HALO Guidance

The Holistic Assessment of Learning Outcomes (HALO) is the Summative Assessment for each domain of the 2021 Curriculum.

The anaesthetist in training will need to demonstrate the following to complete the respective HALO assessment:

- Attainment of all of the Key Capabilities within the Domain of Learning
- Appropriate clinical experience and logbook data in the case of specialty specific domains
- Successful completion of a Multiple Trainer Report for the respective stage of training.

Evidence that may be used to demonstrate attainment of the Key Capabilities includes:

- Clinical experience and logbook data
- Supervised Learning Events (as illustrated by the use of ACEX, CBD, ALMAT, DOPS or A-QIPAT)
- Personal Activities including attending courses, teaching sessions or simulation and personal reflection

For regional anaesthesia, the designated trainers for assessing the collated evidence for completion of the HALO are as follows:

Stage 1: Dr Parvesh Verma parvesh.verma3@nhs.net Stage 2: Dr Timothy O'Neill timothy.o'neill1@nhs.net

Stage 3/ Special Interest Area: Dr Ching Ling Pang c.pang@nhs.net

The following is intended as guidance for trainees and assessors wishing to complete training in Regional Anaesthesia. Whilst there is theoretically no minimum number of SLEs or lists; sufficient evidence needs to be demonstrated for completion of a HALO form. We therefore recommend a minimum of 3 SLEs which cover the key capabilities for each stage, along with suggested number of appropriate lists and SLEs that would be viewed as appropriate and sufficient evidence and experience. The colour coding is intended as a guide for the trainee to identify and pair learning opportunities that would allow efficiency for sign off. An example of this for stage 1 would be in Stage 1, where a single CBD could be used to discuss the indications, contraindications, risks, benefits, drugs, and equipment used in regional anaesthesia.

In general, we have not as a group suggested additional evidence such as logbook be mandated. However, where the anticipated EPA correlates to independent practice or 'mastery', we have included suggested logbook numbers to ensure an adequate breadth and depth of experience which correspond to the suggested Plan A blocks from Regional Anaesthesia UK.

Stage 1

Key Learning Outcome: Performs simple peripheral nerve blocks and performs spinal anaesthesia and lumbar epidural anaesthesia/analgesia independently

Key Capabilities	Required SLEs / Suggested Lists
 Explains risks/benefits of RA Describes indications and contraindications to RA techniques Practices measures to avoid wrong site blocks Spinal anaesthesia for ASA 1-3 patients independently Perform peripheral nerve blocks with US Performs US-guided femoral or fascia iliaca block independently Initial management of complications of RA including systemic toxicity, high spinal, and PDPH Provides epidural/CSE for ASA 1-3 obstetric patients, and offers other forms of pain relief when neuraxial analgesia is contraindicated Provides neuraxial anaesthesia for operative delivery and other obstetric procedures in ASA 1-3 patients and manages the inadequate neuraxial block Discusses the scientific basis of US and the generation of US images Discusses drugs and equipment used in RA 	CBDs: 1-2 A-CEX: - 1 peripheral nerve block (ideally lower limb) - 1 orthopaedic with central neuraxial blockade DOPS: - 1 peripheral nerve block (ideally lower limb) - 1 orthopaedic with central neuraxial blockade Suggested Lists: Elective orthopaedics / Orthopaedic Trauma : 2-3

NB this guidance assumes the satisfactory completion of training in Stage 1 obstetric anaesthesia (EPA level 3 for neuraxial anaesthesia for operative delivery for the parturient)

Stage 2

Key Learning Outcome: Performs a wide range of regional anaesthesia techniques

Key Capabilities	Required Lists / Suggested SLEs
 Performs US-guided brachial plexus blocks Performs US-guided fascial plane blocks for chest/abdominal wall Demonstrates how to achieve an optimal US image and recognises common US artefacts Describes ophthalmic blocks for patients undergoing awake ophthalmic surgery 	CBD: 1-2 A-CEX: 1 of - Brachial plexus block - Chest/abdominal wall block DOPS: 1 of - Brachial plexus block - Chest/abdominal wall block
 Involves the patient in planning and understanding potential complications of RA Assesses when a RA technique is not appropriate Manages inadequate block in the awake patient and in recovery if used as an adjunct to GA Describes the longer-term management of complications of RA Discusses the use of RA in the presence of abnormalities of coagulation 	Suggested Lists: Renal List / Brachial Block List: 1-2 Elective Orthopaedic /Orthopaedic Trauma: 1-2 Mile End (Ophthalmology): 1 (optional)

