

Mapping 'MEPAT' Paediatric Anaesthesia Simulation Course to the RCoA (UK) Curriculum

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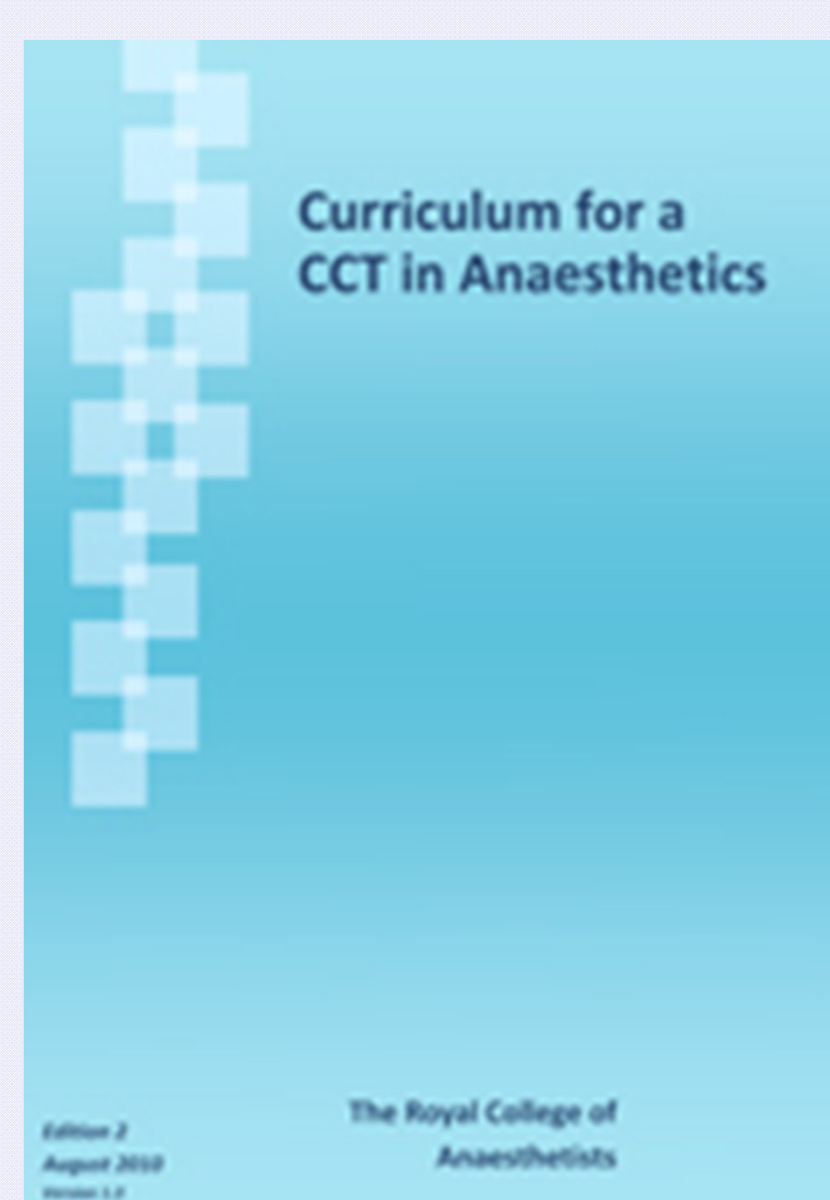
Abstract and Objectives

'Managing Emergencies in Paediatric Anaesthesia for Trainees' (MEPAT) is an Internationally recognised, peer reviewed and literature based simulation course which aims to give anaesthesia trainees the opportunity to develop skills in the management of paediatric anaesthetic emergencies (1)

The Royal College of Anaesthetists UK Certificate of Completion of Training (CCT) is competency based, with an emphasis on achieving coded competencies which can be evidenced from several sources including completion of the Fellowship Examination, Work place Based Assessments (WBA's) and Simulation (2)

Completing MEPAT offers the chance to evidence several areas of the CCT curriculum, however the curriculum is extensive and can be challenging for the trainee to navigate.

We aimed to 'map' the MEPAT Course to the coded competencies within the RCoA Curriculum .



Methods

Anaesthesia trainees who had recently completed an Intermediate paediatric anaesthesia unit *and* the MEPAT course reviewed the MEPAT Scenarios.

