Inter-professional Simulation and Learning for Patient Safety

Dr Elizabeth Berragan

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Thank you to my colleagues at the University of the West of England, for enabling me to undertake this trip. Thank you especially to all my colleagues within the department of Nursing and Midwifery for their understanding while I was away.

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Finally, thank you to my family; to those in Australia who looked after me so well and showed me the sights of Western Australia at the end of my visit, and those left at home who supported me and maintained the day to day routines of work and school to enable me to take up this fantastic opportunity.
## Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ASpiH</td>
<td>Association for Simulated Practice in Healthcare</td>
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<tr>
<td>CALD</td>
<td>Culturally and Linguistically Diverse</td>
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<td>DOHA</td>
<td>Department of Health and Ageing</td>
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<td>EWS</td>
<td>Early Warning Score</td>
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<td>GMC</td>
<td>General Medical Council</td>
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<td>GPhC</td>
<td>General Pharmaceutical Council</td>
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<td>HCPC</td>
<td>Health and Care Professions Council</td>
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<td>HEE</td>
<td>Health Education England</td>
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<td>HESW</td>
<td>Health Education South West</td>
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<td>INACSL</td>
<td>International Nursing Association for Clinical Simulation and Learning</td>
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<td>IP</td>
<td>Inter-professional</td>
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<td>IPE</td>
<td>Inter-professional Education</td>
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<td>KCES</td>
<td>Kiersma-Chen Empathy Scale</td>
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<td>MoD</td>
<td>Ministry of Defence</td>
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<td>NEWS</td>
<td>National Early Warning Score</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NMC</td>
<td>Nursing and Midwifery Council</td>
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<tr>
<td>Code</td>
<td>Description</td>
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<tr>
<td>RSVP</td>
<td>Reason-Story-Vital Signs-Plan system</td>
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<tr>
<td>SBAR</td>
<td>Situation-Background-Assessment-Recommendation</td>
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<tr>
<td>SBE</td>
<td>Simulation Based Education</td>
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<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
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<td>UWE</td>
<td>University of the West of England</td>
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<td>WACHS</td>
<td>Western Australia Country Health Service</td>
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<td>WCMT</td>
<td>Winston Churchill Memorial Trust</td>
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Professional Profile

Dr Elizabeth Berragan is an Associate Professor and Learning and Teaching Fellow at the University of the West of England (UWE), Bristol. Elizabeth draws upon over 30 years of experience in critical care nursing, military nursing and healthcare education working with the NHS, MoD, independent and voluntary healthcare sectors and higher education. As a Nurse Educator Elizabeth is passionate in supporting students to learn to deliver compassionate and evidence based nursing care. Focusing upon the clinical simulation environment, Elizabeth works to develop, facilitate and share successful learning strategies for students which can be transferred to the practice learning environment to help students to deliver safe and effective care.

Inter-professional learning is an important focus of Elizabeth’s work. She is currently leading work with colleagues from three universities (UWE, Bristol and Bath) focusing upon inter-professional clinical simulation for final year nursing, medical and pharmacy students. This work will now be incorporated into nursing, allied health professions, medical and pharmacology curricula, and will provide a truly multi-professional learning experience through which students will learn and work together. This innovative learning experience enables students to consider what it means to deliver safe and effective care and to recognise the impact of human factors upon safety.

A major focus of Elizabeth’s work is the pedagogy and practice of simulation enabling and inspiring undergraduate and postgraduate students to engage with innovative and practice focused experiences. Elizabeth is on the executive committee of the Health Education South West Simulation Network working with colleagues across the South West and the Association of Simulated Practice in Healthcare (ASPiH) to deliver local and national standards for the delivery high quality simulation learning for health care professionals. National and international roles and collaborations working with colleagues across the UK, Australia, Finland, Norway and USA have enabled Elizabeth to raise the profile of simulation work at UWE and share that work with others. Her recent award of a Winston Churchill Travelling Fellowship enabled her to learn from expert colleagues in Australia about their award winning work on simulation and patient safety. This experience has supported her strategic vision for outstanding learning through simulation.
1. Executive Summary

I travelled to Australia where I spent 4 weeks exploring educational initiatives to support undergraduate healthcare students to learn to deliver safe and effective care to their patients. In particular I was interested in inter-professional education and simulation as pedagogical approaches to highlight the importance of patient safety, quality improvement and preparing students for the real world of healthcare practice.

The objectives of my project were to:

• Explore how patient safety issues can be transformed into learning opportunities through the use of innovative simulation approaches.
• Share and identify practical simulation methodologies to address different aspects of clinical practice and patient safety.
• Work with colleagues at Bristol and Bath universities to design, deliver, debrief and evaluate interdisciplinary simulation scenarios to address patient safety.
• Work towards embedding interdisciplinary simulations for patient safety within nursing, pharmacy and medical curricula.

The project was and will continue to be carried out in a number of phases:

1. Development and pilot of inter-professional ward simulations for final year medical, pharmacy and nursing students. This was in progress prior to my Fellowship application.

2. Dissemination of results of the pilot studies to encourage debate, critical analysis, evaluation and awareness of this work. The project has been presented and published at a number of healthcare, medical and nursing conferences and in International Nursing Journals.

3. To meet Professor Levett-Jones and colleagues from the University of Newcastle, New South Wales (NSW), Professor Kelly at Curtin University in Perth, and international colleagues attending the NETNEP 2016 conference in Australia to explore, experience, work with and discuss their work and views on simulation and patient safety.
4. Develop collaborative working opportunities with colleagues in Australia to share good practice and further disseminate this work to colleagues locally, nationally and internationally.

5. To use this exceptional opportunity and learning experience to share with colleagues at UWE, Bristol University and the University of Bath. Learning from my visits across Australia, I hope to develop and embed brief and intense simulation-based scenarios which will increase perceived confidence in communicating and working in impromptu teams for pre-qualifying students from multiple health science disciplines.

My findings highlighted that in order to develop and embed authentic and realistic simulation experiences for learning, there needs to be not only enthusiasm to drive development but also the support, knowledge and infrastructure to underpin and sustain development. During conversations with colleagues in Australia a number of themes emerged as essential to simulation learning for healthcare practitioners. These themes reflect both the educational experience and the focus of safety and quality improvement: quality indicators for simulation, clinical reasoning, inter-professional education for teamwork and communication skills, cultural empathy and professional identity.

My recommendations have evolved from analysis of the information that was shared with me and the need to ensure that any learning experience must be sustainable and sufficiently flexible for the needs of the healthcare workforce and for the benefit of patients and service users. These recommendations are:

- To develop and embed National and local simulation principles and quality indicators for simulation based education (SBE).
- To provide support, identify frameworks and adopt pedagogical approaches for the development of clinical reasoning skills.
- To ensure IPE focuses upon communication and teamwork skills.
- To develop and foster cultural empathy for compassionate healthcare.
- To understand and support the development of professional identity.
2. Introduction to the Project

2.1 Background

For health and social care students, it is essential that patient safety and quality improvement are key features of undergraduate curricula. This project recognises the need for healthcare students to learn to work together through educational initiatives in order to deliver safe and effective care to their patients.

