

# High Fidelity Simulation for Revalidation in Paediatric Anaesthesia

- Linking the tertiary unit with a district general hospital (DGH)

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#### Introduction

To hold a licence to practice in the UK all doctors must complete annual appraisal, using supporting evidence to demonstrate they continue to meet the principles and values set out in Good Medical Practice (1,2).

The Department of Health (DoH) Report – 'The acutely or critically sick or injured child in the district general hospital - A team response' emphasises a 'whole-team approach' and a 'need for training, scenario practice and maintenance of standards' (3, Figure 1)

The Anaesthetic Department at the Royal Hospital for Sick Children, Edinburgh worked closely with St John's Hospital, Livingston (a DGH providing elective and emergency paediatric anaesthetic services) in piloting the use of a high fidelity, 'in-situ' paediatric emergency course to provide: support for evidence for appraisal (for Consultants and SAS anaesthetists who undertake occasional paediatric practice) and training for acute paediatric emergencies.



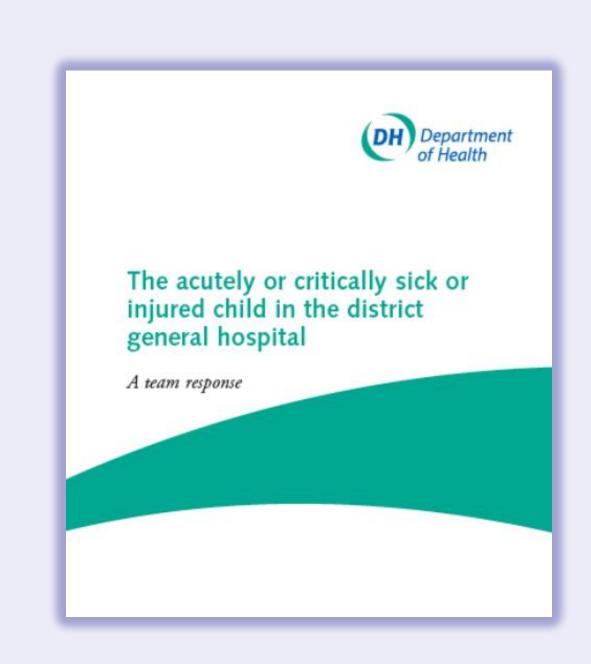


Figure 1. 'Tanner Report'

## Methods

'Managing Emergencies in Paediatric Anaesthesia for Consultants' (MEPA FC) provides a comprehensive update in resuscitation of the sick child for those who undertake an occasional paediatric list or provide out of hours paediatric care (4).

The course covers all paediatric topics in the Royal College of Anaesthetists (RCoA) Level 2 CPD Matrix. (2, Figure 2).

> 2D01 – Assessment and management of critically ill child 2D02 – Perioperative care of children 2D03 – Vascular access techniques 2D04 – Fluid management for children 2D05 – Analgesia for children 2D06 – Sedation techniques for children 2D07 -Team working between DGH's and PICU Retrieval teams

#### Figure 2. RCoA CPD Matrix Codes

Simulation Leads from the tertiary unit and DGH worked closely together in the development and delivery of the course and scenarios were adapted for local use.

Scenarios were run 'in-situ' (Theatres/Intensive Care Unit) - allowing for 'systems testing' in addition to training.

MEPAFC was delivered by an expert faculty including tertiary paediatric anaesthetists and intensivists, and a DGH anaesthetist with special interests in simulation and paediatric anaesthesia.

centralised (MEPA administration) feedback were completed by participants.

