

Skills and Simulation Technicians: the innovators now and for the future.....

Recent recognition and development of the role of the skills and simulation technician in the UK¹ has also raised awareness of an '*untapped*' expertise they frequently demonstrate, but is not yet fully appreciated or utilised.....their creativity and innovative ways of working.

Products, basic equipment i.e. part-task trainers and educational resources are being developed '*silently*' by skills and simulation technicians within UK organisations. They are usually the result of an idea, an identified need or at the simple request of an educator/trainer i.e. bespoke models. However, these *unrecognised* creations potentially could have a major impact on reducing running costs and generating income but more importantly will increase the effectiveness, quality and realism of simulated practice in healthcare and ultimately patient safety.

There are some brilliant development examples - the '*fat leg*' developed to recreate the problems of managing an oedematous limb, a Peri-mortem C-section model² and a '*home-made*' fine needle aspiration model.

Unfortunately, these creations, despite being presented at regional and national conferences remain very close to home. Opportunities for the development of innovation capability, sharing or future commercialization are lost within busy, '*not your job*' departments.

In the USA such innovative practices by their *SimTechs* are viewed very differently and as a result are encouraged and add value to their teams, departments and organisational output. A proportion of their Simulation Centres include designated, appropriately equipped rooms/areas referred to as '*Innovation hubs*' where equipment design and development is encouraged and fabrications and the manufacturing of replacement parts i.e. casting and moulding using silicone and other materials is facilitated alongside the *SimTechs* daily tasks.

¹ Nicklin J. (2013) Pilot cohort of Clinical Skills and Simulation Technician apprentices in the Yorkshire and the Humber region: Project update December 2013 (Unpublished)

² HEYH Clinical Skills and Simulation Provision v3. 17/07/14

<http://www.yorksandhumberdeanery.nhs.uk/media/285575/CS%20provision%20file.pdf> (Accessed 21/09/14)

The latter practices have tremendous impact on reducing the costs of consumables traditionally purchased from suppliers, for example, Injection pad dermis retail @ £15.00 each, suturing skin pads @ £20.00 each, producing one's own supports a 90% savings vs. the commercially available products.³

Research and innovation are recognised as the key levers for continuous improvement in the decisions and processes for investing public funds; improving quality and providing value for money.⁴

In the UK there is an expectation that central investment in the equipment, staffing and infrastructures of skills and simulation centres across the UK will demonstrate a return-on-investment, sustainability, cost efficiency and collaborative working – recognition and nurturing the creative skills of skills and simulation technicians will contribute to this vision.

Current situation -

- Recruitment and awareness raising activities for the role of Skills and Simulation Technicians through the Apprenticeship route includes research and innovation⁵
- Confirmed additional units in the new Modernising Scientific Career Framework 2-4 providing a career pathway that includes a range of significant modules/units e.g. Creative thinking and innovation - application of scientific ideas, theories, manufacture equipment to meet specific needs and casting and moulding of prosthetics
- Collaborative working with FE colleges and industry, including engineering and simulation equipment developers/manufacturers
- Promotion of the role of skills and simulation technician have resulted in growth of job opportunities and initiatives across the current LETBs and Scotland
- Developing relationships with established, expert innovators in the USA

Proposals –

- Scope and baseline skills and simulation centres across Health Education England and Scotland to identify projects and/or innovative products and equipment opportunities
- Initiate research into the efficacy and quality of *home-made* types of models, products, their use in education and impact on the quality of care
- Explore formation and support for local and/or regional simulation *Innovation hubs*
- Extend the collaborative and partnership opportunities with manufacturing

³ <http://www.smooth-on.com/Medical-Simulation/c1425/index.html> (Accessed 21/09/14)

⁴ Health Education England (2014) Draft Research and Innovation Strategy

⁵ Health Education Yorkshire and the Humber Clinical Skills and Simulation Technician Performance Descriptors (2014) Unpublished