At UWE we have offered an inter-professional curriculum since 2000 involving ten pre-qualifying professional programmes. The curriculum has included compulsory, assessed inter-professional modules in each year, together with inter-professional outcomes in both uni-professional modules and supervised practice (Barrett et al., 2003).

Whilst it is clear that UWE has led the way in relation to an Inter-professional (IP) curriculum for health and social care students, the journey has not been without its challenges. These challenges, highlighted within the Inter-professional literature (IPE), include:

- Attitudes concerning inter-professional issues on entry to the programme.
- Engagement with theoretical concepts for inter-professional working.
- The ability to transfer theoretical concepts to practice situations.
- Support needed by students during their professional education.
- The inclusion of medical colleagues.

Evidence from internal (Pollard et al., 2009) and external (Salfi et al., 2012) studies reinforce the argument for including inter-professional education (IPE) in pre-qualifying curricula which is mandatory in the United Kingdom (UK) (Department of Health & Quality Assurance Agency, 2006). Given some of the findings and conclusions drawn by Pollard et al. (2004) in their longitudinal study in relation to student perceptions of IPE, I was interested in discovering how simulation might enhance the delivery of IPE (King et al., 2014). Inter-professional (IP) simulation learning experiences are increasingly more common with a focus on enhancing non-technical skills, such as
communication and collaboration (Reeves et al., 2010; Shoemaker et al., 2011). Brief and intense simulation-based scenarios can increase perceived confidence in communicating and working in impromptu teams of pre-qualifying students from multiple health science disciplines (Miller et al., 2008).

For our students, it is essential that the impact of human factors and the importance of patient safety and quality improvement are addressed within the curriculum. This project embraces the recommendations of the “Shape of Caring (Willis, 2015) and “The Better Training Better Care programme” (HEE, 2014) and recognises the need for healthcare and social care students to learn to work together through educational initiatives in order to deliver safe and effective care (Francis, 2013; Willis, 2013, Temple, 2010; Collins, 2010).

2.2 My interest in inter-professional education through simulation

My nursing career has been exciting, absorbing and wide ranging. At the heart of all my teaching has been the principled and passionate commitment to emphasise the difference that nurses can make to the lives of others and for me this includes the difference that I can make in my students’ learning. My background as a practitioner, an educator, a manager and an army officer has meant that I have always sought to promote an understanding of the diversity of the profession of nursing. These roles have shaped my understanding and my passion for transforming and inspiring the learning and development of our future nursing workforce. My aim is to inspire and motivate students to integrate knowledge, scholarship, and research into their professional practice as they learn to be nurses.

Whilst my remit as associate professor is focused within the department of nursing and midwifery, I have expanded beyond my immediate role to work across departments in the Faculty, the University and externally to develop knowledge and understanding of simulation and to promote and share excellence in teaching and learning. Designing, planning and delivering inter-professional simulations has been an important focus for me in my desire to enable participants to engage in the co-production of knowledge about health care practice (Kennedy et al, 2015; Melgies et al., 2014). Lessons from studies of other disciplines within and beyond health provide a wider context for simulation pedagogy (Berragan, 2013).
One example, from a number of inter-professional simulation projects that I have directed, included final year nursing, and medical students from two universities, and focused upon patient situations that they would encounter in clinical practice. The simulation offered participants the opportunity to identify and prioritise patient care, manage and delegate clinical tasks and work together to ensure efficiency and patient safety. Key features incorporated the use of low fidelity or less technological equipment together with minimal staffing. My aim was to explore and pilot a sustainable and deliverable approach to inter-professional simulation for large numbers of students which could be implemented across a widely dispersed and inconsistently resourced region. Data collected from students and staff asserted that the inter-professional ward simulation offered a very effective way of improving confidence in prioritisation and on-call skills (Kelly et al., 2016). “I personally feel that this has taught me a whole lot more about IP [inter-professional] communication and collaboration in the one afternoon we spent with the nursing students than anything else in our curriculum to date. Thank you for creating it and giving us the opportunity for such fantastic learning”, (Final Year Medical Student, Bristol University). “Thank you so much for your work and vision in this project and for allowing our Year 5s to participate; it was a joy to work with you and your students who were a credit to both UWE and adult nursing”, (Bristol University Medical Academy Dean). With the support of the WCMT and my Fellowship, I am now taking this project a step further and am thrilled to be leading colleagues from three universities (Bristol, Bath and UWE) to incorporate this approach into nursing, allied health professions, medical and pharmacology curricula. This will provide a truly multi-professional learning experience through which students will learn and work together. This project emphasises a patient safety focus embedded through simulation enabling students to consider what it means to deliver safe and effective care and to recognise the impact of human factors upon safety. My Fellowship travels have enabled me to explore and discover how colleagues in Australia are addressing patient safety for students.

2.3 Aims and Purpose

The purpose of this project is to offer inter-disciplinary simulation experience to final year nursing, pharmacy and medical students which focus upon clinical situations that
they would encounter in clinical practice. Embedded into undergraduate curricula, the simulation experiences will offer participants the opportunity to identify and prioritise patient care, manage clinical tasks and work together to ensure patient-centred, effective and safe care.

Student learning objectives

• To learn to work together to ensure efficiency and patient safety.
• To communicate with each other and develop mutual understandings of each other’s professional roles and responsibilities.
• To practise giving and receiving effective handovers.
• To practise prioritising on-call jobs and tasks.
• To practice and refine the skills of delegation.
• To help students identify when and how to escalate concerns.
• To give students the opportunity to practise calling for help.
• To understand the importance of working together and supporting each other.

Learning with and from expert colleagues in Australia has helped to determine how simulation education can support patient safety and quality improvement and ensure that at the point of registration, and as part of undergraduate curricula, students are fit to practice.

Anticipated benefits of my project include: focusing upon patient safety and preventing adverse patient outcomes; improving the learning experiences of healthcare students; creating authentic learning situations that expose students to real practice but in a safe environment.

The purpose of this project is to explore and develop inter-disciplinary learning experiences for health care students which focus upon and replicate situations that they will encounter in clinical practice. The simulation learning experiences that we have piloted have enabled students to identify and prioritise patient care, manage clinical tasks and work together to ensure efficiency and patient safety. My Fellowship has given me the opportunity to explore how an understanding of patient safety can
be supported through simulation experiences provided for healthcare students in Australia. This has enabled me to learn from experts and use my learning to support inter-professional simulation work at UWE and across the South West of England. This will have a direct impact upon care enhancing safety, team work, communication and collaboration.

It is very important to look beyond the horizon to ensure that this work influences the recipients of our care, including patients in hospital, residents in older persons’ care facilities, the community, and many other health services. Without this focus, the work that we do has little meaning or relevance. This Fellowship has enabled me to learn from and work with renowned colleagues to develop and deliver relevant, stimulating and meaningful learning experiences for our future health care workforce. I believe that simulation offers a safe and engaging learning environment and approach for multi-disciplinary student learning. I am committed to truly making a difference to patient safety and quality improvement through education.

