

# **Simulation Training in Primary Care**

*Preliminary Report, March 2023*

## **Authors**

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## **Introduction**

Simulation training can be a highly useful tool in preparing trainees for clinical practice, supporting professional development, and improving clinical care provision. The NHS Long Term Plan sets out how pharmacy professionals will provide increasing levels of clinical care to patients. With these evolving roles, there is a need for innovative training models to enhance individual and team performance. Simulation training is widely used in other health professions, giving learners opportunities for deliberate practice in safe environments. Evidence suggests it provides trainees with powerful and transformative learning experiences that influence behaviour and fill knowledge gaps. Specific benefits include increased knowledge and confidence, improved efficacy in technical skills, as well as improved non-technical skills, such as: teamwork, communication, and interprofessional collaboration (Cook et al 2011, Miller et al 2012).

This project built upon the HEE sponsored "Development of Simulation Training for PRP and PTPTs" project. This latest project was run as a collaboration between the Pharmacy departments of Kings Health Partners, Lewisham and Greenwich NHS Trust and Day Lewis.

## **Aim**

Our aim was to develop an educational infrastructure across both primary and secondary care to support simulation training for trainees in both sectors of practice.

## **Objectives**

- 1) Develop a blended learning programme to train new simulation facilitators from both primary and secondary care to support simulation training.
- 2) Deliver simulation training events for trainee pharmacists from primary care and where possible have mixed sessions with both primary care and secondary care trainees.
- 3) Expand the existing pharmacy simulation training curriculum by developing additional simulation scenarios which explore new areas such as responding to symptoms, clinical assessment and duty of candour.

## **Method**

A pharmacy simulation faculty group that had been created as part of the previous project was used to develop and organise the training. Meetings were held with Day Lewis Pharmacy as the primary care provider to establish and resolve any logistical challenges of the project, keep the project on track and agree new areas for scenario development. Six new scenarios were created. In order to grow capability to provide simulation training across both sectors of practice, a simulation facilitator

training programme was developed and delivered to seventeen pharmacists (seven Day Lewis teacher practitioners and ten hospital pharmacists), most went on to take part as new faculty members.

The simulation training events were themed around human factors in healthcare and medicines optimisation. Learners were invited to complete a pre and post course questionnaire. The principles of simulation as a training tool, human factors in healthcare and medicines optimisation were discussed along with agreeing ground rules at the start of each day. A total of 5 scenarios (selected from a scenario bank) were used on each the day lasting approximately 10-20 minutes. Participants who were invited to partake in scenarios were asked to suspend disbelief and perform as they would in a real situation. Participants entered scenarios either individually or in pairs. One scenario called emergency supply was completed as a group. In all scenarios, faculty staff acted as simulated patients, carers or other health care staff. All course attendees who were not taking part in the scenario observed in the debrief room via a video-link, except for 7 trainees on one day where there was no video link facilities and they instead observed directly. The whole group was then debriefed by trained facilitators using the 'diamond debrief' structure (Jaye et al, 2015) with the 'plus delta' method (Dubé et al, 2019).

## **Results**

At the time of this preliminary report (14/03/2023) 11 simulation training dates had been run for trainees from South East London (SEL) Hospitals and Day Lewis. A total of 93 staff attended the simulation training events (48 Trainee Pharmacists from Day Lewis). 84 trainees fully completed the pre and post course survey (90% completion rate).

### *Participant breakdown by profession*

Trainee Pharmacist - Hospital	33
Year 2 - Pre-registration Trainee Pharmacy Technician	4
Trainee Pharmacist - Multi-Sector	16
Trainee Pharmacist - Community	31
<b>Total number of Trainees</b>	<b>84</b>

The table below shows the numbers that participated in a scenario.

### *Did you get to be the 'pharmacist' or 'pharmacy technician' in any of the scenarios?*

Yes	71% (n=60)
No	29% (n=24)

### *Post Course Survey*

Overall, the table below suggests that the simulation training events continue to be a success in that the majority rate it as excellent and good. These figures are similar when compared with the previous project that only trained hospital-based staff. The data reflects that the course is well received across both trainees from primary care and secondary care sectors.

	Excellent	Good	Satisfactory	Poor
<b>How well did the course meet its stated aims &amp; objectives?</b>	66%	33%	1%	-
<b>How would you rate the timing of the course?</b>	63%	30%	7%	-
<b>How well did the course meet your objectives / expectations?</b>	67%	31%	2%	-

<b>How would you rate the quality of the course content</b>	79%	20%	1%	-
<b>How would you rate the structure of the course?</b>	63%	35%	2%	-
<b>How would you rate the quality of scenarios?</b>	70%	29%	1%	-
<b>How would you rate the relevance of scenarios to your clinical practice?</b>	77%	19%	4%	-
<b>How would you rate the quality of debriefs?</b>	69%	26%	5%	-
<b>How useful do you think this course will be for your work?</b>	71%	25%	4%	-

As part of the course questionnaire participants were asked to explain the reasons for the ratings they gave. A selection of the comments were:

- "Very good for expanding communication skills"
- "Application to real life scenarios where the debrief makes you think about other ways you could go about it"
- "Very good feedback. Entire group was involved"
- "Really good never had an opportunity to work in such challenging situations as a practice. Has given me tips about how to deal with them in real life"
- "I think it would be useful, as it covered various community scenarios, and hospital scenarios. Which I believe has prepared me & given me an idea of what is expected of me in both environments"
- "Really good session. A very welcoming environment where you had a chance to really think about what you're doing and the consequences of your actions. A good environment to learn, make mistakes and try again"
- "Very detailed and thorough explanations and debriefs after completing scenarios Allowed us to gain and give constructive feedback and ask relevant questions"
- "I thoroughly enjoyed the simulation training today! I liked the range of scenarios and the different dilemmas that they posed, both clinically and ethically. I found the debriefs to be really helpful as they further explored the scenarios and allowed me to see things from different points-of-view. I feel that my clinical practice has definitely benefited from the simulation training"
- "It was very well planned and covered many different skills needed for my trainee year. I feel a lot more confident should I be faced with situations like this. The environment was very welcoming, and I didn't feel judged at all"

In the free text part of the survey participants were also asked if there were any activities, they found unhelpful? A single theme from comments was received regarding the length of the session.

