

# Initial Assessment of Competence in Obstetric Anaesthesia (IACO A)

Entrustable Professional  
Activities 3 and 4

**WORKBOOK**

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# Introduction

The initial training period for obstetric anaesthesia takes place during Stage 1 of the 2021 curriculum and is usually commenced after 1 year of anaesthetic training.

The training period is for a minimum of three months during which you, as an anaesthetist in training, will gain the knowledge, skills and attitudes required to take part in an obstetric on call rota.

Progress through this period of training is demonstrated through the use of workplace-based assessments and the reduction in level of supervision required.

Two Entrustable Professional Activities (EPAs) are used to encapsulate the training required for obstetric anaesthesia for the IACOA.

These are:

- **EPA 3: Administration of pain relief for labour**
- **EPA 4: Anaesthesia for obstetric operative procedures including category 1-3 LSCS**

At the end of the training period you will be required to demonstrate that they have achieved an entrustment level of 3 (*Supervisor on call from home for queries, able to provide directions via phone or non-immediate attendance*) in each of the EPAs in order to gain your IACOA certificate.

In addition (or as part of) the two EPAs, you will need to have completed simulation training in:

- 1 obstetric anaesthesia
- 2 assessment of general anaesthesia for Caesarean section

These can be done as together on one course.

## [See Appendix 1](#)

A multiple trainer report must be completed towards the end of this period of training to support the award of the IACOA certificate.

Achieving the IACOA does not signal meeting the obstetric anaesthesia capabilities of Stage 1 training so you will need further exposure to training during this stage.

Levels of supervision/entrustment:

| Based on this encounter, what level of supervision does the trainee require for this case? |   |
|--|---|
| 1  | Direct supervisor involvement, physically present in theatre throughout.  |
| 2A   | Supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals.  |
| 2B   | Supervisor within hospital for queries, able to provide prompt direction/assistance.  |
| 3  | Supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.  |
| 4  | Should be able to manage independently with no supervisor involvement (although should inform consultant supervisor as appropriate to local protocols). |

**Table 1:** EPA supervision scale

## Learning and assessing progress for the IACOA

The initial training period for obstetric anaesthesia occurs on the labour ward, in the obstetric theatre and in the ante and post-natal wards.

Throughout the training time, supervised learning events, as illustrated by A-CEX, DOPS, CBD and ALMAT, should be used to facilitate learning and to demonstrate progress. Additional learning activities such as e-Learning or courses can be undertaken away from the workplace to underpin the experiential learning. You should record this learning activity in the Lifelong Learning platform (LLp) together with a log book of cases.

At the end of the period of training you will be able to show that you have progressed to the required level of supervision and that your trainers entrust you to perform the activities in EPAs 3 and 4. Table 2 provides a guide to the sources of information used to assess progress. The entrustment decisions by trainers will be based on these sources.

| Type of evidence                         | Examples and purpose   |
|--|--|
| <b>Supervised Learning Events (SLEs)</b> | <ul style="list-style-type: none"> <li>■ SLEs as illustrated by A-CEX, CBD, DOPS should be completed regularly as a formative way of gaining the knowledge and understanding of the components of the syllabus.</li> <li>■ Whenever you are with a trainer there are opportunities for learning. Use the SLEs to record the reflective conversation that you have had with your trainer.</li> <li>■ This workbook outlines what you need to learn during your obstetrics training.</li> <li>■ Constructive feedback from your trainer should help you understand developments required to progress to the next levels of supervision/entrustment.</li> <li>■ SLEs can also provide evidence of capability to detect and report high risk patients to supervisors.</li> </ul> |
| <b>Log book of cases</b>                 | <ul style="list-style-type: none"> <li>■ This demonstrates the range of anaesthetic techniques undertaken and the caseload experienced during the period of training.</li> </ul>   |
| <b>Personal activities</b>               | <p>Demonstration of self-directed learning. This may include:</p> <ul style="list-style-type: none"> <li>■ simulation</li> <li>■ e-Learning</li> <li>■ departmental teaching</li> <li>■ journal article and textbook reading.</li> </ul>   |
| <b>Reflections</b>                       | <ul style="list-style-type: none"> <li>■ You should be able to reflect on clinical experience and other educational activities.</li> <li>■ SLEs can be used to reflect on learning in the clinical setting.</li> <li>■ You can also add reflections on courses attended, teaching sessions, personal reading etc</li> </ul>  |
| <b>Multiple Trainer Report</b>           | <ul style="list-style-type: none"> <li>■ This is an assessment of your progress for your stage of training.</li> <li>■ The report covers generic professional capabilities and knowledge and understanding of obstetric anaesthesia and analgesia. This will be used to support the entrustment decision by the trainer faculty.</li> <li>■ The MTR may cover both EPAs for the IACOA</li> </ul>   |

