Royal College of Anaesthetists

*Updated: June 2024*

# Non-CCT CESR Cardiothoracic Anaesthesia

Non-CCT CESR applicants in Cardiothoracic Anaesthesia will be expected to submit much the same evidence as those applying for a CESR in Anaesthetics (please refer to pages 1-12 Anaesthetics Specialty Specific Guidance)

- Primary medical qualification (PMQ)
- Specialist medical qualification(s)
- Recent specialist training
- Specialist registration outside the UK
- Other relevant qualifications and certificates
- Employment letters and contracts of employment
- Job descriptions

There is a difference in the amount of high-level learning outcomes, knowledge, skills and experience (KSE) and practical procedures that are required when compared to a CESR in Anaesthetics.

Applicants will be expected to evidence Stage 3 Domains 1-8, Stage 2 Cardiothoracic KSE, Specialist interest Areas (SIAs) in Anaesthesia for Cardiac Surgery & Anaesthesia for Thoracic Surgery and the additional selected KSE from Stage 3 relevant to the cardiothoracic patient population.

Practical procedures and level of supervision are described in the table at the end of this document.

## Additional KSE (applied to the Cardiothoracic surgery patient population)

### Curriculum Domain 9: General Anaesthesia

**High-level Learning Outcome:**

- **Provides safe and effective general anaesthesia independently for patients within defined areas of a special interest (cardiothoracic anaesthesia).**

Knowledge

- Demonstrates the decision making and organisational skills required to manage operating sessions independently ensuring that the care delivered to patients is safe, effective and efficient
- Contributes to departmental expertise in one or more defined areas of special interest.

Skills

- Provides general anaesthesia for cardiothoracic patients undergoing elective and emergency surgery in general settings for common complex surgical procedures
- Manages patients with complex airway disorders in most situations including independent fibre-optic intubation and can recognise when additional assistance is necessary
- Can manage the anaesthetic challenges of patients needing complex shared airway surgery
- Manages the anaesthetic implications of congenital or acquired heart disease in patients presenting for co-incidental surgery including referral to a specialist centre when appropriate

Experience

- Applies understanding of co-morbidities in patients requiring general anaesthesia and delivers management strategies to offer individualised care
- Provides safe anaesthesia for diagnostic or therapeutic procedures outside of the theatre environment including remote sites
- Provides safe anaesthetic care for the critically ill patient who needs to return to theatre from the intensive care unit
- Provides safe and effective perioperative anaesthetic care to all high-risk surgical patients with significant co-morbidities and the potential for massive haemorrhage

## Curriculum Domain 10: Regional

**High-level Learning Outcome:**

- **Delivers a range of safe and effective regional anaesthetic techniques independently for cardiothoracic patients.**

Knowledge/ Skills

- Performs ultrasound-guided regional anaesthesia for the chest wall independently
- Tailors regional anaesthesia techniques to patients undergoing day surgery

Experience

- Manages regional anaesthesia and analgesia safely in the perioperative period in all settings

## Curriculum Domain 11: Resuscitation and Transfer

**High-level Learning Outcome:**

- **Is able to lead the multidisciplinary team for all patients requiring resuscitation from any cause, subsequent stabilisation and post-resuscitation care**
- **Able to supervise inter-hospital transfers and evaluate the necessary resources for patient transfers.**

Knowledge/ Experience

- Maintains resuscitation capabilities achieved in earlier stages
- Explains the requirements for safe patient transfer by air retrieval.

Skills

- Identifies situations where specialist retrieval teams are required
- Evaluates the suitability of resuscitation, stabilisation, retrieval or transfer
- Evaluates the wider implications of inter-hospital transfer for on-going safe hospital service delivery.

Experience

- Leads the clinical care of patients requiring retrieval/transfer
- Leads debrief sessions for both staff and relatives in a sensitive, compassionate and constructive manner.

## Curriculum Domain 12: Procedural Sedation

**High-level Learning Outcome:**

- **Delivers safe and effective procedural sedation independently.**

Knowledge

- Describes local and national guidelines regarding sedation practice outside the operating theatre

Skills/ Experience

- Evaluates the suitability of sedation for a procedure for a given patient, and formulates an alternative strategy when necessary

## Curriculum Domain 13: Pain

**High-level Learning Outcome:**

- **Able to initiate complex pain management for in-patients and to signpost to appropriate pain management services.**

Knowledge

- Applies knowledge and understanding of assessment and management of pain in a multi-professional context.

Skills

- Demonstrates safe effective pharmacological management of acute and procedure pain in all age groups
- Acts as an effective member of the inpatient pain team
- Effectively engages with multi-disciplinary primary and secondary pain services and palliative care when necessary
- Recognises the need for and complications of interventional pain procedures.

Experience

- Prescribes appropriately in the perioperative period and recognises the long-term implications of not reviewing patient analgesia in the post–operative period following discharge
- Plans the perioperative management of patients for surgery who are taking high dose opioids and other drugs of potential addiction.

## Curriculum Domain 14: Intensive Care Medicine

**High-level Learning Outcome:**

- **Provides safe and effective care for critically ill patients with specialist help and guidance.**

Knowledge

- Recognises the limitations of intensive care; employs appropriate admission criteria
- Can safely plan and conduct the transfer from, and return to, the intensive care unit for patients requiring multi-organ support
- Explains the physiological and pharmacological requirements for the clinical management of the patient for organ donation.

Skills

- Recognises and manages the surgical patient who would benefit from pre and/or post-operative critical care
- Recognises and manages the patient with sepsis and employs local infection control policies.

Experience

- Provides safe anaesthetic care for the critically ill patient who requires a procedure or investigation outside of the intensive care unit
- Supports clinical staff outside the ICU to enable the early detection of the deteriorating patient

Please refer to Anaesthetics Specialty Specific Guidance for examples of evidence.

Note that it is possible to cross reference evidence used for Stage 3 Special Interest Areas (SIAs) Anaesthesia for Cardiac Surgery and Anaesthesia for Thoracic Surgery.

## Additional Practical Procedures (applied to the cardiothoracic surgery patient population)

| | | Supervision level |
|---|---|---|
| **Airway management** | Insertion of supraglottic airway | 4 |
| | Intubation using standard laryngoscope | 4 |
| | Intubation using video laryngoscope | 4 |
| | Fibreoptic intubation | 3 |
| | Intubation in the awake patient | 3 |
| | Emergency front of neck access (simulation) | 4 |
| | Lung isolation technique (e.g. double lumen tube or bronchial blocker) | 4 |
| **CVS** | Central venous line insertion | 4 |
| | Venous access line for renal replacement therapy | 4 |
| | Arterial line | 4 |
| | Ultrasound guided peripheral venous cannulation | 4 |
| **Respiratory** | Needle thoracocentesis (simulation) | 4 |
| | Chest drain insertion (simulation) | 4 |
| **Regional Techniques** | Low thoracic epidural | 3 |
| | Spinal anaesthesia | 4 |
| | Ultrasound guided chest wall plane block | 4 |