

Paediatric Special Interest Area (SIA) guidance How to evidence the Key Capabilities

General guidance

- 1 An SIA in paediatric anaesthesia is carried out over 6 months to 1 year. Those anaesthetists in training intending to practice and potentially lead paediatric anaesthesia in a non-tertiary setting are advised to complete the 6 month SIA. The 12 month SIA is intended for those aiming to practice in a tertiary paediatric setting.
- 2 To fulfil the requirements for the 6 month SIA, Anaesthetists in training must clearly demonstrate that key capabilities A-F below have been achieved. For those completing the 12 month SIA, key capabilities A-H must be clearly evidenced.
- 3 Anaesthetists in training can draw on a broad range of evidence including SLEs, personal activities and personal reflections to demonstrate attainment of the key capabilities.
- 4 There is no requirement for a minimum number of SLEs, sessions or logbook numbers. The anaesthetist in training should use SLEs in a formative way to demonstrate reflection on learning and progress.
- 5 Anaesthetists in training should use appropriate SLEs to clearly demonstrate that they have achieved each of the key capabilities. These should be supported by completion of an SIA specific MTR.
- 6 The suggested supervision level for all key capabilities is SL4. Anaesthetists in training should be able to manage cases independently with no supervisor involvement (although should inform consultant supervisor as appropriate to local protocols). Anaesthetists in training do not have to have a specific SLE with the suggested supervision level to meet the SIA HALO requirements, but they do need to demonstrate progress, and the SIA HALO trainer decision will be based on all the evidence supplied and observation in practice.
- 7 A single piece of evidence can be used to evidence more than one of the key capabilities or a key capability cluster, where appropriate.
- 8 Where examples of evidence are listed, these are not the only form of acceptable evidence. They are examples, not requirements.

SIA in Paediatric Anaesthesia
For a district general hospital anaesthetist with a regular commitment to children's anaesthesia

Learning outcome:

- Provides safe perioperative care for a wide variety of paediatric procedures performed in the district general hospital environment independently

The key capabilities are outlined below with examples of evidence that can be used to demonstrate achievement of each key capability.

Summary of what is required

- Multiple SLEs and reflective pieces which support the achievement of the key capabilities below at supervision level 4
- Supportive logbook evidence including details of anaesthesia for neonates, regional techniques, airway management, TIVA and arterial and central venous access
- A short period on PICU may be useful but not mandated
- An SIA specific MTR which supports the achievement of the key capabilities below at a supervision level 4
- Evidence of attendance at national and/or international meetings and courses related to paediatric anaesthesia such as APAGBI annual meeting, Positive Outcome and Experience Management Strategies (POEMS), Managing Emergencies in Paediatric Anaesthesia (MEPA), Advanced Paediatric Life Support (APLS)

Key Capabilities

A: Provides safe anaesthesia in both emergency and elective setting utilising techniques to reduce anxiety in all ages including premature babies

Examples of evidence

- SLE or reflective piece demonstrating the use of pharmacological and non-pharmacological methods of managing perioperative anxiety in a child. The evidence should discuss use of premedication including patient selection, routes of administration (e.g. oral, intranasal, IM), dosing and selection of different agents (single and multiple) in different situations.
- SLE or reflective piece demonstrating methods to reduce anxiety in infants and babies e.g. minimising starvation times, parental presence, age appropriate distraction techniques, methods of providing comfort.
- SLE demonstrating the anaesthetic management of a child under 1 years of age for straightforward emergency and elective surgery (e.g. scrotal exploration, inguinal hernia repair, MRI) including preoperative assessment, induction, maintenance, emergence and post-operative pain relief.
- SLE demonstrating the anaesthetic management of a neonate including preoperative assessment, intraoperative considerations (e.g. drug doses, fluid management, blood loss, temperature control, vascular access, monitoring) and postoperative care (e.g. apnoea monitoring, analgesia). *The supervision level achieved should be at a level commensurate with their future expected consultant practice.*
- SLE or reflective piece demonstrating the resuscitation and stabilisation of a child prior to transfer.
- Reflections of learning from e-learning and/or courses e.g. Positive Outcome and Experience Management Strategies (POEMS), Managing Emergencies in Paediatric Anaesthesia (MEPA), Advanced Paediatric Life Support (APLS)

B: Delivers safe perioperative care to all paediatric patients requiring surgery in a district general setting, including those with complex co-existing disease

Examples of evidence

- SLE demonstrating the anaesthetic management of a child 1-3 years of age for emergency and elective surgery (e.g. scrotal exploration, tonsillectomy, appendicectomy, orthopaedic procedures) including preoperative assessment, induction, maintenance, emergence and post-operative pain relief
- SLE demonstrating the anaesthetic management of a child with a co-morbidity such as Asthma, Diabetes Mellitus, CF, OSA, simple congenital cardiac disease e.g. ASD/VSD. The SLE should discuss pre, peri and postoperative considerations
- ALMAT for the management of a paediatric list aged 1 years and over
- SLE demonstrating the anaesthetic management of a young child for removal of airway foreign body including different techniques for open airway anaesthesia and LA topicalisation
- SLE demonstrating difficult airway management in a child including use of a paediatric videolaryngoscope under anaesthesia
- SLE demonstrating the use of TIVA in children
- SLE or reflective piece describing the preassessment of a complex patient e.g. congenital heart disease, including risk stratification and discussion of when to transfer to a tertiary unit
- SLE or reflective piece describing leading a paediatric preassessment clinic

C: Can gain arterial, intraosseous, peripheral and central venous access in children and babies

