

Simulation Strategy 2015

This document sets out the Simulation Strategy for Health Education East of England 2015.

Clinical skills and Simulation Training Strategy

Background

Health Education East of England provides significant investment to support simulation opportunities across the East of England for both postgraduate medical trainees as well as non-medical healthcare professionals.

The East of England boasts a number of excellent centres for simulated learning in a high fidelity setting. These include facilities at the University of Hertfordshire, the University of Bedfordshire, Anglia Ruskin University, the University of Essex, Cambridge University Hospitals NHS Trust, the University of East Anglia, University Campus Suffolk, the Icen Centre in Colchester and, more recently, the state of the art Evelyn Cambridge Surgical Training Centre, which provides unique opportunities to develop technical expertise using cadaveric material. In addition, many Local Education Providers engaged in the training of doctors and non-medical professionals have a basic clinical skills laboratory that is appropriately equipped, staffed and is accessible in working hours and, in some cases, out of hours.

Funding for simulation and clinical skills learning is currently being provided through two streams: a simulation budget that has been administered through a bidding process run by the four Workforce Partnerships, and as part of innovative training funding for postgraduate medical trainees.

The widespread and effective use of these financial resources, facilities and equipment is important for the following reasons:

1. Public expectation

Members of the public not only expect professionals in high impact occupations to engage in appropriate skills and simulator training, they believe that clinicians already do. Patient groups are shocked to learn that doctors frequently perform procedures for the first time on a real patient and that professional examinations offer limited assessment of practical ability.

2. Evidence of efficacy

There is now a significant and growing body of evidence that simulator training is educationally effective in developing technical skills. Additionally, evidence is slowly accumulating that patient safety standards and non-technical skills, such as human factors also improve following simulator training. This latter view is at least partially informed by the experience of other high risk professionals in the airline and nuclear industries.

3. Changes in clinical practice

The rate of change in clinical practice is now so rapid that there is an on-going requirement to train both new and existing clinicians in recent technologies and procedures. A prolonged period of learning in an apprenticeship model is no longer practical or cost effective.

4. Changes in working practice

The development of new professional roles, the growth of large and complex working environments, the widespread adoption of shift systems and the rapid pace of modern healthcare evolution require clinicians to develop high order leadership and communication skills.

5. Skills acquisition, maintenance and assessment

The key element here is the concept of progression: a learner must practice and master relevant skills *and* pass an assessment before embarking on clinical training. Once trained, clinicians can use simulated facilities to rehearse both challenging and routine procedures and to reduce error. This philosophy is based on the combination of deliberate practise with appropriate specific feedback.

6. Technological developments and opportunities

The technology available to support high fidelity and simulator training has progressed rapidly in recent years. Whilst there is every reason to suppose that these developments will continue, equipment available now will effectively serve our purpose for some years to come. Evidence exists that the educational value from low fidelity simulators can outweigh that of high fidelity simulators, as long as they are embedded within an educationally sound training programme.

7. Effective preparation for clinical practice

To make the best possible use of available workplace time, trainees must have prepared effectively away from the workplace.

8. Curricular development

The GMC are looking to incorporate simulation training in national curricula and are seeking assurance from LETBs and Deaneries as to the feasibility of implementation.

Acquisition of Skills

The acquisition of clinical skills using simulation is appropriate to all trainees within the LETB. The range of skills can be summarised as:

1. Technical, clinical and operative skills
 - Practical procedures
 - Basic surgical skills
 - Operative ability
 - Other clinical skills, e.g. managing medical emergencies
2. Non-technical skills
 - Leadership
 - Communication skills
 - Team working
3. Cognitive ability
 - Decision making

Data acquisition and risk assessment

Managing uncertainty

Professional judgement in challenging situations

The various types of simulated experiences include:

1. Simulated patients, using either actors or volunteers
2. Manikins and models of varying complexity, ranging from part task trainers to 'complete bodies'
3. Computer-generated virtual reality simulators
4. Wet labs using human or animal tissue
5. Bench-top skills trainers
6. Simulated clinical facilities.
7. Human factors training

Proposed Simulation Strategy for HEEoE

Simulation training should be offered both within and across healthcare professions and healthcare workers. Training offered should be appropriate and add value to the learning experience. Fundamentally, at the forefront of our strategy is the enhancement of patient care and patient safety through the delivery of simulation training.

Simulation and Clinical Skills Training form part of a wider strategy for enhancing learning across HEEoE. The use of simulation does not replace supervised clinical practice, but adds to it, and by doing so makes practice more effective and ultimately safer for the patient.

Following publication of The National Simulation Development Project Summary Report¹ the HEEoE Simulation Strategy will address the urgent and long term developments identified by the following specific aims and objectives that include:

Identification and recognition of the simulation training facilities available within the East of England. This will include the creation of a map of simulation training locations within the East of England.

Using a commissioning framework, HEEoE will commission the use of simulation training services appropriately.

Ensure appropriate evaluation and feedback is sourced from simulation training providers.

Support the development of a simulation faculty, including a networking development day.

¹ This National Simulation Development Project (NSDP) written by Higher Education Academy (HEA), Health Education England (HEE) and Association for Simulated Practice in Healthcare (ASPIH).