2.4 Planning my Fellowship travel

My travel was focused in Brisbane and surrounding areas in Queensland and New South Wales; and Perth and surrounding areas in Western Australia.

After being awarded the Fellowship, I was keen to ensure that I had identified a network of relevant healthcare professionals and places to visit prior to leaving for Australia. The Winston Churchill Memorial Trust advises its Fellows to “aim high” when identifying people to contact. Therefore prior to submitting my application for a Fellowship I had contacted healthcare educators in Australia who I knew were working in the field of inter-professional education and simulation. I chose Associate Professor Michelle Kelly as she was instrumental in developing networks and linking colleagues nationally and internationally within the field of simulation and we had already had some brief conversations about key strategies for learning through simulation. She also had Australia-wide and international remits for sharing and disseminating good practice in simulation learning and would therefore be able to advise me regarding areas of good practice to visit across Australia.
I discussed the aims of my project with Dr Kelly and asked if she would be able to facilitate access to relevant colleagues if my application to WCMT was successful. Once I had been awarded my Fellowship, she became one of the key enablers for my visit to Australia and she facilitated contact with a range of colleagues who were leading academics in the simulation field. These initial contacts put me in touch with other colleagues and this continued to snowball, until I was quite overwhelmed by the number of people who were offering their time and opportunities for me to visit their organisations.

2.5 Conference, visits and meetings

My trip to Australia was exciting and engaging and included individual meetings, meetings with teams, visits to simulation facilities and a conference. My trip started in Brisbane and finished in Perth (Appendix 1). I started my travels in Brisbane attending the NETNEP2016 Conference, a biennial international nurse educators’ conference which has the theme of simulation as a key focus for discussion and debate. The conference provided a pivotal opportunity for me to present my work in workshops and oral presentation sessions and meet with colleagues from across the world who were interested in what we had achieved and were planning in Bristol and/or were implementing similar strategies. My presentations were extremely well attended and my audiences included prominent academics in the field of simulation learning and nurse education who discussed my project with me and offered opportunities for me to discuss their work in the context of my aims and objectives. Prior to my visit I had read a number of their papers in order to prepare for my visit, however, the opportunity for face to face discussion was invaluable and gave me a deeper understanding of the contextual differences between Australia and the UK, as well as the potential for transferability across countries.

In total I visited six universities across the three states and I met with over 60 educators, practitioners, leaders and students who were involved in inter-professional education, patient safety, quality improvement and simulation. Allowing for a degree of flexibility in my schedule to include unexpected opportunities was important and gave me the space to pursue new contacts and also enabled me to explore postgraduate education and training through simulation for practitioners working in
remote areas. This offered a different perspective and one which has encouraged me to look differently at the creation and development of learning experiences to ensure sustainable and inclusive participation.

2.6 Collecting and making sense of the wealth of information

During the conference and my visits I collected a vast amount of information. It was clearly important that I recorded and stored this information to ensure that it would be available for the development of my work in the UK and for the writing of this report. I did not want to tape record meetings as I felt that this might influence the content and flow of discussions, and so I decided to write notes during and after each meeting and visit. This was achieved with the permission of everyone that I met during my travels in Australia. Revision of my notes soon after each visit helped to summarise our discussions and my learning and also highlighted areas for further discussion, collaboration and focus. After each visit, I scrutinised my notes and measured them against the aims of my visit. The report of my findings has been achieved through thematic presentation of the many conversations that I had. It draws upon the published work of some of my contacts together with my own analysis of meaning in relation to my work in the UK. I have not attributed all of the information that was shared with me as many individuals gave me their honest and sometimes candid observations in order to facilitate my understanding of their position in the context of healthcare education in Australia. Thus what is presented as findings are my interpretation of our conversations, literature and learning which impact upon the development of learning for safe and effective patient care within a UK context.

There are a number of contextual differences between Australia and the UK. These differences relate mainly to geography, healthcare workforce education and funding. It is important to highlight these contextual issues in relation to my findings.

2.7 Contextual differences between Australia and the United Kingdom

2.7.1 Geographical differences between Australia and UK
The landmass of the UK covers approximately 3% of that of Australia but the UK has over three times the population of Australia (Figure 1). The largest proportion of the population of Australia lives in 10 large cities. The remainder live in communities across Australia, often in remote or rural areas.

![Landmass of the UK compared with that of Australia](http://www.ga.gov.au/scientific-topics/geographic-information/dimensions/australias-sizecompared)

**Figure 1: Landmass of the UK compared with that of Australia**  
Source: Australian Government, Geoscience Australia

2.7.2 Western Australia

The geographical spread of Australia has a major impact on the provision of healthcare services, especially in Western Australia. Western Australia is the Australia’s largest state and covers 2,529,875 square km (976,790 square miles). The map below (Figure 2) highlights the spread of Western Australia and the travelling distances to healthcare facilities, particularly public hospitals.
During my visit, I was invited by the training team at Western Australia Country Health Services (WACHS) to join them as they delivered training through simulation to nurses and doctors in some of the extremely rural and remote parts of Western Australia. These regions are difficult to access with journey times that are long and flights which are expensive. Therefore I made a pragmatic decision not to travel beyond the urban areas around the capital city. Furthermore, my main focus was on undergraduate
education based in the universities in and around Perth (Curtin, Edith Cowan, and the University of Western Australia). Therefore remote healthcare education was not a major emphasis as registered practitioners, whilst still needing to communicate with colleagues, often worked in isolation and made clinical decisions in isolation as a requirement of their role. However, although not a key part of my study, I was interested in how clinical staff in remote areas were trained and supported to manage acutely ill patients. My conversations with the training team at Western Australia Country Health Services was extremely interesting. They talked about simulation development and the role of debriefing for in-situ (point of care) simulation experiences. Their goal was to run “train the trainer” programmes to enable staff to take on the role of delivering simulations in each region. The geography of Western Australia certainly presented many challenges to healthcare training staff and they spoke of the rewards that staff received living and working in such communities. This including being part of a community where they were able to develop close and therapeutic relationships with their patients and their families.

2.7.3 Differences in organisation and health services nursing workforce

Although Australia and the UK have much in common, there are also a number of notable differences. The way in which health services are organised and staffed is particularly noteworthy. For example, Australia operates a mixed economy of state and private healthcare. The two sectors often co-operate and quite often a private hospital may be located close to a state hospital with the two hospitals sharing some services.

There are also a number of differences in the staffing of the Australian health service in comparison to workforce staffing in the UK. A key difference is that the large metropolitan hospitals employ a mainly qualified nursing staff workforce. Health Care Assistants, in the few places where they are employed, assist qualified nurses rather than replace them. This differs from the UK where a much greater use of Health Care Assistants is made, particularly in front-line nursing roles such as undertaking physiological observations and delivering fundamental nursing care.

