Australian Government

This project received funding from the Australian Government

Speech Pathology Australia

The University Of Queensland
AUSTRALIA

Simulation-based Learning Program

Simulated patient training

Mrs Beth Connor

Developed as part of the *Embedding Simulation in Clinical Training in Speech Pathology* project 2014 – 2018

The University of Melbourne
The University of Sydney
La Trobe University
Griffith University Queensland, Australia
The University of Newcastle Australia

Funding:

This resource was developed for the *Embedding Simulation in Clinical Training in Speech Pathology* project (2014-2018) which was supported by funding from the Australian Government, Department of Health, under the Simulated Learning Environments Program.
Speech Pathology Australia, as the funded organisation, subcontracted The University of Queensland to lead this project.

Project leadership team (authors):

The University of Queensland
- Dr Anne Hill (project lead)
- Prof Elizabeth Ward
- Ms Adriana Penman (project officer)
- Ms Emma Caird (project officer)
- Ms Danielle Aldridge (project officer)

The University of Melbourne
- A/Prof Bronwyn Davidson

Griffith University
- Prof Elizabeth Cardell
- Ms Simone Howells

La Trobe University
- Ms Rachel Davenport

The University of Newcastle
- Dr Sally Hewat
- Ms Joanne Walters

The University of Sydney
- Prof Patricia McCabe
- A/Prof Alison Purcell
- Dr Robert Heard
- Prof Sue McAllister

Speech Pathology Australia
- Ms Stacey Baldac

Citation/attribution format:

Hill, A.E., Ward, E., Davidson, B., McCabe, P., Purcell, A., Heard, R., McAllister, S., Hewat, S., Walters J., Cardell, E., Howells, S., Davenport, R., Baldac, S., Penman, A., Caird, E., Aldridge, D. (2018). *Embedding Simulation in Clinical Training in Speech Pathology*. Melbourne: Speech Pathology Australia.

Contents

Funding for simulation research

The *"Embedding Simulation in Clinical Training in Speech Pathology"* project was initiated by Heath Workforce Australia in 2010, as part of a review of the use of simulation in many allied health professions. In the feasibility study in 2010, a collaborative of universities investigated current and planned practices in simulation within speech pathology training programs and concluded that use of simulation-based learning in clinical education had the potential to assist educators to meet placement demand, and that it may in fact result in superior learning outcomes for students in areas such as development of clinical reasoning skills and working with other professions (MacBean et al., 2013). The collaborative was committed to the development and integration of simulation-based learning into clinical education curricula and to building an evidence base that evaluated its use.

In 2014, Health Workforce Australia provided funding to Speech Pathology Australia to undertake Phase 1 of the *"Embedding Simulation in Clinical Training in Speech Pathology"* project. A collaborative of six universities across Australia was awarded this funding to develop a plan to investigate whether simulation could replace a proportion of clinical placements without loss of clinical competency. The Phase 1 project plan was completed in October 2014 and the collaborative was awarded further funding in December 2014 to conduct a randomised controlled trial. Phase 2 of the project commenced in May 2015 and was completed in November 2018. Health Workforce Australia was disbanded in August 2014 and current funding was then provided by the Department of Health (Commonwealth).

Research aim

The overall aim of the *"Embedding Simulation in Clinical Training in Speech Pathology"* project was to determine if students in accredited speech pathology programs achieved a comparable level of competency (i.e., performance in the same Zone of Competency on COMPASS®) in middle-level placements involving the management of adult patients, if they either:-

(a) completed a clinical placement where an average of 20% of the traditional clinical placement time is replaced with a simulation model, or
(b) completed a traditional clinical placement for 100% of the time.

Further information about the *"Embedding Simulation in Clinical Training in Speech Pathology"* project, including outcomes of the research study, can be obtained through contacting the project leader, Dr Anne Hill (ae.hill@uq.edu.au).

Main objective of Simulation-based Learning Program

The Simulation-based Learning Program allows students the opportunity to develop and demonstrate a range of skills in assessment and management in adult areas of practice across the continuum of care. Learning objectives for each simulation are specifically outlined below.

