

CASE STUDY: INTRODUCING SIMULATION WITHIN THE SKILLS FOR HEALTH ACADEMY'S MULTI-PROFESSIONAL CADET SCHEME

In 2013, the Clinical Skills and Simulation team at Pennine Acute Hospitals NHS Trust (PAHT) recommended that a patient-centred approach to care needed to be reinforced much earlier in health education.

This was based on the publication and findings of the Francis Report which highlighted that fundamental aspects of patient care are still lacking throughout the clinical environment of the NHS. They believed that introducing this concept earlier would result in a drastic change in future clinical practice, not only within their own Trust but the whole NHS.

According to the NHS Institute for Innovation and Improvement, modelling and simulation tools give you a range of options for testing and experimenting with potential improvements. They provide a safe environment to see what their potential impact may actually be. This helps to reduce wasted resources and helps identify potentially unforeseen impacts.

The purpose of this pilot study was to introduce simulation into the education of the multidisciplinary cadet scheme, currently run by the Skills for Health Academy. Its aim was to educate young students in the fundamental basics of patient care by adopting a blended approach to learning, combining theoretical knowledge with the opportunity to practice key clinical skills in a simulated environment. The intended outcome was to enhance the underpinning knowledge of the

multidisciplinary cadet which in turn would lead to a safer environment and a more cohesive patient journey.

This pilot study included 31 multi-disciplinary cadet students, between the ages of 17-19, all based within PAHT. Healthcare cadets are preparing for a further theoretical and educational journey within healthcare and it was felt that this course should be used to bridge the gap between the cadet and nursing student.

Key Outcomes

- Results confirmed that the introduction of a patient-centred session into the multi-professional cadet scheme, via the use of simulation training, helped to instil within the participants the importance of human factors such as leadership/fellowship, communication and situational awareness.
- The multidisciplinary cadet students felt that the simulation session enhanced their understanding of basic patient care. This was highlighted within responses given on the pre and post-questionnaire, with a 41% improvement in student's knowledge of the Airway, Breathing, Circulation, Disability, Exposure (ABCDE) approach, which is applicable in all clinical emergencies for immediate assessment and treatment.
- The study highlighted the successful use of simulation in order to promote the effective use of communication within the healthcare setting. This is also shown by the contrast of responses given on the pre- and



post-questionnaires, with a 29% improvement in communication, which is significant.

- Selection of feedback from the multi-professional cadets who took part in the simulation:
 - *“I have really enjoyed the day, I have gained a lot of knowledge and it was very useful!”*
 - *“Would love to come back if there is another opportunity. I would know how to improve”*
 - *“Been good for learning about communication skills - would like to do it again”*
 - *“The simulation session allows you to expand on your knowledge of communicating with a patient”*
 - *“Participated in different real-life scenarios, using a mannequin in a safe, controlled environment, to practice caring for patients”*

Background

The Clinical Skills and Simulation Team at PAHT are responsible for the delivery of a wide range of training within the Trust. The Simulation Suite, where this study took place, is located in the Limbert Education Centre at North Manchester General Hospital (NMGH). This team sits within the Learning and Organisational Development department, ran by Lynda Spaven.

The faculty who were involved in this pilot study are Katherine Robertson (Clinical Skills Manager), Toby Garrity (Curriculum Development Co-ordinator for Simulation) and Bethan Maher (Simulation and Clinical Skills Technician). Recently improving basic patient care and safety has become the primary concern of the healthcare agenda, with the Francis Report putting the NHS under the public spotlight. Medical education has been called on to raise standards and to focus curricula on ensuring that quality of care, patient safety and patient experience are the central drivers for the NHS. During the past decade there has been ‘a significant increase in the use of simulation technology for teaching and assessment’ due to the need to improve patient safety (Scalese et al, 2008:46) and in recent years it has been shown that involving trainees in simulated teaching helps to enhance the teaching and learning experience and becomes an ‘effective vehicle for the integration’ of the fundamental principles of care (Jeffries and Huggett, 2010:, 79). However, it is still not widely used in all disciplines of clinical education, as it is mainly used for educating student doctors.

The Clinical Skills and Simulation team at the Pennine Acute Hospital NHS felt that introducing this concept earlier into health-related education could result in a significant change in future clinical practice not only within PAHT but the whole NHS.



