RECOMMENDED PAEDIATRIC RESUSCITATION TRAINING FOR
NON-TRAINING GRADE ANAESTHETISTS

Introduction and rationale

Anaesthetists caring for children should be trained in paediatric resuscitation and receive annual updates. All trainees should have successfully completed recognised and accredited paediatric life support training. The national EPLS and APLS courses are purpose-made and run by instructors trained in educational theory. They are quality controlled by their co-ordinating bodies (Resuscitation Council [UK] and the Advanced Life Support Group respectively). Both offer internationally recognised qualifications. Current EPLS/APLS certification provides good evidence of ongoing resuscitation training. However high quality, locally organised, focussed, role specific training may be more relevant and responsive in some circumstances.

Repeat attendance at EPLS/APLS courses, for the purposes of recertification and revalidation, may not be optimal for certain professional groups. For example, much time in courses may be spent in learning airway opening, mask ventilation and vascular access – skills that anaesthetists, who regularly care for babies and children, practice every day. We describe a suggested scheme for training which broadly outlines how this can be delivered.

The local Resuscitation Committee is well placed to determine the needs of healthcare providers in its area of influence and should determine the most appropriate training for them in collaboration with local EPLS/APLS or simulator instructors. It also has a responsibility to ensure that the training is of good quality and not just a simple ‘box ticking’ exercise.

This document may be of use to Resuscitation committees and Anaesthetic departments. Compliance with these standards could be used by external bodies (for example the Care Quality Commission in England, and the RCoA ACSA process 1, 2) for the purposes of Clinical Quality review.

This recommendation is reflected in current national guidance on the delivery of paediatric anaesthetic services 3

References
1. Report to the Care Quality Commission by Dr. Sheila Shribman “Getting it right for children and young people (including those transitioning into adult services)”- a report on the CQCs new approach to inspection, March 2014

Dr. R Bingham and Dr. K Wilkinson, APAGBI, Last revised October 2014
Suggested Core Knowledge and Skills delivered in local paediatric resuscitation updates

**Knowledge:** may be delivered as an annual tutorial or e-learning – *approx 1 hour duration*

Suggested topics:

- Update on resuscitation guidelines
- Recognition of the acutely ill or injured baby or child
- Common drug and fluid doses for the acutely ill or injured baby or child
- Defibrillation including use of Automated External Defibrillators (AEDs) in infants and children
- ALS algorithm in babies and children
- Update on network arrangements, local guideline development with reference to local PICU and transport equipment and teams

**Skills:**

Some of the skills listed below may be practised on purpose built equipment, but they should be reinforced by the participation in annual scenarios led by accredited EPLS/APLS or simulator instructors – *minimum 1 hour duration*

- Difficult airway management e.g. laryngospasm, can’t intubate/ventilate
- Chest compression including management of ventilation during asynchronous compression/ventilation of intubated child
- Defibrillation – manual & AEDs
- Intra-osseous (IO) needle insertion including use of mechanical IO insertion devices

**Scenarios** should be developed with defined educational objectives and outcomes and should be in a setting appropriate to the anaesthetist and local practice. Debriefing is an essential part of the process. The use of video recording and simulation will increase the value of this exercise considerably and is encouraged as in “in situ” practice.

Scenario examples:

- Laryngospasm with hypoxia
- Anaphylaxis in an anaesthetised child with PEA arrest
- VF arrest in child secondary to LA overdose e.g. post caudal block
- Electrolyte disturbance secondary to previously undiagnosed myopathy

**Attitudes:**

Scenarios and feedback should include multi-disciplinary team roles, responsibilities and dynamics.