

Certification Guidelines for Cardiothoracic Surgery

All trainees seeking certification in Cardiothoracic Surgery must:

- a) be fully registered with the GMC and have a licence to practise (UK trainees) or be registered with the IMC (Republic of Ireland trainees).
- b) have completed a recognised higher surgical training programme in the UK or Republic of Ireland¹.
- c) have successfully passed the Intercollegiate Specialty Board examination.
- d) have been awarded an outcome 6 at a final ARCP (gained all required competencies).
- e) be able to demonstrate the acquisition of the appropriate Generic Professional Capabilities (GPCs) as described in the GMC framework (UK trainees only).

In order to be awarded an outcome 6 at final ARCP, the SAC would expect that trainees should be able to satisfy the following specialty specific guidelines:

	Guidelines for Cardiothoracic Surgery
Clinical experience - evidence of the breadth of clinical experience defined in the specialty syllabus	<p>Trainees should have had exposure to both adult cardiac and thoracic surgery. Trainees must be able to demonstrate that they are keeping their knowledge and skills up-to-date.</p> <p>Trainees must be able to demonstrate knowledge and understanding of the management of the following critical conditions: (1) aortic dissection, (2) stridor, (3) secondary pneumothorax/tension pneumothorax, (4) cardiac tamponade, (5) acute haemothorax, (6) low cardiac output following cardiac surgery, (7) endocarditis-native or prosthetic valve, (8) respiratory failure following thoracic surgery.</p>
Operative experience - consolidated logbook evidence of the breadth of operative experience defined in the specialty syllabus	<p>There are indicative numeric requirements for the number of operations performed. This has been agreed as 250 major cases with the majority in the area of special interest (please see Appendix 1). Candidates should demonstrate broad exposure to operative cardiothoracic surgery with the majority of procedures in the area of special interest.</p>
Operative competence - evidence of competence in indicative operative procedures to level 3 or 4 (evidenced by PBAs defined by the specialty)	<p>Trainees should demonstrate competence across a broad range of cardiothoracic procedures as evidenced by completed PBAs.</p>
Research - evidence of having met the relevant requirements for research and scholarship. For UK trainees, this can be found in the GMC's Generic Professional	<p>Trainees should provide evidence of study of research methodology or possess a higher degree. Trainees should have four papers published in peer-reviewed journals, two of which should be completed as first author. Trainees should have delivered six presentations at</p>

¹ This will include out of programme training

<p>Capabilities framework. Broadly, this includes:</p> <ol style="list-style-type: none"> 1. The demonstration of evidence based practice. 2. Understanding how to critically appraise literature and conduct literature searches and reviews. 3. Understanding and applying basic research principles. 4. Understanding the basic principles of research governance and how to apply relevant ethical guidelines to research activities. 	<p>national/international meetings, two of which must have been presented internationally. Trainees should have completed a Good Clinical Practice (GCP) course in Research Governance and a research methodologies course.</p>
<p>Quality Improvement - evidence of an understanding of, and participation in, audit or service improvement as defined by the specialty</p>	<p>Trainees should have evidence of an audit completed (loop closed) within the two years prior to certification.</p>
<p>Medical Education and training - evidence of an understanding of, and participation in, medical education and training as defined by the specialty</p>	<p>Trainees should have completed courses in training and education by the time they apply for certification.</p>
<p>Management and leadership - evidence of an understanding of management structures and challenges of the NHS in the training jurisdiction</p>	<p>Trainees should have completed courses in NHS management by the time they apply for certification.</p>
<p>Additional courses / qualifications - evidence of having attended specific courses/gained specific qualifications as defined by the specialty</p>	<p>There are no specific additional courses/qualifications required for certification in cardiothoracic surgery.</p>
<p>Educational conferences - evidence of having attended appropriate educational conferences and meetings as defined by the specialty</p>	<p>Trainees should have attended a major national or international meeting in each year of training. Training programmes require attendance at a minimum of 70% of the regional teaching days.</p>

Appendix 1 – Major cases

Cardiac Major Cases

- Coronary Artery Bypass Grafting (CABG), either alone or in combination with another procedure such as valve repair/replacement
- Valve repair/replacement either alone or in combination with CABG or any other cardiac procedure
- Other major cardiac surgical cases involving cardiopulmonary bypass (CPB), such as post infarct ventricular septal defect (VSD) repair, excision of atrial myxoma or pericardiectomy
- Implantation of the heart or lung (transplantation)
- Heart-lung block retrieval
- Any congenital cardiac procedure (atrial septal defect (ASD), VSD closure, patent ductus arteriosus (PDA) ligation etc)

Thoracic Major Cases

- Anatomical lung resection (video-assisted thorascopic surgery (VATS)/robotic/open)
- Correction of pectus deformity
- Decortication
- Thoracotomy for trauma
- Chest wall resection and reconstruction
- Tracheal resection
- Surgery of secondary pneumothorax (VATS/open)