Simulation activities – process of learning

All activities are designed to assist student learning. Each simulation consists of the following learning cycle:

1. **Pre-simulation activities**: The student group will be briefed by the simulation clinical educator and will have the opportunity to review documentation related to the upcoming simulation and to discuss this with the clinical educator and peers. Workbook activities will be completed in small groups to guide this discussion before the simulation commences.
2. **Simulation**: Students will enter a simulation and work in pairs or small groups, with each student having an opportunity to play the role of the speech pathology clinician. A time in/time out approach may be used during the simulation to provide online feedback and to facilitate each student taking a turn in role.
3. **Post-simulation activities:** The student group will engage in a debrief with the clinical educator. Students will have the opportunity to provide feedback to peers and to complete the related post-simulation activities in their workbook. Simulated patients will provide feedback to students following some of the simulations.

A number of feedback approaches will be used by the *clinical educator*:

1. Feedback during patient interaction

Some feedback provided to students will occur during normal clinical interactions with their peers in role play or in interactions with you as simulated patients. This feedback is generally directed at the student directly involved in the interaction and is usually quick and does not interrupt the clinical interaction. It is feedback 'on the go'.

2. Pause-discuss feedback method

This feedback occurs with interruption to the student-patient interaction process and is usually conducted where there is more than one student involved in the simulation. The simulated patient *stays in role* and the students and clinical educator have the opportunity to briefly discuss what they observed. The pause-discuss model can work in two ways:

a. The student seeks the clinical educator's assistance within the simulation to discuss their action, ask a brief question or obtain guidance about their decisions. The simulation continues while this brief discussion with the student occurs i.e. the clinical educator involves the simulated patient in their discussion with the student.
b. The clinical educator determines that a break in the simulation is required in order to more extensively discuss the progress of the interaction and to engage the observing students in this discussion. The simulation is paused and a 'time out' is called. A pause occurs and discussion follows with the educator and all students.

Feedback to students

Simulations offer students the opportunity to gain valuable feedback from simulated patients. It is therefore important that simulated patients provide clear and specific feedback which assists in student learning.

General comments related to your role and providing feedback are included below

1. Keep in mind at all times your **teaching role** – this is the most important aspect of your involvement.
2. Stay in role during your simulation.
3. Agree with the clinical educator on a pre-arranged signal to indicate your need to 'time out' of role (only when necessary). The clinical educator will then call 'time out'.
4. When 'time out' or 'pause and discuss' is called by the clinical educator, continue to stay in role.
5. Once the simulation is completed you will be given an opportunity to provide feedback from the perspective of the patient you are portraying.
6. Therefore, your feedback should focus on how the interaction made you feel as a patient. You can use the words *"I felt…" "When you said/did…. I felt…."*
7. Please provide this feedback on the 'Simulated Patient Feedback Form' and give to the clinical educator. This form will not be given directly to students but will add valuable information to the clinical educator's feedback.
8. You may be given the opportunity to provide verbal feedback at the conclusion of your role.
9. Feedback should be delivered in lay terms.
10. Feedback should generally be given to the students as a pair. Use discretion when highlighting individual performance.
11. If you would like to comment on something that an individual student did very well, however, please do so.
12. Always seek the advice of your clinical educator before delivering sensitive feedback.
13. Target feedback around the specific areas on the feedback form provided. Students should receive feedback in each of these areas.
14. Your feedback should be concise and specific.
15. Where possible, provide an example to support your observations.
16. As your feedback is important in shaping students' learning, you should provide specific ways they can make their interaction more appropriate with you as a patient.

Simulated patient feedback form

Student Names: _____ Date: _____

Your name: _____ Patient name: _____

Instructions: Consider the students' interaction with you during the interview. Please comment on each of the areas listed below, speaking from the perspective of the patient and how you felt during the interaction.

In this interaction, I felt:	**Body language** Eye contact Facial expression Use of gesture Positioning in relation to you	**Communication** Level of formality Speech loudness Speech rate Listening Use of jargon (i.e. medical or speech pathology terms that you did not understand)	**Clinical skills** Explanations Instructions Clarifying information Providing a summary and next steps	**Professionalism** Attitude Manner Respectfulness Inclusion in goal setting and plans
A little uneasy *at times*				
At ease *most of the time*				
At ease *at all times*				

Any further comments:

Mrs Beth Connor

Timetable		
Simulation 7	Communication assessment	**DAY 4 AM** • Arrive at Sim Lab: 8:45am • Preparation: 8:45am – 9:15am • Simulation: 9:15am – 11:30am

