NHS Yorkshire and the Humber - Clinical Skills and Simulation Technicians

Report to justify the inclusion of training for Clinical Skills and Simulation Technicians as part of the proposed healthcare science apprenticeship educational framework.

Justification
The current advances of simulation technologies are only a small part of the explosion of technological tools that the Healthcare workforce needs to be familiar with and use more frequently. Only skilled technical staff in the skills and simulation centres will be able to support visiting faculty, staff colleagues and students/trainees with 21st Century technology, such as Avatars, Podcasting, Video Conferencing, Blogging, Wiki, Digital Storytelling and webinars.

The Department of Health (2008) highlighted the potential value of technology in the education, training and development of the health and social care workforce.

The research bulletin of Damassi (2010) referred to the ‘proliferation of simulation technologies’ and the increasing availability of their functionality to include effective competency-based education.

The Framework for Technology Enhanced Learning (2011) states that ‘healthcare professionals, as part of a managed learning process and where appropriate, should learn skills in a simulation environment and using other technologies before undertaking them in supervised clinical practice’.

The National Patient Safety Agency (2010) clearly recognise and support the use of simulation techniques and sophisticated interactive environments to develop, enhance and test specific technical skills to learn from and reduce the number of significant incidents.

The strategic priorities of Health Education England (2012) include making technology central to education, to support and build on the existing use of technology in the preparation of the future workforce including clinical skills laboratories, simulation and virtual learning environments – ‘learning about technology by using it for learning’. HEE’s investment in the future workforce includes encouraging greater vocational and academic awards and progression opportunities.

Future demand for a skilled technical workforce
The Department of Health NHS friends and family test (2012) and the impact of the Francis Report (2013) will undoubtedly highlight and subsequently increase the need for skills and simulation training across all professions.

The application of simulation has been recognised by all healthcare specialties across the board and is currently being assimilated into their educational curricula. Consequently, the demand for simulation training will rapidly expand in the near future (STEER 2012)

Local Education Training Boards (LETB) have clearly articulated the need to provide high quality education and training for the whole workforce, to provide opportunities to learn and develop along flexible career pathways, including recognition of the importance of having development options for bands 2 - 4 staff.
A current pilot audit of the relatively new facilities across the Yorkshire and Humber region is expected to show a usage of over 70% which is anticipated and expected to increase year on year to fulfil Level 4 Kirkpatrick return on investment.

This regional scoping exercise reflects a national current situation regarding the current limitations of the role of Clinical Skills and Simulation Technicians and the career progression that needs to be in place to ensure sustainability and future proofing of those healthcare learning environments that include e-learning, simulation and all other mobile technologies.

**Current position in the Yorkshire and Humber region**

As a result of regional funding, the majority of NHS organisations within the Yorkshire and the Humber have excellent clinical skills and simulation facilities and equipment within their estate. However, a scoping exercise using a short verbal questionnaire devised and completed by one of the NHS Yorkshire and the Humber Strategic Clinical Skills Advisors captured the responses from 71% of the facilities in the Yorkshire and Humber region (Appendix 1) and demonstrated substantial findings regarding technical support staffing.

- No specifically trained technical support staff for a significant 60% of facilities questioned
- A small proportion with Laboratory technician experience
- No recognised qualifications, training or career pathway available to help perform the roles expected in the new simulation learning environments.

National soft intelligence and anecdotal evidence contributed to the overall findings resulting in a region wide agreement of the range of skills required.

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<th>Summary of the range of skills required to provide technical support</th>
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<td><strong>Faculty</strong> - Supports/assists in role playing applications, involved with debrief.</td>
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<td><strong>Teaching</strong> - Provide appropriate training on patient simulators, equipment and medical devices to users and faculty- Act as a live resource</td>
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<tr>
<td><strong>IT and AV skills</strong> - Advanced computer and keyboard skills, operate and maintain audio/visual equipment used in simulation. Ability to use video cameras, digital cameras, microphones Program scenarios, tag events,</td>
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<tr>
<td><strong>Equipment maintenance</strong> – Skilled maintenance and repair of skills and simulation equipment to ensure longevity and reduce down-time</td>
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<td><strong>Manufacturers/Trade</strong> - Maintain current knowledge of simulation equipment, operation manuals. Communicate regarding maintenance, repairs, updates and any technology changes</td>
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<td><strong>Casualty Make-up/moulage</strong> – to include props placement and moulage set-up to create a virtual healthcare setting. This specialist skill is frequently accessed through expensive, external providers.</td>
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<td><strong>Administration</strong> – Provide daily administrative, coordinating, planning and technical support.</td>
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<td><strong>Inventory, ordering</strong> - Maintain inventory of supplies and equipment. Provide recommendations for budget and purchase of equipment, supplies and materials related to simulation. Responsibility for organisations/facility Asset Register.</td>
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Recommendations