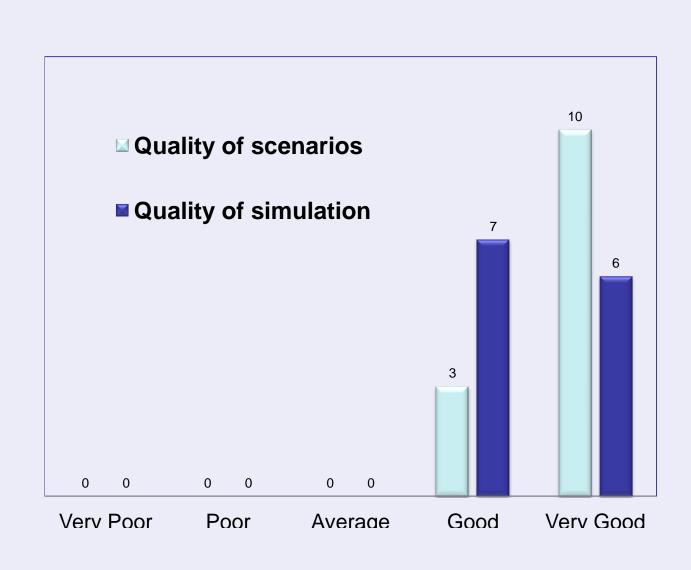
#### Results

3 MEPA FC courses were delivered. 12 consultants and 2 SAS doctors from the DGH attended.

100% of participants felt the quality of the course was "good" or "very good" (Figure 3).

100% of participants "agreed" or "strongly agreed" that they had improved confidence in managing paediatric emergencies and all participants would recommend MEPA FC to colleagues and support MEPA FC becoming part of their regular revalidation cycle (Figure 4).

Free-text comments included that scenarios were "relevant" and "realistic" delivered by "expert" and "approachable" faculty. See also Figure 5 for further examples of free text comments.



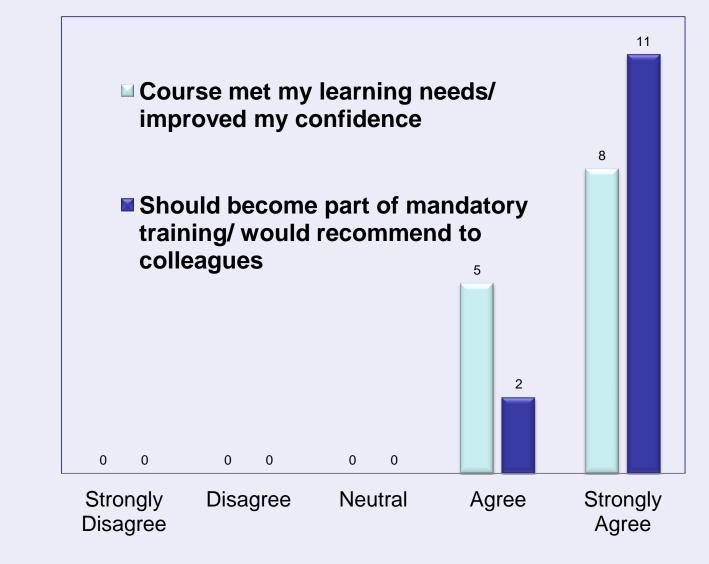


Figure 3. Quality of Course

Figure 4. Confidence/Revalidation

"Clear, concise sessions, pleasant and approachable trainers."

Figure 5. Free Text Comments

"One of the best study days I have been on"

### Discussion

Participant feedback suggested many factors behind the success of this training programme:

- MEPA FC aligns with RCoA appraisal requirements.
- Delivering MEPA FC 'in-situ' allows realistic simulation and 'systems testing'.
- Links between the tertiary unit and the DGH are strengthened by training together – as recommended by the DoH (3)

Participants have expressed a desire that MEPA FC be incorporated into a regular revalidation cycle. We are collating opinions as to how often the course should run.

Outcomes from 'systems testing' will be presented at a future date.

We have set up a system that enables participants to be sent the 'reflective' component of their own feedback (in addition to receiving a certificate). This reflection on learning and planned 'changes to practice' can be used to evidence Domain 1.1 within Good Medical Practice (1). This will be presented at a future date.

## References

- http://www.gmc-uk.org/doctors/revalidation.asp
- http://www.rcoa.ac.uk/revalidation-cpd
- 'The acutely or critically sick or injured child in the district general hospital A team response Department of Health Report 2006.
- www.mepa.org.uk



