Guidance for trainers on achieving regional anaesthesia outcomes – RCoA 2021 curriculum

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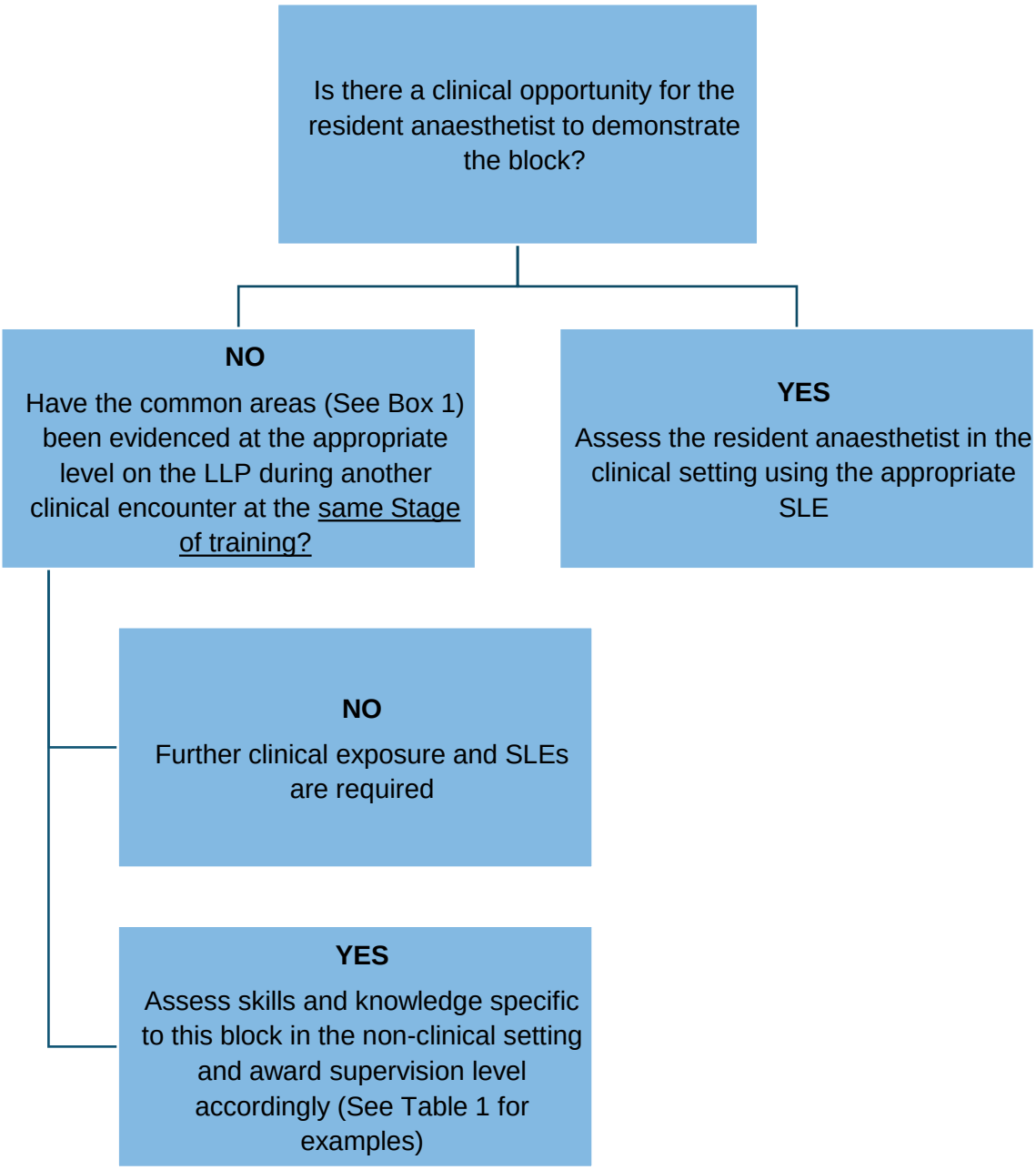
Introduction

All anaesthetists completing the 2021 Curriculum should be able to deliver a range of safe and effective regional anaesthetic techniques to cover the upper and lower limb, chest and abdominal wall independently[1]. The RCoA and RA-UK recognise that there is variation in the provision of regional anaesthesia training opportunities nationally[2]. The purpose of this guidance is to aid trainers in supporting resident anaesthetists to meet the regional anaesthesia Key Capabilities of the RCoA 2021 Curriculum in situations where clinical training opportunities may be limited.

It is essential to plan regional anaesthesia training during the initial Educational Supervisor meeting to allow identification and scheduling of available opportunities early in the training cycle. While *examples* of evidence are provided as a guide, trainers and resident anaesthetists should note that other forms of evidence may be used if relevant to the Key Capabilities being assessed. The 2021 Curriculum allows many forms of evidence to contribute towards Holistic Assessment of Learning Outcome (HALO) sign-off in addition to Supervised Learning Events (SLEs). Trainers are encouraged to make use of the RA-UK Regional Anaesthesia Curriculum Resources document, which offers valuable materials to support training and assessment in regional anaesthesia.

The following flow diagram outlines the process to follow where there is limited clinical opportunity to perform a particular technique. This recognises that some areas are common to all blocks, and where these common areas have previously been demonstrated to a satisfactory level in a clinical situation, they do not need to be demonstrated again.