- "It felt slightly repetitive and slightly focus was lost near the end of the day, going from scenario to scenario"
- "Very long debrief with lots of examples around scenarios that could have been summarised"
- "The session was long so towards the end I couldn't pay full attention"
- "Debriefs we're very informative but sometimes a little too information filled and long - was near impossible to take everything in but took in the main points"

Feedback was overwhelmingly positive for the delivery by the facilitators as seen in the table below.

<b>Feedback on delivery by Simulation Training Facilitators</b>	<b>Excellent</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Poor</b>
<b>Encouraging participation, reflection, and learning</b>	89%	11%	-	-
<b>Clearly explaining things</b>	86%	14%	-	-
<b>Providing a safe and constructive learning environment</b>	85%	15%	-	-
<b>Their knowledge of the subject</b>	87%	12%	1%	-
<b>Enthusiasm</b>	83%	16%	1%	-

Free text comments received regarding the facilitators included:

- "All staff were very knowledgeable and able to explain their relative areas well"
- "The facilitators were very welcoming understanding and explained things thoroughly"
- "Can't name a single fault with them and how they provided the session"
- "I believe the simulation exercises were very lifelike and real. It helped me imagine being in the actually situations and visualise the scenarios better"
- "Facilitators were very hands on, getting everyone involved, listening to everyone's opinions and thoughts. Made it very engaging and gave several solutions to tackle each scenario"
- "Asked good open questions. Involved the whole group in discussions. Enjoyable to talk to. Relaxed yet professional"

### *Simulation Facilitator Training*

The simulation facilitator training session was developed as part of objective 2 of the project. A PowerPoint slide deck was written and delivered over a 4-hour session to staff from the acute hospitals in South East London and Day Lewis. A total of 17 staff attended the training sessions, 7 staff from Day Lewis and 10 from SEL. The expectation was that after undertaking this training and then attending a simulation training event with an experienced facilitator and undertaking a debrief would enable a level of competence to be developed. This package has been developed for wider use by others wishing to develop their training programmes to include simulation. It would be our recommendation that individuals intending to train others, are at first trained as a simulation training facilitator by those with experience in delivering simulation training.

### *Simulation Training Scenarios*

The simulation training curriculum has been expanded by developing additional simulation scenarios which explore new areas which includes responding to symptoms, emergency contraception, clinical assessment and duty of candour. These additional scenarios will be available to be used by trained facilitators for the 2023/24 Training year.

### **Discussion**

Overall simulation training continued to be extremely well received from staff from all sectors and delivery by the facilitators was highly commended. The data indicates the community trainees welcomed and took learning away from the training just as much as those from the secondary care sector. Anecdotally the facilitators also noted that there were no issues with the performance of the trainees in the scenarios themselves based on the sector they work in. Consideration on the length of the day should be kept in mind, however the nature of simulation training is to encourage more lengthy discussions on topics and is an intended part of the debriefing process.

One session was run without the use of video link and this did not appear to impact the positive responses to the training, although it should be acknowledged that only 5 responses were received for that specific training method. This is an area that shows that simulation training can still be delivered in a format without the use of a dedicated simulation suite. Methods such as facing the trainee away from the observing audience can potentially assist with overcoming the fear of being directly observed by others.

A mixture of scenarios from the secondary care and primary care setting were used on each day. So, the feedback received is based on being exposed scenarios from sectors of practice that they may be more familiar as well as less familiar with.

### **Reflection**

Logistical challenges of having trainees from around the country attending the training, which was supported by Day Lewis, cannot be understated. The desire to provide a universal training experience for the community trainees has a financial impact as this project was run from a single area of the country. Infrastructure for simulation training is important as having enough trained facilitators in a location which supports the training (i.e. a simulation centre or a room large enough) remain important considerations for organisations embarking on using this as a training method.

A question around “what is the right number of facilitators in a room when training is occurring” is one that we should be mindful of. In light of the intention to train more facilitators and spread the benefits of simulation, facilitators should be mindful of the number of observers present that may have an impact on the “safe environment”.

### **References**

Cook DA, Hatala R, Brydges R, Zendejas B, Szostek JH, Wang AT, Erwin PJ, Hamstra SJ. Technology-enhanced simulation for health professions education: a systematic review and meta-analysis. *JAMA* 2011;306(9):978-988.

Dubé, M. M., Reid, J., Kaba, A., Cheng, A., Eppich, W., Grant, V., & Stone, K. (2019). PEARLS for systems integration: a modified PEARLS framework for debriefing systems-focused simulations. *Simulation in Healthcare*, 14(5), 333-342.

Miller D, Crandall C, Washington C, McLaughlin S. Improving teamwork and communication in trauma care through in situ simulations. *Academic Emergency Medicine* 2012;19:608-612.

Jaye P, Thomas L, Reedy G. "The Diamond": a structure for simulation debrief. *The Clinical Teacher*. In press (Accepted April 2014).

Iannelli H, Chan K, Lane A, Saunders A, Pudney R, Dec 2021. Development and evaluation of simulation training for pre-registration pharmacists and pre-registration pharmacy technicians, Project report.