General character information	
Name	Beth Connor
Age	32 years
Address	16 Main Avenue, Newtown
Family	• Husband (Tim Connor). You have been married for 2 years. • You do not have children. • Tim is a very supportive husband.
Occupation	• You work full time as a teacher at the local primary school. • You are a well respected member of the community.
Personality	• You are a social, active young woman. • You love socialising with friends.
Hobbies	• You are a busy teacher but enjoy being active on the weekends – going for walks, bike rides. • You and Tim both enjoy playing a variety of sport. • You are both planning to travel at the end of the year. • You play Netball weekly.
Medical History	• You recently injured your right knee playing netball for your club. • You required a right anterior cruciate ligament (ACL) knee reconstruction surgery to prevent any further ligament damage. • Other than the your ACL reconstruction 2 weeks ago, this is the first time that you have had a hospital admission. • You are otherwise fit and healthy with nil other medical conditions.

**Additional details (ie. Personal memories, children's names/stories, other interests and hobbies) may be improvised as required.*

Patient background	
What brought you to hospital?	• You have recently had a right ACL knee reconstruction 2 weeks ago. • You saw your GP 1 day ago (yesterday) as you were complaining of severe headaches. These headaches had started following your recent surgery and have been persisting for 10 days and had not subsided. • You also reported some blurred vision and some loss of coordination in your body movements over the past 10 days. • You have not had had headaches of this nature prior to your ACL surgery. • Your GP ordered an MRI of your brain and cervical spine. • The brain MRI report revealed a left cerebellar lesion (low at the back of the brain). • Following this scan your GP referred you to the Emergency Department of the National Simulation Health Service (NSHS) hospital. • You presented to the Emergency Department of the NSHS hospital following the recommendation of your GP.
What has happened since you have arrived in hospital?	• From the Emergency Department, the neurosurgery team have taken over your care and admitted you to the ward. • Given your age and diagnosis the Neurosurgeon scheduled an urgent resection/removal of the tumour. • This surgery is scheduled for later today. • You have been informed that post-operative radiotherapy may also be required. • To manage both the headaches and pain post-surgery your current medications include: Endone, Diazepam, Nurofen, Panadol, Tramadol (you only need to remember a few of these names but know that you are on a lot of medication currently).
Current presentation:	• You are lying in bed awaiting the arrival of the student clinicians. • You are pleasant and co-operative. • You feeling very anxious today waiting for the surgery. • You have a knee brace on (Zimmer splint or just bandage). • You are waiting for your husband Tim to arrive at the hospital prior to your surgery.

Simulation 7 overview	

Scenario overview	• You (Beth) are a 32 year old woman admitted to the NSHS yesterday.
	• Student clinicians are meeting you for the first time on the acute Neurosurgery ward in the hospital.
	• Students will attend the bedside to complete a pre-operative communication screening assessment. The purpose of this task is to obtain a baseline measurement of your current communication skills.
	• The same assessment will be conducted post-operatively to determine if there have been any changes with your communication skills as a result of the tumour resection/removal.
	• Student clinicians will be required to discuss the post-operative course with you regarding your communication skills (e.g., that there will be swelling immediately post-surgery, some symptoms may persist etc).
	• You present with:
	  ○ significant headaches,
	  ○ low volume of voice,
	  ○ slurred speech at times.
	
	The student clinicians are wanting to:
	1. Discuss the post-operative course with you regarding your communication skills.
	2. Complete an informal screening assessment of your speech and voice.
	3. Communicate the results of the screening assessment to you.
	
	Student clinicians have **15 mins** to complete the above.

Learning objectives	When managing your care, the speech pathologist will aim to achieve the following: • Assess you prior to brain surgery to determine current functioning of your communication skills. • Assist recovery of your communication skills following your surgery by providing treatment and strategies. It is expected that the student clinicians involved in your care will be able to: 1. Effectively conduct a pre-operative screening assessment of communication skills. 2. Effectively communicate information to you regarding the likely post-operative course in relation to her communication skills.
Setting	• You will be lying in bed resting with your eyes closed awaiting the arrival of the student clinicians. • You are on Ward 2D (Acute Neurosurgery ward). • No other hospital staff or family members are present with you today. • You are waiting for your husband Tim to arrive before you have your surgery.

	• You are wearing a hospital gown.  

