmed
Realism	17	Scenario was not what social workers are usually involved with[5] Could have a family meeting scenarios Rest of team was already waiting in hallway when called for an emergency Moving outside the room removed the realism At times facilitators entering the room were talking to you then would stop to listen to the ear piece You would normally know the people you were working with.[3]
Team work	5	Would have liked other allied health involvement, speech, OT etc Need more doctors
Preconceptions	3	There was no choice to participate or not
Skills	1	Maybe having a scenario that didn't have a positive outcome
Emotional response	1	Being observed by seniors you know