The SPRinT programme: high quality in-situ interprofessional team training leading to improved patient care and service delivery 2008-2012

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Introduction

We identified a need to improve the quality of care for paediatric cardiorespiratory patients through highly trained interprofessional faculty providing high fidelity in-situ simulated training.

Quality of Interprofessional Team Working

A training framework of simulated SUs to identify failures of team performance, improve team performance through teaching crisis resource management including leadership and team working skills with debriefing by trained faculty.

Quality of specialised clinical skills

Provide targeted clinical skills training according to needs identified during in-situ training.

Optimize Systems and Mitigate Risk

Identify latent threats/system errors within workplace during simulated events.

Rectify errors through structured risk-management strategy and system changes.

Methods

We founded the Simulated Paediatric Resuscitation Team Training (SPRinT) programme, consisting of 14 interprofessional, cross-departmental Harvard-trained faculty. SPRinT involves embedded in-situ simulation team training providing interprofessional courses in paediatric areas.

Team training

- In-situ courses: 2 hours every 2 weeks
- Development of novel tools to meet specialty simulation requirements
- Crisis Resource Management workshops
- Debriefing sessions for real PICU resuscitation events

Clinical Skills

- Training Workshops
- System Optimisation.

Results

123 in-situ SPRinT courses

Structure

- 2MIM training and introduction to simulation area and equipment
- Real-time Scenarios with accompanying data/echo/radiology and real equipment/medications
- Video-assisted debriefing by 2 facilitators emphasising adult learning techniques using advocacy-mentor method
- Brainstorming: Discussion of latent threats identified, to reform practice/service delivery.

Wider outcomes of SPRinT programme

Academic educational output

- 15 abstracts presented internationally
- 3 publications

Training Workshops

- 6 national/international conference workshops

Training Days delivered

- 2010: Trust-wide day “SPRinTing from disaster”- 40 NHS staff live simulation.
- 2011: Open-Chest ECMO Crisis at “The future of CT surgery training in the UK”: cardiothoracic training day, Royal Society of Medicine.
- SPRinT teaching days North Thames care curriculum course for PICU Fellows, evaluated 86.5% very satisified.

SPRinT facilitator interprofessional team training courses - 100% rated v45

- 3 Introductory 3dy courses - 35 participants.
- 2 combined 5dy courses - 10 participants

Combining team training at London School of Paediatrics

Quality Assurance for SPRinT faculty

Full immersion team training - Management/Change Consultant (past vice president J Morgan)

Children’s Hospital Boston Simulator Programme-Harvard University, graduate and advanced training courses. Assessed by “Enhancing Clinical Teaching Through Observation and Reflection” representative.

Full immersion team training - debriefing assessed + Education Day: Guy Hirst, Atrainability

Method

- 4 ST3/4 courses: SPRinT programme named ‘Gold standard in ‘In-situ’ Team Training'
- Quality Assurance for SPRinT faculty

System Optimisation

- Mitigation of system errors through identification of latent threats
- Improving patient Safety Through Mitigation of Latent Threats Identified in An Embedded In-situ Simulation Programme for ICU (PICO) research.
- SPRinT has contributed to safety culture development successfully by identifying 31 latent threats in PICU/paed wards/PICU/HDU/CT, with category analysis highlighting 54 areas for improvement.
- 50% latent threats were organisation/strategic and resources, 50% were education/training, equipment, work environment, medication and systems/protocols.

Wider outcomes of SPRinT programme

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