The simulation	
What the speech pathology student clinicians will do:	*What you should do:*
• Student clinicians will enter the room, use your name and introduce themselves	• You are to open your eyes in response to your name being called. • You acknowledge them by smiling, maintaining eye contact and introducing yourself. • You appear like you have a bad headache and you need to put a lot of effort into concentrating on what has been said. • You are finding it hard to think. • The volume of your voice is considerably low and your speech is sounding slightly slurred. • If asked, you report that your speech has not sounded 'normal' since your knee reconstruction surgery and you are aware that you are speaking more quietly than usual. • You are also taking a lot more time, your speech is slower and a little slurred.
• Student clinicians will continue to build rapport with you by talking to you, asking questions of you	• You should always be cooperative with what you are asked to do. • If the explanations are not clear, too long then you should start to look like you are having to really concentrate on what the student clinicians are saying as you have a headache. • Close your eyes at times to indicate you are finding it hard to think. • If the student clinicians ask you to complete any tasks, you will cooperate, but perform all tasks very slowly as if your headache is making it hard to do so and that you are having difficulty maintaining concentration on the task.

The simulation	
What the speech pathology student clinicians will do:	*What you should do:*
• Student clinicians may ask you questions before they start their assessment • If the student clinician says "I am sure you will be fine."	• You are happy to be seen by the student clinicians as you have been worried about how you have been feeling and sounding. You will sound slurred when you speak most of the time. • *"It is nice to meet you …… I have been noticing that since my surgery my speaking sounds different and I am not sure if it is due to the headaches or what but I am needing to really concentrate at times."* • *"I am in so much pain with both my knee and now this headache it is getting really difficult to manage it all. Is this going to be fixed after my surgery today?"* • You can say: *"I need to be able to go back to work and at the moment that certainly doesn't even seem possible. I have no idea how I will cope with a classroom full of children."* • You maintain eye contact at all times. You are attentive but this begins to waver towards the end of the session and particularly during tasks that are more difficult. You often say: • *"I am sorry but I am just so nervous and my head is pounding at the moment."* • *"It is really hard to concentrate."* • *"Would you mind saying that again?"* • You are feeling quite anxious and mention this throughout the session. • *"This is just so scary. I went in to fix up my knee and have come out with a brain tumour. It is like a bad dream. Have you heard if my husband Tim is on his way?"*
• Student clinicians will position you in the bed – raise you to be upright	• You are to agree to this. • If it is uncomfortable let them know that this is the case. • If they do not attempt to position you upright let them know that you are wanting to sit up.
• Student clinicians will commence an assessment of your communication skills	• If the information provided is too complex then indicate that you have a headache and

The simulation	
What the speech pathology student clinicians will do:	*What you should do:*
	need to think about what they have said. <u>Speech/Voice</u>: • Your speech at times appears a little slurred like you are tired or having difficulty with the transition of moving between sounds. • Your tongue feels fat. • Your speech sounds like you have something in your mouth and are talking around that e.g. a tic-tac. • You tongue and lip movements affected currently – slower and more unco-ordinated movements. • Your vocal volume is considerably lower than your normal voice. • You report that you have noticed that your speech has not returned to 'normal' since your knee reconstruction surgery. • Student clinicians can discuss with you regarding the possibility of your reduced volume due to you being unwell, significant medications for pain management, headaches, occupation.

Structure:	*What you should do:*
Jaw	No difficulties with movement.
Face	You have difficulty with your lip seal on the left side (when asked to puff your cheeks with air – air will escape on the left side). You are a little slower and demonstrate some incoordination of your lips on the left side.
Cough	You have a weak cough. You complain of a headache when asked to cough. You are able to swallow your saliva when asked.
Voice	You have a softer volume of your voice.
Tongue	Only mild difficulties when asked to move your tongue (slightly slowed range of movement, weakness on the left side, when asked to poke your tongue out it falls slightly to the left side).
	SWALLOWING • You are not having any difficulties with swallowing. • You are able to manage all foods and drink. • You are aware that you are not able to eat or drink at the moment prior to your surgery – you are Nil by Mouth.

References

MacBean, N., Theodoros, D. G., Davidson, B. J., & Hill, A.E, (2013). Simulated learning environments in speech-language pathology: An Australian response. *International Journal of Speech-Language Pathology, 15*(3), 345-357.