**Table 2:** Learning and assessment for the IACOA

## EPA 3: administration of pain relief in labour

The intention of this EPA is that you are able to provide pain relief to women in labour with the supervisor on call from home for queries, able to provide directions via phone or non-immediate attendance (supervision level 3). This will be achieved through training in the workplace and with simulation over a specific training period (usually three months).

At the end of this training period you will be able to:

- discuss the various pain relief options available to women in labour
- understand the risks, benefits and contraindications associated with the different types of pain relief
- make a safe assessment of a patient before inserting a lumbar epidural
- insert a lumbar epidural catheter into a woman in labour
- manage the epidural after insertion, including the prescription of analgesic regimes, and follow up of the patient
- troubleshoot problems that may occur with analgesic techniques including epidurals
- recognise and manage complications of regional techniques eg Post Dural Puncture Headache
- recognise features of the history and examination, which confer, increased anaesthetic risk and communicate these to senior colleagues.

### Limitations

By the end of the period of training you should be able to provide epidural analgesia in patients with straightforward anatomy. You should be able to recognise those patients where you may encounter difficulty such as the morbidly obese and seek help accordingly.

### Areas of knowledge expected to be covered

- Anatomy and physiology of pregnancy and labour and its relevance to anaesthesia
- Progress of labour and its implications for analgesic technique
- Common medical and obstetric co-morbidities and their impact on the conduct of analgesia in labour including:
  - › sepsis
  - › hypertensive diseases of pregnancy
  - › grown up congenital heart disease (GUCH)
  - › raised BMI
  - › spinal problems
  - › previous anaesthetic, or
  - › epidural complications.

| Type of evidence                  | Examples and purpose  |
|-----------------------------------|---|
| <b>Supervised learning events</b> | <ul style="list-style-type: none"> <li>■ Regular completion of A-CEXs, DOPS and CBDs covering area of knowledge and skills as above</li> <li>■ these should always include insertion of epidural catheter in uncomplicated patient during labour.</li> </ul>  |
| <b>Personal activities</b>        | <ul style="list-style-type: none"> <li>■ Attendance at relevant courses and in-house teaching covering topics included above for EPA3.</li> <li>■ You should ensure that you do simulation training using part simulator for insertion of epidural catheter before your first patient encounter if you don't already have epidural skills.</li> </ul> |
| <b>Reflections</b>                | <ul style="list-style-type: none"> <li>■ These should be on difficult or challenging cases showing what was learned about how this might influence future practice.</li> </ul>  |
| <b>Multiple Trainer Report</b>    | <ul style="list-style-type: none"> <li>■ Assessment of progress for stage of training.</li> <li>■ This will report on generic professional capabilities and knowledge and understanding of obstetric analgesia.</li> </ul> <p><b><i>NB: only one MTR, covering capabilities for both EPA 1 and 2, is required for the award of the IAC.</i></b></p>   |

**Table 3:** Evidence for completion of EPA 3

## EPA 4: anaesthesia for obstetric operative procedures including category 1-3 LSCS

The intention of this EPA is that you are able to safely anaesthetise an ASA 1 or 2 patient having uncomplicated urgent or emergency obstetric surgery including Category 1-3 LSCS, trial of forceps, manual removal of placenta, perineal repair. This is with the supervisor on call from home for queries, able to provide directions via phone or non-immediate attendance (supervision level 3)

At the end of this training you will be able to:

- plan and deliver safe anaesthesia to appropriate patients, as above, including the following techniques:
  - › spinal anaesthesia
  - › epidural top-up
  - › general anaesthesia with rapid sequence induction.
- manage complications in theatre such as:
  - › difficult airway encountered after the induction of anaesthesia in a simulated environment until appropriate help arrives
  - › management of anaesthesia related hypotension
  - › failed regional technique
  - › breakthrough pain
  - › maternal collapse including that due to high spinal, anaphylaxis, local anaesthetic toxicity, sepsis, cardiac arrest.
- start the initial management of major obstetric haemorrhage
- recognise the sick parturient, institute appropriate resuscitation and summon senior help
- know your limitations as an inexperienced practitioner and call for help appropriately.

### Limitations

- This does not include anaesthesia for ASA 3 or 4 patients.
- You are expected to commence initial management of obstetric emergencies but would seek assistance at an early stage for further management.

### Areas of knowledge expected to be covered

- Urgency of different categories of Caesarean section.
- Pregnancy related factors that may make the provision of anaesthesia more difficult.
- Airway concerns, patient BMI, raised white cell count, abnormal clotting, skeletal abnormality.
- Risk of aspiration and prescription of appropriate therapies to minimise this.
- Pregnancy related conditions that may lead to maternal illness and collapse such as pre-eclampsia and eclampsia, amniotic fluid embolism, placental abruption, placenta praevia.
- Commonly used classes of obstetric anaesthetic drugs including uterotonics.
- Postoperative issues including pain, nausea and vomiting, fluid requirements and VTE prophylaxis for the obstetric patient.