Learning objectives within the MEPAT Scenarios (see example Figure 1) were reviewed alongside the RCoA Curriculum Annex C - Intermediate Curriculum (3) (see example Figure 2) and Annex G - Teaching and Training, Academic and Research (inc audit) and Management for Anaes, Critical Care and Pain Medicine (4)

A list of coded competencies were matched to each scenario to create a map.

The General Medical Council (GMC) 'Good Medical Practice' (GMP) decodes were included according to the RCoA curriculum blueprint.

The map was subsequently reviewed by a MEPAT trainer and the map was submitted to the MEPA Group for feedback.

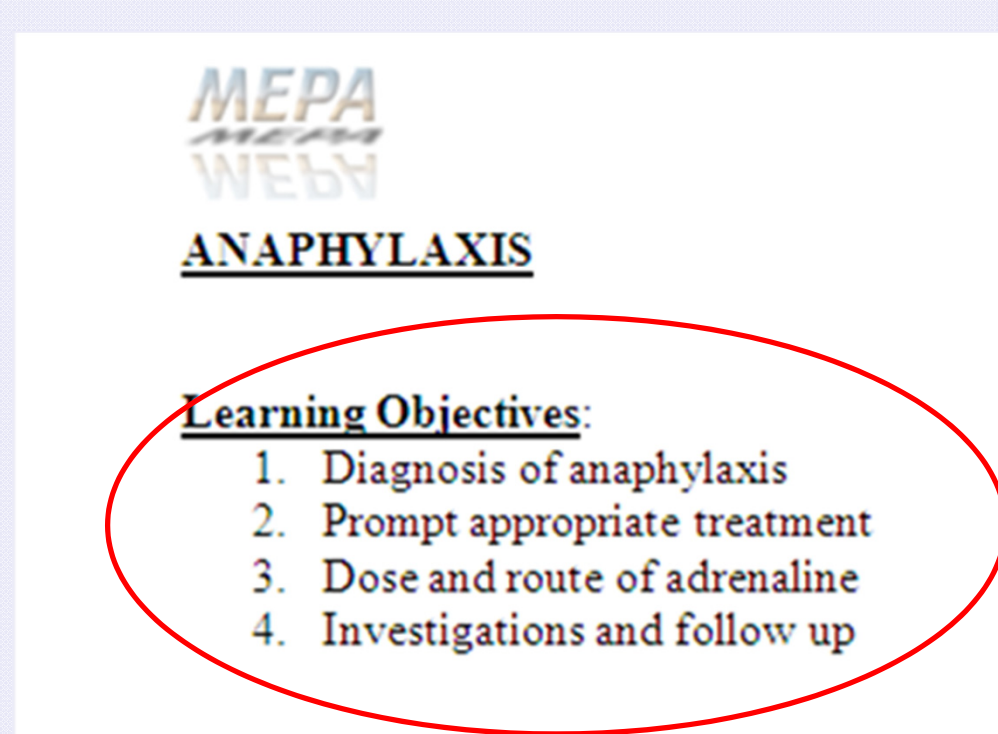


Figure 1

Competence	Description	Assessment Method	GMP
Children and Infants			
PA_IS_01	Demonstrates the ability to resuscitate all ages, both basic and advanced (BLS and ALS)	S	1
PA_IS_02	Demonstrates correct preoperative assessment in all ages down to 1 year	A,D	1,3,4
PA_IS_03	Demonstrates the ability to use the correct technique for induction, maintenance and monitoring for elective and emergency anaesthesia	A,D	1,2,3,4
PA_IS_04	Demonstrates correct selection, management and monitoring of children requiring diagnostic and therapeutic procedures carried out under sedation	A,C,D	1,2,3,4
PA_IS_05	Demonstrates ability to maintain perioperative physiology (e.g. glucose, fluids and temperature) in children down to 5 years of age	A,C,D	1,2
C-49			
PA_IS_06	Demonstrates strategies for, and the practical management of, anaesthetic emergencies in children (e.g. loss of airway, laryngospasm, failed venous access, anaphylaxis including latex allergy)	A,C,D,S	1,2
PA_IS_07	Demonstrates correct postoperative pain management, including the use of regional and local anaesthetic techniques, simple analgesics, NSAIDs and opioids	A,C,D	1,2,3,4
PA_IS_08	Demonstrates the ability to communicate clearly with children & young people, parents and carers, including those with cognitive, communication or behavioural problems	A,D,M	1,2,3,4

Figure 2

Results

MEPAT is mapped to coded competencies within the following Essential Units of Annex C:

- Paediatrics
- Management of respiratory and cardiac arrest in children and adults
- Critical Incidents
- Airway Management

MEPAT is also mapped to Improvement Science, Safe and Reliable Systems (Human Factors) within Annex G.