Key Aims

- Enhance the communication/questioning skills between cadets and patients
- Develop and reinforce the importance of team work
- Underpin knowledge of the ABCDE approach to patient care
- Ensure that all of the above are effectively used with a patient-centric approach to care being the priority

Key Stages of Setup

- The first, and key stage, in setting up these sessions were the meetings held between the Clinical Skills and Simulation team and the Cadet clinical educators to discuss the Cadets’ curriculum and how simulation could be built into the programme with specific learning objectives.
- The next stage consisted of the Clinical Skills and Simulation team creating simulation scenarios that mapped the Cadet curriculum and were based on the level and needs of the attendees.
- The team then designed pre-course questionnaires that were sent out to the participating cadets to complete before the day of the session.

How It Works

The pilot comprised 31 second year cadets who were nearing the end of their programme of study at PAHT. The pilot ran as two full day sessions with 14 cadets attending the first session and 17 attending the second. For each session there were three staff facilitating the actual simulation and debrief sessions (Katherine Robertson, Toby Garrity and Bethan Maher) and a cadet educator facilitating the pre-set curriculum work (Lisa Hill and Ursula Caldwell). The clinical skills and simulation team at PAHT designed a pre-course questionnaire that was sent out to all participating cadets to analyse the needs of the learners and in order to see what the participants were worried about. This allowed the course to be set at an appropriate level and allowed the clinical skills and simulation team to address some of the issues before the sessions started.

The training sessions started with an interactive and didactic lecture including an overview of simulation and the importance of communication within a healthcare setting. Alongside this lecture a PowerPoint was produced which reinforced what the attendees were being told by the faculty. Following this the attendees were divided into two groups, half going with the Cadet educators to complete pre-set curriculum work, while the other half participated in the simulation scenarios. The simulation group was further divided into two, half participating in the simulation scenario and the other half completing the peer assessment whilst watching. This process was completed four times throughout the course of the day, ensuring all attendees had a chance of participating in the simulated scenario, all completed a peer assessment and all completed the curriculum work.

The hypothesis was that early education in a patient-centred approach would reinforce any future health related training and highlight the importance of giving a student at this level the opportunity and experience of a simulation session focused on human factors.

Assessment frameworks for both faculty and peers were designed to enhance the debriefing using the same marking criteria in order to ensure continuity and direct comparisons. These frameworks looked at Team Work, Communication, Situational Awareness and ABCDE Knowledge with a Likert Scale for an overview of the whole session and a comment box for extra observations underneath. The faculty assessment framework also included a checklist underneath each subheading taken from the cadet curriculum in order to ensure that the de-brief was relevant for the attendees. During the debrief each component on the faculty and peer assessment framework was explored and discussed at length encouraging them to express their feelings in a safe and confidential environment. The framework assessments would also allow for a comparison between the differences of the peer's observations and the faculty's.

At the end of each day the post-course questionnaire was given out for the attendees to fill in on their own time with an honest reflection of the day and to reassess themselves after the session. The post course questionnaire mirrored the pre-course questionnaire and was used to determine the significance of the change in self-assessed competence ratings pre and post session.

Resources

As this was a pilot there was no cost incurred by the Skills for Health Academy, which hosts the multi-professional cadets. Instead the course was funded by PAHT through its Learning and Organisational Development department. However future courses may have a cost implication.

Key Challenges

- It was a important to ensure that the scenarios were set at an appropriate level to allow each cadet to work independently within their remit, yet to be challenged. This was achieved by meeting with the cadet educators, mapping the curriculum closely and by using the pre-questionnaire to help create the simulation.
- The logistics of pulling together cadets from four different sites was also difficult so the cadet educators organised coaches and transport for those attending from other sites.

Key Learning

In conclusion, this small-scale study has revealed that the multidisciplinary cadet students felt that the simulation session enhanced their understanding of basic patient care. It highlighted the successful use of simulation in order to promote the effective use of communication within the healthcare setting. All attendees also felt that the curriculum as a whole would benefit from having this as a compulsory session for all cadets and agreed that they would like to have the opportunity to complete the course again to highlight improvements.

Next Steps

This session can help instil the fundamental principles in basic patient care that should be incorporated into everyday care throughout the NHS. Therefore it is intended that this should be incorporated nationally into the cadet scheme; in line with present government thinking. Data will be presented, and the Skills for Health department will be encouraged to introduce this as a compulsory component of its future multidisciplinary cadet schemes.

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