Australia offers both registered nurse (degree) and enrolled nurses (diploma) programmes. This is a similar situation to that of the UK until 1989 when enrolled nurse
education was discontinued. However, the responsibilities of the enrolled nurse are more limited in Australia than they were in the UK. Those wishing to become a Registered Nurse in Australia undertake a three year Bachelor of Nursing degree in a University whilst those seeking to become an Enrolled Nurse undertake a two year diploma level programme at a Technical and Further Education (TAFE) or other educational institute (there are some variations in this across Australian states).
3. Findings

This section provides a discussion and analysis of my findings. It draws upon conversations that I had with the people that I met in Australia, papers published by some of them or recommended to me and my own analysis of the information. Whilst each theme is presented in isolation, it will become clear on reading that many have connecting and overlapping subject matter and thus, on occasion there is by necessity some repetition.

As previously stated, as I journeyed across Australia I began to realise that my initial focus of inter-profession learning through simulation for patient safety needed to include the infrastructure and the pedagogical scaffolding which would support and sustain simulation learning. This included simulation governance in relation to principles, standards and delivery requirements. It also included comprehension and awareness of the experience of being a healthcare professional in society today. The themes that I present here are those which were discussed most frequently and will be most important to my work for inter-professional learning and patient safety. There were many other themes and areas of discussion which were relevant, engaging and important for healthcare education. However, pragmatically and for this report, I have decided to focus upon quality indicators for simulation, the notion of clinical reasoning, inter-professional education for teamwork and communication skills, cultural empathy and professional identity.

3.1 Quality Indicators for simulation

Simulation of clinical activities has been used for many years as part of healthcare education. New technologies have provided educators with a wider and more diverse range of authentic and realistic options to allow students to practice healthcare delivery in safe learning environments. This has led to the integration of a variety of simulation activities throughout healthcare curricula. Studies have evaluated the impact of simulation on the development of knowledge (Scherer et al., 2007; Hoadley, 2009; Kardong-Edgren et al., 2009), psychomotor skills (Rodgers, 2007; Hoadley, 2009; Blum et al., 2010), and clinical reasoning (Brannan et al., 2008). There is also literature discussing strategies and barriers to curriculum integration (Feingold et al., 2004; Wilford & Doyle, 2006; Jones & Hegge, 2008; Murphy et al., 2011).
I was interested in how quality indicators for simulation might help support the design and development of inter-professional simulation experiences. I assumed that they would have an impact upon the quality of the simulation experiences that students experienced including aspects of preparation, support, fidelity, and debriefing. I also assumed that the application of quality indicators would have potential for use to guide the design and implementation of simulation activities, and also to evaluate their effectiveness, both in academic and practice settings across a range of disciplines. In order to test my assumptions I discussed my thoughts with colleagues at the NETNEP 2016 Conference and in particular with Professor Tracey Levett-Jones and Professor Kerry Reid-Searl who had researched in this area. I also attended a number of presentations which focused upon quality and simulation offering different perspectives of standards and principles of simulation for education.

This resulted in a large amount of information which have been distilled into five themes: pedagogical principles, fidelity, student preparation and orientation, staff preparation and training and debriefing.

3.1.1 Pedagogical principles:

1. Simulation experiences are aligned with curriculum goals and programme and module objectives. Simulation experiences should be developed as part of a coherent curriculum structure with the ultimate goal of preparing graduates who are fit for practice.

2. A curriculum matrix or map illustrates how simulation experiences are integrated throughout the programme. This provides a way of ensuring alignment between programme, course, and simulation objectives.

3. There is scaffolding of learning experiences throughout the curriculum; and the required knowledge, psychomotor skills, clinical reasoning and reflective thinking skills, and use of healthcare technologies are taught prior to their implementation into simulation experiences. The term “scaffolding” refers to the provision of adequate support to promote learning. It implies purposefully constructed activities that build towards student mastery, with gradual reduction in staff involvement.
4. Simulation experiences, where appropriate, are integrated into clinical programmes and courses and progress in complexity throughout the programme. The introduction of simulation from the first year of the students' programme provides early experiential learning opportunities within a safe practice environment, as well as familiarizing students with simulation activities and building confidence for subsequent more complex activities.

5. Learning objectives guide all aspects of simulation design, including student preparation activities, clinical scenarios, group size, inclusion of observers or students from other disciplines, selection of manikin fidelity and other equipment, level of student support during the simulation, and method of debriefing. Clear learning objectives should be written prior to simulation design, and should be available to all staff and students prior to simulation activities.

3.1.2 Fidelity:

1. The range of simulation technologies and approaches used are consistent with learning objectives, resource availability, and cost-effectiveness. These include, but are not limited to, low, medium- or high-fidelity human patient simulation, part-task trainers and standardized patients (faculty, service users, students, and actors). Cost, as well as suitability, to meet required learning objectives should be considered when planning simulation activities and purchasing equipment.

2. Environmental fidelity is developed in line with the learning objectives of the simulation session. The fidelity level of the manikin often overshadows consideration of other aspects of fidelity. Providing a realistic environment gives the scenario contextual richness, and assists the students to become immersed in the situation.

3. Contextually-appropriate clinical equipment and the availability of hardcopy or electronic patient information and charts support a realistic clinical environment. Wherever possible, equipment and charts should be the same as those used in local clinical venues to increase the transferability of skills.
3.1.3 Student preparation and orientation:

1. Structured orientation is provided for students prior to the simulation session, and depending on the students’ prior exposure to simulation activities, includes an introduction and an opportunity to become familiar with the learning objectives, structure, timing and process of the session; the simulation environment, equipment, manikin, monitoring devices, and ICT (information communication technology) to be used. Adequate briefing prior to simulation sessions alleviates students’ anxiety and improves learning. Additional preparation before the simulation activity in the form of lectures, learning packages, or skills training provides the scaffold that assists students to perform in simulated situations.

3.1.4 Staff preparation and training:

1. Staff who design scenarios, conduct the simulation sessions, facilitate debriefing, and manage the technology have support and appropriate training. The training of staff is an essential to the effective instigation and continuation of simulation within any curriculum, and needs to be considered as an important aspect of the simulation budget.

2. Staff who design simulation scenarios and programme manikins are familiar with curriculum goals, have relevant clinical knowledge, and understand the technological capabilities of the manikins. Academic staff who are responsible for simulation activities require a range of skills and might need additional training or updates in new technologies.

3. Staff who facilitate simulation sessions have relevant clinical knowledge, understand learning objectives, and possess expert clinical teaching skills to enable students to relate theory to practice during debriefing. The quality of students’ simulation experience is largely dependent on the skills and knowledge of those facilitating the simulation sessions. A supportive attitude and effective debriefing skills are at least as important as familiarity with the manikin technology.
3.1.5 Debriefing:

1. Structured debriefing is provided immediately following the simulation. Debriefing sessions should be structured to explore key concepts from learning objectives and help consolidate students’ learning. Debriefing is most effective when conducted immediately after the simulation while the events and emotions are fresh in students’ minds.

2. Debriefing facilitates students’ reflection on practice, self-evaluation, and feedback on their perceptions of the experience. It should encourage students to identify areas for improvement and how to transfer learning into clinical practice. For novice students the opportunity for guided reflection will help them to develop and use these skills throughout their education and into registered practice.