MEPAT Scenario	Annex C			Annex G		GMP
	Paediatrics	Critical Incidents	Resuscitation	Airway	Improvement science, Safe/ Reliable Systems	
Anaphylaxis	PA_IS_06, PA_IK_14	CI_IK_02, CI_IS_01, CI_IS_02	RC_IS_07, RC_IK_11, RC_IS_05, RC_IK_10		IS_K_05, IS_K_31	1,2,3,4
Equipment failure child	PA_IS_06, PA_IS_03	CI_IK_02, CI_IS_01, CI_IS_02	RC_IS_07, RC_IS_03		IS_K_05, IS_K_31	1,2,3,4
Hypovolaemic shock	PA_IS_06, PA_IK_14, PA_IS_01	CI_IK_02, CI_IS_01, CI_IS_02	RC_IS_07, RC_IS_03		IS_K_05, IS_K_31	1,2,3,4
LA toxicity	PA_IS_06, PA_IK_14	CI_IK_02, CI_IS_01, CI_IS_02	RC_IS_07, RC_IK_11, RC_IS_05, RC_IK_10		IS_K_05, IS_K_31	1,2,3,4
Laryngospasm	PA_IS_06	CI_IK_02, CI_IS_01, CI_IS_02	RC_IS_07, RC_IK_11, RC_IS_05, RC_IK_01, RC_IK_03, RC_IK_10, RC_IS_02	AM_IK_03	IS_K_05, IS_K_31	1,2,3,4
Loss of airway	PA_IS_06, PA_IK_14, AM_IK_03	CI_IK_02, CI_IS_01, CI_IS_02	RC_IK_12, RC_IK_13, RC_IS_03, RC_IS_07	AM_IK_03	IS_K_05, IS_K_31	1,2,3,4
Malignant Hyperthermia	PA_IS_06, PA_IK_14	CI_IK_02, CI_IS_01, CI_IS_02	RC_IK_10, RC_IS_05, RC_IS_07		IS_K_05, IS_K_31	1,2,3,4
Supraventricular Tachycardia (SVT)	PA_IS_06, PA_IS_01	CI_IK_02, CI_IS_01, CI_IS_02	RC_IK_01, RC_IK_02, RC_IK_03, RC_IS_02, RC_IS_05, RC_IS_07, RC_IK_10		IS_K_05, IS_K_31	1,2,3,4

Discussion

Mapping the MEPAT Course to the RCoA curriculum has not yet been done but mapping of the Managing Emergencies for Consultants (MEPAFC) course to the RCoA Continuing Professional Development Matrix been completed (1) and is used as evidence for annual GMC Appraisal and Revalidation.

During the process of mapping MEPAT to the RCoA curriculum we identified areas of the curriculum in addition to paediatric anaesthesia. Without use of this map trainees may miss the opportunity to include these areas in their portfolio.

Feedback from trainees and specialist paediatric anaesthetists has been extremely positive.

Following feedback from trainees we have subsequently piloted the use of Work Place Based Assessments (Standardised Case Based Discussion Templates) within this course:

We reviewed Learning Objectives within the scenarios alongside our local MEPAT database of 'Take Home Messages' (reported learning outcomes from course participants) in order to create standardised case based discussion templates for each scenario. This can be linked with the RCoA ePortfolio. This will be presented at a later date.

References

1. www.mepa.org.uk
2. 2010 Curriculum for a CCT in Anaesthetics Edition 2 Version 1.6. A publication by the Royal College of Anaesthetists UK August 2010.
3. 2010 Curriculum for a CCT in Anaesthetics Edition 2 Version 1.6. A publication by the Royal College of Anaesthetists UK August 2010 Annex C.
4. 2010 Curriculum for a CCT in Anaesthetics Edition 2 Version 1.6. A publication by the Royal College of Anaesthetists UK August 2010 Annex G.