Examples of evidence

- SLE or reflective piece demonstrating the management of difficult peripheral venous access in a child and baby e.g. ultrasound guided IV access, including indications for different types of venous access
- SLE demonstrating the safe placement of central venous access in a child including choice of location, catheter selection, appropriate technique and consent
- SLE demonstrating the safe placement of arterial access in a child including choice of location, catheter selection, appropriate technique and consent
- SLE or reflective piece demonstrating the safe placement of intraosseous access in a child including choice of location, needle selection, appropriate technique and consent. May be demonstrated on a mannikin
- Logbook evidence of paediatric central venous and arterial access

D: Uses a wide range of analgesic strategies perioperatively including simple regional techniques for surgeries routinely performed in a district general hospital setting

Examples of evidence

- Logbook of regional techniques including paediatric plan A blocks
- Multiple SLEs demonstrating the use of a number of the paediatric plan A blocks for different surgeries e.g. dorsal penile nerve block for circumcision, lateral QL block for appendicectomy
- SLE demonstrating the use of caudal anaesthesia in a child including patient selection, consent, safe technique, drug selection and dose
- SLE or reflective piece on the use of opioids in children including management of NCA/PCA and the use of opioid sparing drugs and techniques

E: Manages massive transfusion in children

Examples of evidence

- SLE describing the management of massive transfusion in a child including knowledge of local paediatric major haemorrhage protocol
- Simulation training demonstrating safe management of massive transfusion in children

F: Explains NHS policy for the provision of paediatric services

Examples of evidence

- Development of guidelines and policies
- Leadership of QI projects related to paediatric anaesthesia

SIA in Paediatric Anaesthesia

For those intending to practice in a tertiary paediatric setting

Learning outcomes:

- Provides safe perioperative anaesthetic care for a wide variety of complex paediatric (including neonates) surgery and other procedures independently
- Is capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation

The key capabilities are outlined below with examples of evidence that can be used to demonstrate achievement of each key capability. These are required in addition to key capabilities A-F above

Summary of what is required

- Multiple SLEs and reflective pieces which supports the achievement of the key capabilities below at supervision level 4
- Supportive logbook evidence including details of anaesthesia for neonates, regional techniques, advanced airway techniques, TIVA and arterial and central venous access
- A dedicated period of time spent on PICU is desirable
- A dedicated period of time spent in paediatric cardiac anaesthesia is desirable
- An SIA specific MTR which supports the achievement of the key capabilities below at supervision level 4
- Evidence of attendance at national and/or international meetings and courses related to paediatric anaesthesia such as APAGBI annual meeting, Positive Outcome and Experience Management Strategies (POEMS), Managing Emergencies in Paediatric Anaesthesia (MEPA), Advanced Paediatric Life Support (APLS)

Key Capabilities

G: Delivers safe perioperative care to all paediatric patients requiring surgery in a tertiary paediatric setting including those with complex co-existing disease

Examples of evidence

- SLE demonstrating the anaesthetic management of a premature neonate for laparotomy including preoperative assessment, intraoperative considerations (e.g. drug doses, fluid management, blood loss, temperature control, vascular access, monitoring) and postoperative care (e.g. analgesia).
- SLE demonstrating the anaesthetic management of a neonate for tracheosophageal fistula repair including preoperative assessment, intraoperative considerations (e.g. airway management and ETT placement, positioning, drug doses, fluid management, blood loss, temperature control, vascular access, monitoring) and postoperative care (e.g. analgesia).
- SLE demonstrating the anaesthetic management of a neonate for a diaphragmatic hernia repair including preoperative assessment and optimisation and timing of surgery. Intraoperative considerations (e.g. airway management and ventilation strategies, positioning, drug doses, fluid management, cardiovascular support, blood loss, temperature control, vascular access, monitoring) and postoperative care (e.g. analgesia).
- SLE demonstrating the anaesthetic management of a child or infant with congenital heart disease for cardiac surgery or an interventional procedure.
- SLE demonstrating the anaesthetic management of a child under 1 years old with stridor (e.g. subglottic stenosis, laryngomalacia) for a microlaryngobronchoscopy including techniques for paediatric open airway anaesthesia and LA topicalisation
- SLE or reflective piece demonstrating the management of transfer and handover of the postoperative child to PICU
- SLE demonstrating the management of the difficult paediatric airway e.g. MPS, Pierre Robin including use of videolaryngoscope and flexible videoscope (or fiberoptic) under anaesthesia and advanced airway techniques.
- SLEs or reflective pieces describing the perioperative management of children with complex co-existing disease e.g. metabolic conditions, muscular dystrophy, complex congenital cardiac disease
- SLEs or reflective pieces describing the perioperative management of children for complex surgery e.g. craniofacial, neurosurgery, thoracotomy

Key Capabilities

G: Delivers safe perioperative care to all paediatric patients requiring surgery in a tertiary paediatric setting including those with complex co-existing disease

- SLE or reflective piece describing the perioperative management of an infant for a pyloromyotomy including preoperative assessment and optimisation, intraoperative management and postoperative analgesia
- ALMAT for the management of a paediatric list which includes children under the age of 1 years old

H: Uses a wide range of analgesic strategies perioperatively for complex paediatric patients requiring major surgery

Examples of evidence

- Logbook of regional techniques including epidural and caudal anaesthesia, paediatric plan A and B blocks and catheter placement
- SLE demonstrating the safe placement and use of epidural anaesthesia in a baby and young child including patient selection, consent, technique, drug selection and dose.
- SLEs and reflective pieces demonstrating the use of a range of peripheral nerve blocks and catheter placement for complex cases