- Education for the role of Clinical Skills and Simulation Technicians is considered as part of the proposed healthcare science apprenticeship educational framework careers framework (CF) 2-4.

- That the role and remits identified through job descriptions are mapped to current units within the Laboratory and Associated Technical Activities (LATA) Framework and the proposed healthcare science educational framework CF 2-4.

- Any specialism gaps are identified and the appropriate units sourced are considered for inclusion as part of the Healthcare Science apprenticeship framework specification.

- Opportunity to attain Assessor, mentor and teaching qualifications alongside the framework with peer apprentice and mentor support days. E.g. QCF Assessor award/certificate - to support specific Further Education (FE) assessor capacity, Supporting Learning in Practice (SLIP) course, Preparing to Teach in the Lifelong Learning Sector (PTLLS).

- The arrangement includes the opportunity for current staff in the technician’s role to access the educational framework and any specific units needed for their role and their organisation – permitting a step on step off points and progression.

- Individual NHS Trusts engage with the NHS Yorkshire and the Humber, future Local Education Training Board and submit an expression of interest/proposal to be part of initial pilot and demonstrate identified link to workforce need and/or justification.

- Collaborative working is sought to encourage stronger links and support from trade and industry i.e. medical training products and equipment suppliers.

Further work to be undertaken by March 2013:

- Complete mapping exercise of job descriptions to current units within the Laboratory and Associated Technical Activities (LATA) Framework and the proposed healthcare science educational framework CF 2-4.

- Identify mandatory core modules and other themed units from the range of skills required.

- Develop an outline of a career progression pathway for Clinical Skills and Simulation Technicians.

- Coordinate a final consultation exercise of all of the above through the Yorkshire and Humber Clinical Skills Executive, Clinical Skills Network and the Regional Technicians Network.
Bibliography


Department of Health (2012) NHS friends and family test Implementation Guidance

Department of Health (2013) Final Report of The Independent Inquiry Into Care Provided By Mid Staffordshire NHS Foundation Trust


## APPENDIX 1

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<tr>
<th>Findings</th>
<th>Concerns/risks</th>
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<td>Over 50% had no designated Technician; those that had technical staff in the role were from variable backgrounds i.e. Nursing, IT and media.</td>
<td>Facilities unable to run to full capacity with staff incapable of providing the specialist support expected. Differing qualifications and skills</td>
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<td>Job descriptions (if evident) are inconsistent in content, criteria and subsequent banding</td>
<td>No career pathway for this group of staff, no progression between bands. No strategic or consistent approach to training, qualifications non-transferable.</td>
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<td>Most technicians in post admitted that the range of skills they had, were limited, self-taught and mostly gained whilst in the role/on the job.</td>
<td>Concerns around quality and competences. No consideration of standardising future simulation delivery</td>
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<td>There was an expectation and reliance on clinical educators/facilitators (Band 5-6) to carry out the role of the technician as part of their teaching duties</td>
<td>Unproductive workforce planning: right people, right time, right skills Cost implications and efficiency. Teaching time lost due to lack of familiarity with equipment</td>
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<td>Most of the facilities are expected to support multiple cross-site teaching, in-situ simulation and/or externally held courses for all professions.</td>
<td>Facilities unable to provide adequate staffing/support.</td>
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<td>Frequent requests from facilities for specialist support from IT, AV within their organisation i.e. ‘unofficial arrangements’ Responses varied from very helpful to unable to provide.</td>
<td>Reiterates the need for own skilled staff in an already stretched work environment. Trust IT staff not always familiar with simulation platforms and high-fidelity manikin functionality</td>
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<td>Only one exemplar Trust in the region has an Apprentice Education Technician. All indicated a keen interest in Apprenticeships, some had included it in business/future workforce plans</td>
<td>May need additional support/mentors in some areas and need to share responsibility of education with other facilities</td>
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