<http://www.aspih.org.uk/static/aspihdjango/uploads/documents/general/national-scoping-project-summary-report.pdf>

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A hub and spoke model will be adopted within HEEoE, utilising the expertise developed within the Hi-fidelity centres as the hubs and the Local Education Providers (Trusts) as the spokes. A multi-professional approach will be adopted whenever appropriate.

“Hubs”

Simulated clinical environments (e.g. mock operating theatres, wards and outpatient areas) and complex skill training are by their nature expensive. They require more technical support and often involve the development of a specialist expertise in the faculty.

“Spokes”

All Trusts will act as “spokes”. However it is recognised that some will also be a Hub for a particular areas of expertise, such as the use of cadaveric material in the Evelyn Cambridge Surgical Centre. Each Trust is expected to provide basic clinical skills training facilities which includes but is not limited to: hand washing, intravenous injections and sampling, suturing, resuscitation training, basic and advanced airway management, urinary catheterisation, arterial puncture, and basic surgical skills.

A number of Trusts have also received investment for manikins and high fidelity simulators which can be used for a wide range of specialities. This equipment includes laparoscopic, endoscopic, and angiographic simulators. The medical trainees benefiting from this training include surgeons, radiologists, cardiologists, gynaecologists, anaesthetists and physicians. Trusts will be encouraged to make these facilities available to trainees from other institutions and from other professions.

Delivery

A HEEoE Simulation Steering Group, with representation from Universities, Foundation and Specialty Schools, Trainees, HEEoE Professional Advisor for TEL, Patient Voice and Medical and Non-Medical senior educationalist engagement from Trusts and chaired by an HEEoE Lead for Simulation will be established. This Group will play a key leadership and oversight role in implementing the clinical skills strategy. The steering group will provide an opportunity for a coordinated approach to commissioning simulation activity within EOE, where commissioners and providers are able to meet within a forum in order to ensure best value and use of facilities and training resource across EOE.

Additional support will be provided by a project administrator whose role will help ensure a collaborative, quality assured and sustainable approach to simulation training. They will provide a key role in networking and sharing good practice.

Within many Trusts, educational leads for simulation and clinical skills training have recently been appointed. Similar roles should be created in all Trusts, these leads will work with the Directors of Medical Education, Non-Medical Tutors and Education centre managers to ensure appropriate facilities and equipment for simulation and clinical skills are available to support curriculum delivery.

The Foundation and Speciality Schools will each identify a Simulation Lead who will be responsible for mapping the various elements of clinical skills and simulation training to their curricula. These individuals will ensure that skills training is made available at appropriate times within the programme for trainees at varying levels of seniority.

Trusts and Schools will be required to provide evidence that simulator training meets the agreed quality standard in their Annual Reports to the LETB. These reports will inform the Quality Management process and will be discussed at Trust visits. Educational quality standards embrace the range of training provided, faculty involvement in training delivery and an evaluation of the training experience by trainees.

Links between the various leads, across the Professions, Simulation Hubs, Trusts and will be made and encouraged.

Suggested Next Steps

1. Appointment of clinical lead for Simulation Training.
2. Appointment of a project administrator for Simulation Training.
3. Scoping exercise of all simulation facilities available across HEEoE, mapped to courses/ programmes that are currently provided. This will then be made available on the HEEoE website.
4. Organisation of LETB event in the Autumn to increase awareness of clinical skills and simulation training.

The event will be targeted at Trusts, Universities and Foundation and Specialty Schools, Trainees and Students from all professions should also be encouraged to attend.

The purpose of the event will be to increase awareness of clinical skills and simulation training and will support the development of future simulation training in the East of England.

5. Creation of a Simulation Steering Group for HEEoE, with representation from Universities, Foundation and Specialty Schools, Trainees, Patient Voice and Trusts. The aim of the Board will be to evaluate, review and enhance simulation training across HEEoE for all professions.
6. Horizon scanning – Steering Group to actively promote all new national guidance and standards for Simulation.
7. Identify existing simulation leads in each Trust to ensure oversight and leadership of simulation skills teaching in Trusts.

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8. Establish / Identify simulation leads within the Foundation / Specialty schools, who are responsible for mapping courses to curricular requirements and help develop and support a co-ordinated approach to simulation training.
9. Both Trust based, and Programme Based simulation leads will help HEEoE to establish a network of training faculty and ensure the most appropriate and effective use of resources across professions and areas within the east of England.
10. Improve communication regarding Simulation strategy, in order that LEPs recognise and prioritise access to simulation training for all staff and the release of faculty to deliver it.
11. Promote evaluation and research, sharing learning, and raising the profile of HEEoE as a national leader in simulation training.
12. Quality Assurance. Ensuring appropriate evaluation is undertaken of simulation training.
13. The Simulation Steering Group should work with the HEEoE Faculty of Educators to develop and resource the role of Clinical Fellows in Simulation.

Conclusion

HEEoE recognises the need to upgrade and develop a co-ordinated approach to clinical skills and simulator training across the LETB. Access to simulation training should be both on a “uni” and “multi” – professional basis, taking in to account the need to ensure the most effective training opportunities to enhance patient care. Along with the increase in quality and quantity of provision, it will be essential to evaluate programmes and ensure access to training opportunities is both fair and appropriate.

This LETB-wide approach will reduce costs through resource sharing between Speciality Schools and the non-medical professions, avoiding unnecessary duplication of resources and making best use of the training faculty across HEEoE.

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