3. Depending on the simulation objectives, opportunities for discussion of students’ non-technical skills, such as clinical reasoning, situation awareness, communication, leadership, and teamwork, are included in debriefing. Research continues to demonstrate the importance of these skills to patient health outcomes, and simulation provides a valuable teaching strategy for the acquisition of non-technical skills.

There is now a developing focus upon what constitutes quality use of simulation, and ways to evaluate implementation strategies. Whilst this has been evident internationally with standards and principles of simulation available in specific healthcare fields and especially nursing (INACSL standards), this has been less evident in UK. However, more recently in the UK, national and local simulation networks have begun to work upon a joint view of what is needed in order to ensure quality simulation delivery across healthcare (Association of Simulated Practice in Healthcare (ASPiH), 2016; Health Education South West (HESW) Simulation Network, 2016).

These are all themes which are familiar to me and whilst not nearly as well and as clearly refined, had formed the basis of much of my initial work for my role as Associate Professor within the Nursing and Midwifery department at UWE. I feel reassured that these themes should provide a focus for quality and I am eager to start working with them and linking them to local and national quality work with which I am involved in the UK.
3.2 Clinical Reasoning

Contemporary healthcare environments are dynamic, unpredictable and reactive. Increasing numbers of adverse patient outcomes are evident in the UK and across the world. Acute care settings have a growing proportion of patients with complex health problems who are more likely to be or become seriously ill during their admission (Willis, 2015). Whilst warning signs may often precede serious adverse events such as cardiac arrest, unplanned admission to intensive care and unexpected death (Royal College of Physicians, 2012), there is evidence that ‘at risk’ patients may not always be identified; and even when warning signs are identified they are not always acted upon in a timely manner (Smith et al., 2013).

In the literature the terms clinical reasoning, clinical judgment, problem solving, decision making and critical thinking are often used interchangeably (Thompson and Dowding, 2002). Elstein and Bordage (1991) define clinical reasoning as the way clinicians think about the problems they deal with in clinical practice. It involves clinical judgments (deciding what is wrong with a patient), and clinical decision-making (deciding what to do). Tanner (2006) conceptualises clinical reasoning as the process by which nurses make clinical judgments by selecting from alternatives, weighing evidence, using intuition and by pattern recognition. In this paper we use the term clinical reasoning to define a logical process by which nurses (and other clinicians) collect cues, process the information, come to an understanding of a patient problem or situation, plan and implement interventions, evaluate outcomes, and reflect on and learn from the process (Hoffman, 2007). Clinical reasoning is not a linear process but can be conceptualised as a cycle of linked clinical encounters.

Nurses use different but interrelated patterns of clinical reasoning. Although the cognitive thinking strategies used by nurses in decision-making and clinical reasoning have not been extensively examined, some studies have demonstrated differences between novice and expert nurses as well as between different groups of experienced nurses. Commonly used thinking strategies have been identified as “collection”, where patient data and information is obtained; “description”, where nurses describe facts and information; “selection”, the choosing of appropriate information; “inference”, making deductions about information; “synthesis”, putting information together; and “verification”, testing that information is correct (Jones, 1989 and Higuchi Smith and
Donald, 2002). In studies using verbal protocol analysis and problem behaviour graphs the identification of cognitive strategies has been accomplished by identification from verbal protocols or a priori from the literature, or by a combination of both (Ericsson and Simon, 1984 and Ericsson and Simon, 1993).

It was clear to me during visits to different universities and on tours of simulation facilities that there was a drive to focus upon clinical reasoning skills as well as technical skills. The information shared with me and explored in the narrative above suggested that simulation experiences had a part to play in helping students to learn, develop and master the skills of clinical reasoning in order to make clinical judgments and be able to select and deliver the right course of action for a patient in distress. The Clinical Reasoning Cycle (Levett-Jones et al., 2010) offered a framework for this and was presented by Professor Levett-Jones during the NETNEP 206 conference and discussed afterwards highlighting ways that it might be used to help students to navigate the complex process of clinical reasoning in order to achieve safe and effective care and positive patient outcomes.

Figure 1: The Clinical Reasoning Cycle (Levett-Jones et al., 2010) (with permission of the authors and publishers).
A diagram of the Clinical Reasoning Cycle developed from Hoffman’s (2007) study is shown in Fig. 1. In this diagram the cycle begins at 1200 h and moves in a clockwise direction. The circle represents the ongoing and cyclical nature of clinical encounters and the importance of evaluation and reflection. There are eight main steps or phases in the Clinical Reasoning Cycle. However, the distinctions between the phases are not clear cut. While clinical reasoning can be broken down into the steps of: look, collect, process, decide, plan, act, evaluate and reflect, in reality, the phases merge and the boundaries between them are often blurred. While each phase is presented as a separate and distinct element in this diagram, clinical reasoning is a dynamic process and nurses often combine one or more phases or move back and forth between them before reaching a decision, taking action, and evaluating outcomes.

This illustration of the complex and dynamic processes which occur as practitioners gather information to inform their decisions and actions is so helpful, bringing to life and to view the activities of professional practice which for many experienced healthcare practitioners are taken for granted, intuitive, tacit and often hidden skills.

Using this cycle as part of learning and teaching experiences will help novice practitioners to explore, question and practice these skills as they work towards proficiency. It will also be useful as a guide for debriefing enabling students to consider the decisions that they have made during a simulation experience and exploring and evaluating the effectiveness of their actions.

However, clinical reasoning requires effective teamwork and communication in order to ensure that decisions are acted upon and treatment decisions are carried out. Thus the theme of communication is one that justly featured in many of the conversations that I had both at the conference and during my visits across Australia.

3.3 Inter-professional Education for Teamwork and Communication Skills

Universities are committed to the preparation of graduates who will be able to work as effective members of the health care team. Nursing, medicine, pharmacy, and other allied health graduates are required to work both collaboratively and autonomously in complex clinical environments. This requires effective teamwork and communication skills. University-based health professional education has traditionally been delivered
in a discipline specific mode. This approach is limited in its capacity to equip graduates with the knowledge, skills or attitudes for inter-professional collaboration and for working effectively as part of a complex health care team (Garling, 2008). It is claimed that inter-professional education (IPE) is a strategy for addressing these concerns. Inter-professional education occurs when “two or more professions learn with, from and about each other to improve collaboration and the quality of care” (Centre for the Advancement of Inter-professional Education, 2002). The fundamental premise of IPE is that if health professional students learn together they will be better prepared for inter-professional collaboration and teamwork, ultimately leading to improved patient care (Barr et al., 2005).

In Australia, The Department of Health and Ageing (DOHA) in a report titled “Towards a National Primary Health Care Strategy”, referred to the importance of “multidisciplinary teams” and “interdisciplinary learning” (Department of Health and Ageing, 2008). In the same year, Garling’s (2008) Special Commission of Inquiry into Acute Care Services in NSW Public Hospitals made clear recommendations supporting IPE approaches, stating that education and training should be undertaken in a manner that emphasises interdisciplinary team-based patient-centred care. In the UK, a sense of urgency to implement IPE was generated by community outrage at the findings of the Bristol Royal Infirmary inquiry which attributed a significant portion of preventable errors to poor inter-professional collaboration (Bristol Royal Infirmary Inquiry, 2001). As a result, IPE is now a mandatory requirement in the UK for pre-registration training in health and social care (Department of Health & Quality Assurance Agency, 2006).