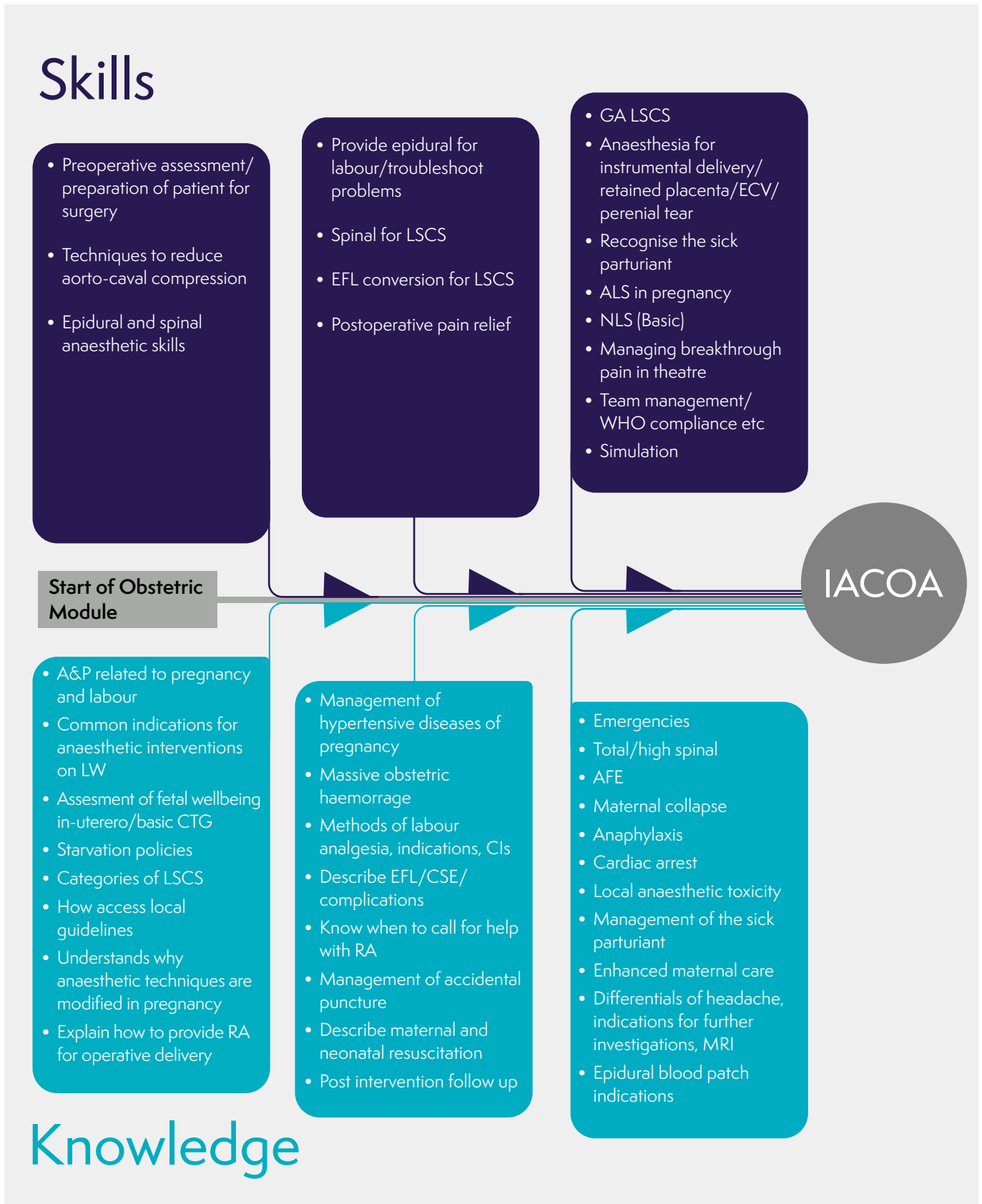
| Type of evidence                  | Examples and purpose  |
|-----------------------------------|---|
| <b>Supervised Learning Events</b> | <ul style="list-style-type: none"> <li>■ Regular completion of A-CEXs, DOPS and CBDs covering knowledge and skills as described above. These should always include spinal anaesthesia for LSCS in ASA 1 and 2 patients.</li> </ul>  |
| <b>Personal activities</b>        | <ul style="list-style-type: none"> <li>■ Attendance at relevant courses and in-house teaching covering topics included above for EPA4.</li> <li>■ you should ensure that you do simulation training for: <ul style="list-style-type: none"> <li>› demonstrating ability to provide general anaesthesia for caesarean section</li> <li>› demonstrating management of failed intubation drill in an obstetric patient according to DAS guidelines.</li> </ul> </li> </ul> |
| <b>Reflections</b>                | <ul style="list-style-type: none"> <li>■ These should be on difficult or challenging cases showing what was learned about how this might influence future practice.</li> </ul>  |
| <b>Multiple Trainer Report</b>    | <ul style="list-style-type: none"> <li>■ Assessment of progress for stage of Training.</li> <li>■ This will report on generic professional capabilities and knowledge and understanding of obstetric anaesthesia.</li> </ul> <p><b><i>NB: only one MTR, covering capabilities for both EPA 3 and 4, is required for the award of the IACOA.</i></b></p>   |

**Table 4:** Evidence for completion of EPA 4



# Knowledge and skills for the IACOA

Figure 1 demonstrates the knowledge and skills required to be awarded the IACOA. This summary diagram can be used to guide learning and to support entrustment decision making. You are not required to provide evidence on the LLp for every individual element.



## Completing the IACOA: final sign-off procedure

Sign-off for the IACOA should be a reflection of the collective judgement of the obstetric anaesthesia training faculty. Anaesthetists in training must be capable of performing EPAs 3 and 4 at a supervision level of 3 in order to be awarded the IACOA. The decision to award the IACOA should be supported by the information recorded in LLp, including SLEs, personal activities (including simulation) and personal reflections, as well as observations made by trainers in the workplace. The views of a range of appropriate trainers (minimum 3) should be collated using the multiple trainer report tool, which is initiated by a member of the training faculty prior to sign off.

Anaesthetists in training who require additional time to complete their IACOA should be supported in gaining the additional training and experience they require to reach the expected level of performance. Feedback and guided reflection with trainers should be used to devise an appropriate plan for development.