Stage 3

Key Learning Outcome: Delivers a range of safe and effective RA techniques to cover the upper and lower limb, chest and abdominal wall independently

Key Capabilities	Required SLEs / Suggested Lists	
 Tailors RA techniques to patients undergoing day surgery Manages RA and analgesia safely in the peri-operative period in all settings Performs US-guided RA for the chest wall independently Performs US-guided RA for the abdominal wall independently Performs US-guided RA for lower limb surgery independently Performs US-guided brachial plexus block independently 	CBD: 1 A-CEX: 1 of - Brachial plexus block - Lower limb block - Chest/abdominal wall block DOPS: 1-2 of - Brachial plexus block - Lower limb block - Chest/abdominal wall block ALMAT: - Ideally for the renal or hand list Suggested Lists: Renal List: 2 Brachial Block List: 1-2 Elective Orthopaedic /Orthopaedic Trauma: 1-2 TAG: 1	

Suggested Logbook (in total, including historical):

While logbook numbers are not intended to form part of a summative assessment, the faculty feel that the following numbers of blocks (in totality throughout training) may represent appropriate additional evidence to support progression towards EPA 3-4 clinical activity.

Upper limb: 20 Lower limb: 20

Abdominal + chest wall (single shot/catheters- may be surgically placed): 20

Special Interest Area

Key Learning Outcomes:

- Provides a wide variety of regional anaesthetic techniques independently
- Is capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation

Key Capabilities	Suggested SLEs
Can independently practice safely a wide range of regional techniques for all upper limb and shoulder surgery under block alone, including the management of continuous nerve catheters for post-operative analgesia	CBD, A-CEX, DOPS
Can independently practice safely a wide range of regional techniques for lower limb surgery, including the management of continuous nerve catheters for post-operative analgesia	CBD, A-CEX, DOPS
Can independently practice safely a wide range of regional techniques for chest and abdominal wall surgery	CBD, A-CEX, DOPS
Ability to independently organise, lead and evaluate the effectiveness and efficiency of an operating list planned under regional anaesthesia alone	ALMAT x 1, for the brachial block list
Supervises and advises colleagues on the suitability and delivery of regional anaesthesia in complex cases	CBD, A-CEX Teaching for scanning club
Can evaluate the place of regional anaesthesia, and any developments, within the patient perioperative	CBD
pathway and advise on potential changes in practice	Personal reflection
	A-QIPAT

There are currently no minimum numbers of SLEs suggested for each domain of anaesthesia within the curriculum. However, a suggested recommendation would be as follows:

CBDs: minimum of 1 involving the delivery of regional anaesthesia in the peri-operative pathway for a complex patient (elective or emergency) A-CEX: minimum of 1 involving the delivery of regional anaesthesia *independently* (EPA 4) to a patient having upper limb surgery DOPS: minimum of 1 involving the delivery of regional anaesthesia *independently* (EPA 4) to a patient having any surgery

Suggested Lists:

Renal List: 2

Brachial Block List: 2

Elective Orthopaedic / Orthopaedic Trauma: 2

TAG: 1

Additionally, experience may be gained across a number of theatres including: emergency theatres, vascular theatres, and on the on-call rota

Suggested Logbook (to discuss):

While logbook numbers are not intended to form part of a summative assessment, the faculty feel that the following numbers of blocks (in totality throughout training) may represent appropriate additional evidence to support progression towards EPA 4 clinical activity. Whilst historical logbook evidence may be used as evidence of breadth of experience, the assessment faculty would also expect to see appropriate progression towards independent / EPA 4 clinical practice within the logbook.

Area of Body	Number of Blocks	Number of Independent/ EPA 4 Procedures
	Total in SIA/ In Training	
Upper Limb	25	10
Lower Limb	25	10
Chest Wall	10	5
Abdominal Wall	10	5

Quality Improvement

Trainees completing a special interest area of training in regional anaesthesia would be expected to participate in the delivery of local regional anaesthesia related quality improvement/service delivery projects. Appropriate evidence of this would be in personal reflection or the completion of an A-QIPAT.