However, many of these recommendations appear to have been made without strong evidence of the effectiveness of IPE. The results of a systematic review of the effectiveness of inter-professional education in health professional programmes conducted in 2013 (Lapkin et al., 2013) indicate that students’ attitudes towards inter-professional collaboration and clinical decision-making ability may be enhanced through IPE. However, the researchers suggested that little evidence existed regarding whether the gains attributed to IPE could be sustained over time. Additionally, the evidence for using IPE to teach inter-professional communication skills, patient care objectives and clinical skills such as resuscitation was in their view inconclusive and needed further investigation. Although the studies in the review
reported a number of positive outcomes, the small number of studies, combined with heterogeneity of IPE interventions, limited the generalisability of the results. Future studies explicitly focused on IPE with rigorous approaches to recruitment, larger sample sizes, and appropriate control groups, were recommended to improve the evidence base of IPE. Additionally, since most IPE interventions are multi-faceted and include more than one professional group, it was suggested that future studies should consider cluster-randomised designs.

For my work in the field of simulation and for this project this is very exciting. The opportunity to research inter-professional education and learning for the healthcare professions through the medium of simulation might offer some answers in relation to sustainability and transferability to practice. However, this is a future project and one which will build upon the foundations of this project and future evaluations of the efficacy of inter-professional simulation experiences for healthcare students.

Discussions with colleagues in Australia who had implemented or were evaluating inter-professional simulation experiences with the purpose of exploring teamwork and communication made clear the value of effective inter-professional collaborative practice and the requirement of a solid foundation of knowledge about, valuing of, and respect for other professions. Their studies highlighted a lack of knowledge about how members of the inter-professional team contribute to patient care in the context of medication safety. This resulted in the underutilisation of the readily available expertise of team members, particularly the pharmacists. Their findings identified the need for team members to interact with each other meaningfully and as part of routine practice, rather than serendipitously or opportunistically which was frequently the case in the study. Knowledge and awareness of each other’s capacity for meaningful contribution was clearly linked to their expertise, being valued and validated. Open and direct communication was an important element inter-professional collaborative practice facilitated within a context of mutual valuing, respect, and trust. In such environments, professionals interacted confidently, contacted each other deliberately (rather than relying on accidental meetings), listened, gave and received advice, asked questions openly, freely acknowledged the limits of their own knowledge, and took action to prevent potentially serious situations without feeling constrained or fearful of being dismissed or ignored. Interestingly they suggested that when they had discussed this through focus groups with newly registered practitioners from a tertiary care
environment, displays of passive aggression and unhelpful communication strategies, such as withholding information, rolling eyes, ignoring, or being dismissive, were all noted as harmful to team functioning and, potentially, patient safety.

Colleagues in Australia clearly supported the introduction of IPE as an integral component of healthcare education for students to learn about other health professionals’ roles and responsibilities. IPE presents opportunities for increased focus on teaching inter-professional collaborative practice in ways that are directly relevant to and grounded in clinical practice. The creation and development of brief and intense simulation-based scenarios which will increase perceived confidence in communicating and working in impromptu teams for pre-qualifying students from multiple health science disciplines was considered to be a positive and relevant approach. In this way students could be supported and learning fostered in relation to knowing what the others can do, valuing each other and feeling valued, respecting each other and feeling respected, communicating with each other and collaborating towards a common purpose.

3.4 Cultural Empathy

The imperative for nurses and other health professionals to practice in a culturally competent manner is articulated in professional standards and codes internationally (International Council of Nurses 2012; Nursing and Midwifery Council, 2015; Nursing and Midwifery Board of Australia, 2013), and has long been an objective of pre-registration education programmes. While there is some evidence that cross-cultural education informed by various theoretical models can improve nursing students’ cultural knowledge (Allen et al. 2013), a recent review concluded that educational strategies have had a limited impact on discriminatory attitudes (Allen et al. 2013). Concerns have also been raised that decades of education and research in the area of cultural care have not achieved the necessary behavioural changes in health care practice (Grote 2008).

The concept of cultural empathy was first explored in counselling psychology, and grew out of a recognised need for therapists to perceive and communicate an understanding of the client’s experience, from the unique cultural perspective of the client (Fernandez et al. 2002). While cultural empathy has been a focus of counselling education (Grote 2008), it has not received the same attention in nursing education
Indeed, a search of the literature discovered few studies that had explored the effectiveness of educational interventions on nursing students' cultural empathy. In these descriptive studies of international placement experiences, student feedback indicated increased empathetic responses towards patients; however, pre- and post-differences were not measured (Sørensen 2009).

Educational approaches which attempt to place students ‘in the shoes’ of particular patient groups have achieved some positive results in fostering empathy, although few of these studies have discussed the elements of empathy being measured or used validated scales. Qualitative studies have described self-reported increases in nursing students' understanding of patient experiences and concern for patient groups. Such examples include the wearing of physical impairment suits and chronic obstructive pulmonary disease masks (Eymard et al. 2010) and the use of audio devices which simulate the experience of voice hearing in schizophrenia (Dearing & Steadman 2009). Kiersma et al. (2013) measured changes in nursing and pharmacy students' empathy scores when undertaking a Geriatric Medication Game where they assumed the role of an older adult experiencing physical, psychological, and financial problems while navigating the health care system. Changes were measured using the Kiersma-Chen Empathy Scale (KCES) and Jefferson Scale of Empathy—Health Profession Students and results indicated increased cognitive and affective empathy post simulation.

Simulation experiences have also been used in cross-cultural education in a range of educational settings, however empathy has only featured as an outcome measure in one identified study. In Sales’ et al. (2013) simulation undergraduate pharmacy students interviewed graduate students playing the role of culturally and linguistically diverse (CALD) patients; however, this approach did not have a positive influence on the participants' cultural empathy levels. Thus, the limited number of studies that have explored the role of simulation in fostering empathy and the paucity of quantifiable outcome data, underscore the need for findings confirmed by validated measures to guide the development of educational programmes in this area.

Professor Levett-Jones highlighted a number of important and valuable features of a 3D cultural empathy simulation designed and used in Australia. The purpose of the simulation was to provide an immersive and authentic ‘simulated’ experience
consistent with that of a person seeking health care in an unfamiliar context that is incongruent with their own culture and ethnicity. The premise was that this type of learning experience had the potential to enhance empathy towards people undergoing the same or similar type of experience, for example CALD patients undergoing health care in an Australian context. This principle was consistent with previous studies such as those that have shown how a person's own pain experiences increase empathy for people experiencing pain (Hodges et al. 2010). However, most previous studies relied upon actual experiences rather than simulated experiences. Only two previous studies that put students ‘in shoes of’ a patient and used a validated scale have been identified (Jakes 1999, Kiersma et al. 2013). The findings of this study are therefore novel as they demonstrate that exposing students to a 3D simulated experience rather than an actual experience can increase dispositional empathy.