Where the opportunity is not available to perform a particular block on a patient, if the resident has demonstrated these common areas previously, it may be appropriate to undertake an SLE in a *non-clinical* situation assessing the specific knowledge and skills relevant to that block. This could be by discussing the anatomy, specific indications and contraindications, using mock scanning, needling phantoms, cadaveric needling on courses, needling simulators, or other means depending on local availability, according to the judgement of the trainer. Attendance at regional anaesthesia courses, although useful, is not mandatory. The table below gives further examples of evidence that could contribute to HALO sign-off.



Box 1

Common areas evidenced at the appropriate level on the LLP during another encounter at the same Stage of training:

- Consent
- Set-up/ergonomics (including measures to avoid wrong-site blocks)
- Scanning technique
- Needling technique
- Communication

Experience

The requirements for each Stage of training are as follows:

- Stage 1
- Stage 2
- Stage 3

Evidence

The following table provides examples of evidence to support attainment of regional anaesthesia Key Capabilities at each Stage of the curriculum.

Evidence may be presented in a variety of ways. This can take the form of **SLEs** such as A-CEX, DOPS, CBD and ALMAT at the suggested supervision level. It may also include activities such as attendance at courses, completion of eLearning modules, involvement in regional anaesthesia teaching (attendance at and/or delivery of teaching sessions), simulation training or logbook data. These can be recorded on the LLP as **Personal Activities** or **Personal Reflections.**

Table 1: Examples of evidence to support attainment of regional anaesthesia Key Capabilities

Stage 1	**Supervised Learning Events (SLEs)** can be used to demonstrate specific knowledge and skills required to perform a block which has not been evidenced in the clinical setting, such as: • Anatomy (e.g. central neuraxial, femoral, fascia iliaca) • Risk and benefits of regional anaesthesia • Indications/contraindications • Measures to avoid wrong-site blocks • Drugs and equipment • US image generation • Scanning volunteer model or patient • Mock needling on phantom or needle simulator **Personal Activities and Personal Reflections examples:** • Attendance at courses (e.g. RA-UK Stage 1 Competencies Course) • Attendance at local teaching sessions • eLearning and webinars • Simulation training/needle-trainer • Logbook • Reflective practice

Stage 2	**Supervised Learning Events (SLEs)** can be used to demonstrate specific knowledge and skills required to perform a block which has not been evidenced in the clinical setting, such as: • Anatomy (e.g. brachial plexus, chest, abdominal wall, ophthalmic) • Indications/contraindications and assessing when a regional technique is not appropriate • Complications • Longer term management of complications • Acquisition of optimal US images and recognition of artefacts • Management of inadequate block • Abnormalities of coagulation and regional anaesthesia • Scanning volunteer model or patient • Mock needling on phantom or needle simulator **Personal Activities and Personal Reflections examples:** • Attendance at courses (e.g. RA-UK approved model scanning/cadaveric anatomy/cadaveric needling courses) • Attendance at local teaching sessions • eLearning and webinars • Simulation training/needle-trainer • Logbook • Reflective practice
Stage 3	**Supervised Learning Events (SLEs)** can be used to demonstrate specific knowledge and skills required to perform a block which has not been evidenced in the clinical setting, such as: • Anatomy (upper limb, lower limb, chest, abdominal wall) • Tailors regional anaesthesia techniques to patients undergoing day surgery • Manages regional anaesthesia and analgesia safely in the perioperative period • Performs ultrasound-guided regional anaesthesia for the chest wall and abdominal wall independently • Performs ultrasound-guided nerve blocks for lower limb surgery and brachial plexus block independently • Scanning volunteer model or patient • Mock needling on phantom or needle simulator **Personal Activities and Personal Reflections examples:** • Attendance at courses (e.g. RA-UK approved model scanning/cadaveric anatomy/cadaveric needling courses)

	• Attendance at local teaching sessions • eLearning and webinars • Simulation training/needle-trainer • Logbook • Reflective practice

Case Example 1

An ST6 resident anaesthetist is working in a hospital where all abdominal wall blocks are performed by the surgeons. Their logbook shows that they have performed TAP blocks independently out-of-hours in obstetric patients. Necessary capabilities for upper limb, lower limb and chest wall blocks have all been achieved (i.e. common areas have been evidenced at the appropriate level on the LLP).

The resident anaesthetist has completed a CBD describing anatomy, indications, contraindications and complications of the rectus sheath plane block. They have recently attended an RA-UK approved course scanning live models demonstrating the rectus sheath plane block. This resident has presented sufficient evidence for Key Capability D 'Performs ultrasound-guided regional anaesthesia for the abdominal wall independently'.

Case Example 2

An ST7 resident anaesthetist is in the final 6 months of training, working in a centre that undertakes upper limb but not lower limb surgery. They have SLEs demonstrating brachial plexus blocks at the appropriate supervision level for this Stage of training and supportive logbook data for independent upper limb blocks. They have evidenced the common areas at the appropriate level on their LLP.

They submit a Personal Reflection on the LLP after working through the lower limb resources in the RA-UK Regional Anaesthesia Curriculum Resources document and complete a CBD on the anatomy, indications, contraindications and complications of femoral nerve blocks. They successfully demonstrate scanning for a femoral nerve block for a trainer during their local teaching session, who completes an SLE. This resident has presented sufficient evidence for Key Capability E 'Performs ultrasound-guided nerve blocks for lower limb surgery independently.

References

1. Royal College of Anaesthetists. 2021 Anaesthetics Curriculum. 2021
2. https://www.bjaopen.org/article/S2772-6096(23)00120-X/pdf