## Abbreviations

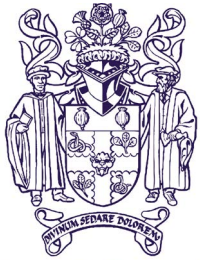
|      |                                 |
|------|---------------------------------|
| A&P  | Anatomy and physiology          |
| LW   | Labour ward                     |
| CTG  | Cardiotocograph                 |
| LSCS | Lower segment Caesarian section |
| RA   | Regional anaesthesia            |
| CI   | Critical incident               |
| EFL  | Epidural for labour             |
| ECV  | External cephalic version       |
| NLS  | Neonatal life support           |
| CSE  | Combined spinal epidural        |
| AFE  | Amniotic fluid embolus          |

## Appendix 1: simulation syllabus for IACOA

| Name of training                                | Obstetric Anaesthesia   |
|---|---|
| <b>Learning outcomes</b>                        | <p>Prepare for initial assessment of competence in obstetric anaesthesia.</p> <p>Demonstrate ability to provide analgesia and anaesthesia for the majority of the women in the delivery suite.</p> <p>Discuss and rehearse the management of common obstetric emergencies and be capable of performing immediate resuscitation and care of acute obstetric emergencies [eg eclampsia; pre-eclampsia; haemorrhage], under distant supervision but recognising when additional help is required.</p> <p>Rehearse provision of general anaesthesia for caesarean section.</p> <p>Rehearse management of failed intubation drill in an obstetric patient according to <a href="#">DAS guidelines</a>.</p> |
| <b>Timing</b>                                   | CT1-2, ACCS CT2-3.  |
| <b>Delivery methods</b><br>minimum requirements | <p>Fidelity should permit ability to rehearse in context and demonstrate technical and non-technical skills.</p> <p>To include the discussion of the management of common obstetric emergencies.</p> <p>Scenarios should be rehearsed as part of a team.</p> <p>Could be multi-professional.</p>  |
| <b>Equipment</b><br>minimum requirements        | A manikin, monitor and equipment to allow recognition and management of routine obstetric procedures, cases and emergencies.  |
| <b>Faculty</b><br>minimum requirements          | Two clinically credible faculty members appropriately trained to deliver obstetric scenarios using a manikin and lead de-briefs.  |
| <b>Location of training</b>                     | In-situ or simulation suite.  |

| Name of training                                | Assessment of general anaesthesia for Caesarean section  |
|---|--|
| <b>Learning outcomes</b>                        | <p>Demonstrates ability to provide general anaesthesia for caesarean section.</p> <p>Demonstrates management of failed intubation drill in an obstetric patient according to <a href="#">DAS guidelines</a>.</p>               |
| <b>Timing</b>                                   | CT1-2, ACCS CT2-3.   |
| <b>Delivery methods</b><br>minimum requirements | <p>Fidelity should permit ability to assess performance in context and demonstrate technical and non-technical skills.</p> <p>Each individual must demonstrate competency for dealing with failed intubation on a manikin.</p> |
| <b>Equipment</b><br>minimum requirements        | A manikin, monitor and equipment to allow recognition and management of failed intubation.   |
| <b>Faculty</b><br>minimum requirements          | <i>One faculty member approved to sign off IACOA.</i>  |
| <b>Location of training</b>                     | In-situ or simulation suite.   |

## Appendix 2: EPA completion forms



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# Entrustable Professional Activity Completion Form

## EPA 3: administration of pain relief in labour

This is to certify that (name):

GMC number:

College reference number (CRN):

**Has presented evidence that demonstrates that they have reached the required level of supervision for this entrustable professional activity and is entrusted to perform administration of pain relief in labour at supervision level 3.**

**Final signoff must be done by one consultant anaesthetist**

Assessor name:

Assessor signature:

GMC number:

Date:

Hospital or  
department  
date stamp



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## Entrustable Professional Activity Completion Form

### EPA 4: anaesthesia for obstetric operative procedures including category 1-3 LSCS

This is to certify that (name):

GMC number:

College reference number (CRN):

**Has presented evidence that demonstrates that they have reached the required level of supervision for this entrustable professional activity and is entrusted to perform anaesthesia for obstetric operative procedures including category 1-3 LSCS at supervision level 3.**

**Final signoff must be done by one consultant anaesthetist**

Assessor name:

Assessor signature:

GMC number:

Date:


Hospital or  
department  
date stamp

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