The only identified cultural simulation that reported measurement of empathy involved a role play and did not have an impact on students' empathy (Sales et al. 2013). The experiential, immersive and realistic nature of the Australian 3D immersive simulation may have enabled suspension of disbelief and consequently had a measurable impact on students' cognitive and affective empathy.

The debrief that formed the final component of the 3D simulation included a number of prompts which encouraged perspective taking. For example, students were asked to reflect on their own feelings as they viewed the video and, following on from that, what it might feel like to be a patient in a clinical setting where the language and customs are foreign and unfamiliar. As perspective-taking instructions have previously been used in experimental studies to increase state empathy (Batson et al. 2002), it may well be that this element of the simulation contributed to the enhanced empathy scores.

The importance of educational approaches that seek to develop empathy is underscored by research identifying significant decreases in students' empathetic concern and perspective taking over the last three decades (Konrath et al. 2011). The results of this current study suggested that: (a) a brief educational intervention might increase empathy; and (b) that empathy education may be a key influence in health professional students' cultural competence.
As evidenced in my narrative so far, colleagues in Australia are using the medium of simulation to develop and test diverse and creative learning experiences. Cultural competence and cultural empathy are additional factors which support practitioners’ abilities to deliver safe and effective care. The medium of simulation, illustrated here demonstrates one way to provide focused learning experiences in order to build empathy and cultural competence. Given the culturally diverse communities in which healthcare students work within the UK, this approach might offer benefits for both students and service users.

3.5 Professional Identity

In the world of professional practice, practitioners are required to make complex decisions that impact on the lives of the individuals and families, and organisations with whom they work. Effective decision-making requires a degree of leadership and relies on the decision-maker having a well-developed professional identity. In nursing and healthcare education, building a professional identity involves engagement with practice in the field throughout a student’s years of study. Professional identities can be difficult to negotiate, given the diversity of practice undertaken by members of the profession, and students often reflect this difficulty following engagement with professional practice placements. On occasion students may struggle with integrating theory and practice, especially when they have limited exposure to the range of issues that registered practitioners may deal with in the course of their professional practice.

Drawing upon discussions that I had with colleagues from universities and WACHS I began to acknowledge that the opportunity to explore inter-professional practice within a simulated learning environment may help students move from a separation of theory and practice to a greater integration of the two. I also began to consider that this may help students to develop a positive professional identity.

Simulation has become an established pedagogy for clinical skills in healthcare (Berragan, 2011), offering students the opportunity to learn fundamental nursing skills in a safe environment, which closely represents reality (Linder and Pulsipher, 2008). In the controlled learning environment of the simulation suite (Jeffries, 2005) students are supported as they learn the skills of nursing assessment, react to changes in their patient's health and prioritize each patient's care needs without exposing real patients.
to risk (Moule et al., 2006; Robinson and Dearmon, 2013). In comparison to the intensity and pace of the clinical learning environment, learning through simulation takes place at a measured pace in order to meet individual learning needs (Reilly and Spratt, 2007), where activity can be halted in order to explore knowledge and understanding, and where feedback can be given and tacit knowledge articulated (Eraut, 2000).

Through simulation students have the opportunity to immerse themselves in the world of professional practice and are challenged to use the skills and knowledge of their profession in situations where leadership is required through effective decision-making activities. Simulation learning experiences with colleagues from other healthcare professions may help students to articulate and elucidate their professional identities and in doing so begin to work together more efficiently for the benefit of patients and service users.

Exploration of literature to substantiate and underpin my ideas highlights that professional practice theory (Benner et al, 2010) can help to articulate and elucidate students' development of a professional identity drawing upon the notion of apprenticeship as a metaphor for the complex embodied, cognitive, skilful, ethical and experiential learning required in practice disciplines (Benner and Sutphen, 2007). It also suggests that simulation learning may help students to begin to develop a habitus (Bourdieu, 1990) of skills, expectations, perceptual acuity and actions, which, over time, create the foundation for skilled, embodied healthcare practice.

Simulation presents an opportunity for students to begin to learn and develop a nursing habitus or medical habitus or pharmacological habitus, enabling them to rehearse the ‘skilled know-how’ required for competent practice. The opportunity to experience and act in complex professional situations through simulation enables the student to rehearse and refine the skills and practices of healthcare. It also facilitates the development of an understanding of a professional situation requiring specific actions and interactions whilst fostering the growth of professional identity.

My vision and aim is to embed these approaches to simulation in our professional healthcare curricula, to work to better equip healthcare students for the challenges of professional practice. By focusing upon the development of professional identity, I hope that we are able to foster the development and understanding of more effective
professional communication and intervention, and in turn when the students are out in placement and on completion of their undergraduate programmes they will be able to effect and improve the patient and client experience.

4. Recommendations

My recommendations have arisen from the wealth of information that was shared with me during my travels. Following on from my findings it is perhaps predictable that I have made recommendations on each theme in the belief that all are integral and vital to safety, quality and communication. Each of these recommendations will form the basis of my work over the next few years as I work with students, colleagues and partners to ensure that we provide the best learning opportunities to our future healthcare workforce.

4.1 National and local simulation principles and quality indicators for simulation based education (SBE).

There is now a developing focus upon what constitutes quality use of simulation, and ways to evaluate implementation strategies. Whilst this has been evident internationally with standards and principles of simulation available in specific healthcare fields and especially nursing through for example, the International Nursing Association for Clinical Simulation Learning (INACSL), this has been less evident in UK.

One of the key issues that I have identified in this report is the need for national and local guidance related to quality indicators and SBE standards of practice that would be relevant and of value to the increasing number and breadth of institutions, departments and individuals designing and delivering SBE.

ASPiH have established a SBE standards committee which has consulted a wide range of educationalists and professionals in the field of simulation based education, experts in undergraduate and postgraduate curricula and those with expertise in human factors and ergonomics. The draft standards are based on published evidence and a number of existing quality assurance processes currently in use across the UK and internationally including the General Medical Council (GMC), the Nursing and
Midwifery Council (NMC), General Pharmaceutical Council (GPhC) and the Health and Care Professions Council (HCPC).

However, more recently in the UK, national and local simulation networks have begun to work upon a joint view of what is needed in order to ensure quality simulation delivery across healthcare (ASPiH, 2016; Health Education South West (HESW) Simulation Network, 2016).

4.2 Support, frameworks and pedagogical approaches for the development of clinical reasoning skills.

There is evidence that ‘at risk’ patients may not always be identified; and even when warning signs are identified they are not always acted upon in a timely manner (Smith et al., 2013). There are a number of frameworks and algorithms available for practitioners to use in order to make sense, organise and evaluate the information that they have about a patient. These include Situation-Background-Assessment-Recommendation commonly known as SBAR, a technique for communication and situational briefing (Leonard, 2004). Another system for communication of deterioration in hospital patients is the Reason-Story-Vital Signs-Plan system (RSVP), similar to the SBAR model this also offers a concise and clear structure for communicating important patient information (Featherstone, 2004). The National Early Warning Score (NEWS), like many existing EWS systems, is based on a simple scoring system in which a score is allocated to physiological measurements already undertaken when patients present to, or are being monitored in hospital (Royal College of Physicians, 2012). All of these algorithms and communication tools provide information for practitioners to use to make decisions about treatment and care. The clinical reasoning cycle articulates and illustrates how that information can be used in order to make decisions and plan action. Therefore, using the clinical reasoning cycle as part of learning and teaching experiences will help novice practitioners to explore, question and practice these skills as they work towards proficiency. It will also be useful as a guide for debriefing enabling students to consider the decisions that they have made during a simulation experience and exploring and evaluating the effectiveness of their actions.
4.3 Ensuring IPE focuses upon communication and teamwork skills

According to the Health Foundation (2015) communication problems are routinely cited in patient safety incidents because communication is so central to everything healthcare professionals have to do. Ensuring that teams communicate effectively is therefore central to managing and improving patient safety – it binds people together and allows many individuals to act with a common purpose and with coordinated activity. Effective communication is not just about providing the right information at the right time. It is also about anticipating the needs of others, packaging information in ways that are practical and relevant to the task at hand, and being mindful of the different perspectives and knowledge that others in a team might have.

IPE presents opportunities for increased focus on teaching inter-professional collaborative practice in ways that are directly relevant to and grounded in clinical practice. Drawing upon the results of pilot studies already completed, the opportunity to participate in brief and intense simulation-based scenarios should increase perceived confidence in communicating and working in impromptu teams for pre-qualifying students from multiple health science disciplines. Having explored and analysed this approach with colleagues in Australia, I am confident that this is a positive and relevant approach. In this way students can be supported and learning fostered in relation to knowing what the others can do, valuing each other and feeling valued, respecting each other and feeling respected, communicating with each other and collaborating towards a common purpose.

4.4 Developing cultural empathy for compassionate healthcare

In 2012 Health Education England set out the strategy for nurses, midwives and care staff entitled Compassion in Practice. The publication set out the shared purpose of nurses, midwives and care staff to deliver high quality, compassionate care, and to achieve excellent health and wellbeing outcomes. It built upon the enduring values for nursing in the 21st century and the pledges and rights of the NHS Constitution, which patients, the public and staff should expect. It suggested that every patient and person can and should expect high quality compassionate care (HEE, 2012). Building upon this, The Five Year Forward View (NHS England, 2014) and the Chief Nursing Officer’s framework for nursing, midwifery and care staff Leading Change, Adding Value (HEE, 2016), compassionate care is at the centre of every dimension of healthcare.
Cultural competence and cultural empathy are additional factors which support practitioners’ abilities to deliver safe, effective and compassionate care. The medium of simulation, illustrated in my report (3.4) demonstrates one way to provide focused learning experiences in order to build empathy and cultural competence. Given the culturally diverse communities in which healthcare students work within the UK, this approach offers benefits for both students and service users.

4.5 Understanding and supporting the development of professional identity.

In the world of professional practice, practitioners are required to make complex decisions that impact upon the lives of the individuals and families. Effective decision-making requires a degree of leadership and relies on the decision-maker having a well-developed professional identity. In nursing and healthcare education, building a professional identity involves engagement with practice in the field throughout a student’s years of study. Professional identities can be difficult to negotiate, given the diversity of practice undertaken by members of the profession, and students often reflect this difficulty following engagement with professional practice placements. On occasion students may struggle with integrating theory and practice, especially when they have limited exposure to the range of issues that registered practitioners may deal with in the course of their professional practice.

Simulation presents an opportunity for students to begin to learn and develop a nursing habitus or medical habitus, enabling them to rehearse the ‘skilled know-how’ required for competent and safe practice. The opportunity to experience and act in complex professional situations through simulation enables the student to rehearse and refine the skills and practices of healthcare. It also facilitates the development of an understanding of a professional situation requiring specific actions and interactions whilst fostering the growth of professional identity.

Embedding these approaches to simulation in our curricula, we can work to better equip healthcare students for the challenges of professional practice. By focusing the development of professional identity, we can support and foster more effective professional communication and intervention, and in turn improve the patient and service user experience.
5. Conclusions and next steps

On my return from Australia I was keen to start promoting the benefits of applying for a Fellowship, especially to my colleagues in UK. Whilst I was in Australia I submitted abstracts to present at conferences which have been accepted. I also talk about the WCMT to colleagues in health and social care education, across the university and to external partners highlighting the benefits that I have been offered and the potential for plans to be realised following successful application. I am now acting as an ambassador for the WCMT at my university and am currently supporting a colleague to submit an application. I take every opportunity to mention that I am a Churchill Fellow and what that means and have been amazed at the opportunities that have been afforded by this. I am slowly recognising the high esteem in which the WCMT is held both internationally and within the UK. I am so proud to be able to introduce myself as a Churchill Fellow.

I am now building a range of ideas for curriculum development, student experience and engagement, learning and teaching strategies, staff support and development and research studies, all of which now need some clarity and organisation in relation to their focus and what can be achieved.

I am pleased to say that I met all of the original aims of my Fellowship and much more. A WCMT Travelling Fellowship offers much more than just meeting your original aims. It gave me the opportunity, legitimacy and support to meet with experts and leaders in the field of healthcare simulation learning. It also gave me the time to undertake an international visit, to learn from others and to share my work and emerging ideas with experts.

I will be working closely with colleagues in my department and at the Universities of Bath and Bristol to establish meaningful inter-professional learning which has a direct impact upon patient safety.

This will be achieved through a working group with student and staff representatives from each University who will manage, direct and contribute to each stage of development and implementation. This project has learning at its centre and it will therefore be important that we share our learning with colleagues across the UK as we progress. As detailed above, the dissemination of our experiences and our findings will be important. This project and future work will focus upon student learning.
experiences. With this in mind I am very keen to encourage students to share their experiences not only in involvement with our own pilot studies and development, but also through publication and supported presentation at professional conferences. This will offer additional value to student involvement and ensure that the student voice is heard.

A WCMT travel Fellowship offers much more than just meeting your original aims. It gave me the opportunity, legitimacy and support to meet with experts and leaders in the field of healthcare simulation learning. It has resulted in national and international collaborations, requests to present at conference and to share my work and my developing understanding of the possibilities for learning and teaching in healthcare in order to inspire the learning and development of our future nursing workforce. My ambition is for students to be equipped not only with all of the necessary skills and knowledge to deliver safe and effective care, but also to have a sense that learning is an exciting, life-long process. I want students to recognize that their learning is both a science and an art which, at its best, can enable people to improve, maintain, or recover health, and achieve the best possible quality of life, whatever their disease or disability, until death. My Churchill Fellowship has helped me to progress these aspirations and return to the UK enthused and galvanized to realize my ambitions through education to support the delivery of safe and effective patient care.

References


Appendix 1
**My Itinerary**

9 April – 22 April 2016
Curtin University:
Edith Cowan University
University of Western Australia
WACHS

29 March – 7 April 2016
NETNEP 2016 International Nurse Education Conference
Griffith University
University of Queensland

7-9 April 2016
Newcastle University