



CARDIOTHORACIC ACCREDITATION STANDARDS 2019

Notes to Provide Clarification of ACSA Standards

Please be advised that:

- only certain parts of the cited GPAS reference text may be applicable to the ACSA standard
- the term 'appropriately trained' refers to someone who has had specific training in the knowledge and skills required to undertake their designated role
- areas that do not have any anaesthetic input will not be assessed during the onsite review visit
- the obstetric unit only refers to units led by an obstetrician: midwife-led units are not reviewed by ACSA.

Note 1	On the prioritisation of standards	<p>Every ACSA standard has been assigned a priority. Standards are assigned priority 1 if they must be achieved in order for accreditation to be awarded. Priority 2 standards should be achievable by most departments. Priority 3 standards will be aspirational for most; however, they will provide targets for the highest performing departments to achieve.</p> <p>All new standards are assigned to Priority 2 in their first year but may become Priority 1 after that.</p>
Note 2	On the use of the term 'policies'	<p>Whilst the ACSA standards utilise the term 'policies', it should be noted that the term is used as an umbrella to refer to a form of locally agreed process that is maintained, kept up to date (reviewed at least every three years), can be used as a reference and is used during staff induction. This could be in the form of a policy document, practice document or even a piece of software that fulfils the function of the standard. The important criteria are that everyone knows the reference point exists and where to find it, and that the reference point is kept up to date in accordance with the trust/board policies. Policy documents should be standardised in format, have clear review dates and have been ratified in accordance with trust/board policies.</p>
Note 3	For hospitals that do not provide services for patients under 18 years of age	<p>If your department does not treat patients under 18 years of age routinely it is acceptable to mark paediatric specific standards as 'N/A'. Where the standard refers to both patients under 18 years of age and adults, you may disregard the paediatric aspect and mark the standard as 'met' if you feel you meet that standard for adult care, or 'not met' if that isn't the case.</p> <p>If you have an emergency department but do not routinely treat patients under 18 years of age or only occasionally treat patients of 16 or 17 years of age, then the paediatric standards are still considered applicable to a certain degree. In this instance, you will be required to provide further information on the pathway for these patients to determine a view of how those particular standards will apply to you.</p>

<p>Note 4</p>	<p>On Staff Grade, Associate Specialist and Specialty (SAS) Doctors</p>	<p>The diverse nature of these posts means that the standards of education, training and experience that can be expected from post holders can vary quite widely. The degree of supervision a SAS doctor requires should be agreed via a robust, local governance process and follow the RCoA guidance on 'Supervision of SAS and other non-consultant anaesthetists'.</p> <p>Where the standard refers to a consultant anaesthetist, it is acceptable for SAS doctors whom this process has agreed can practice without consultant supervision, to fulfil this role.</p>
<p>Note 5</p>	<p>On terminology</p>	<p>Please use the following definitions and explanation to facilitate your understanding of the ACSA standards:</p> <p>Immediate Without any appreciable delay, within a matter of seconds or minutes. Unless otherwise specified, this should be no more than five minutes.</p> <p>Remote sites A remote site is any location where general or regional anaesthesia is administered away from the main theatre suite and/or anaesthetic department. This may be within or away from the base hospital. Common examples include MR or CT scanners, maternity units or dental sedation suites.</p> <p>Supervision Direct supervision: This means that the individual is working directly with a supervisor who is actually with the supervisee or can be present within seconds.</p> <p>Indirect supervision: Indirect supervision falls into three categories: local, distant and remote sites. For local supervision the supervisor is usually within the theatre suite e.g. 'the starred consultant' system, is immediately available for advice and is able to be with the supervisee within minutes of being called. For distant supervision, the supervisor is rapidly available for advice but is off the hospital site or separated from the supervisee by over 10 minutes. Remote sites are as defined above. Supervisees should only be permitted to work in remote sites under distant supervision if they meet certain criteria.</p> <p>These definitions for levels of clinical supervision are as outlined in the curriculum. Please refer here for more detail.</p>

STANDARD

5.4.1.1 The process for preoperative assessment of patients presenting for cardiac and thoracic surgery (including thoracic aortic) is defined within the patient pathway.

EVIDENCE REQUIRED

A clinical pathway detailing the various components of preoperative assessment should be available for review.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

- 2.1.1** All patients should be assessed before anaesthesia or sedation for surgery by an appropriately trained doctor, nurse or PA(A).
- 2.1.3** Anaesthetists need time to cover the following essential points in the more immediate preoperative phase. The anaesthetic room is not usually an appropriate place for this except in an emergency.
- 2.1.5** Local protocols should determine the grade, experience and competency-based training of the nurse undertaking preoperative assessments and accompanying the patient to the operating department.
For 1,000 patients, the following minimum staffing is required:
- 0.6 registered nurses
 - 0.3 healthcare assistants
- This staffing to patient ratio is based on 80% of patients as day cases and 20 per cent as inpatients assuming day case patients have a 30 minute nurse consultation and inpatients have 45 minutes. This is only a guide, as complex patients may be scheduled for minor surgery and fit patients may be scheduled for major surgery.
- 2.2.3** Consulting rooms need adequate furniture, such as a desk, chairs, examination couch and equipment such as computers, scales for measuring height and weight, blood pressure, pulse oximeter and electrocardiography machines.
- 2.2.5** There should be facilities for the storage of patients' paper notes in a secure environment to enable access to previous anaesthetic records and medical alerts.

HELPNOTE

This may be departmental specific but a defined pathway must be clear to all.

STANDARD

5.4.1.2 Preoperative preparation and optimisation, of all patients presenting for cardiac or thoracic surgery includes multi-professional pathways.

EVIDENCE REQUIRED

Review of the weekly departmental rota, MDT minutes and action points and/or evidence within job plans that demonstrates adequate time is provided to deliver the preoperative assessment service for patients. Evidence of preoperative assessment and optimisation policies. Evidence of Audit of preoperative optimisation practice against written policies e.g. Anaemia. Consultants should agree that they have adequate time within their job plans to support preoperative preparation and that admin and other support is appropriate.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

2.1.5 Local protocols should determine the grade, experience and competency-based training of the nurse undertaking pre-operative assessments and accompanying the patient to the operating department.

For 1,000 patients, the following minimum staffing is required:

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This staffing to patient ratio is based on 80 per cent of patients as day cases and 20 per cent as inpatients assuming day case patients have a 30-minute nurse consultation and in-patients have 45 minutes. This is only a guide, as complex patients may be scheduled for minor surgery and fit patients may be scheduled for major surgery.

2.1.6 Perioperative time should be allocated for the work the anaesthetist undertakes on the day of surgery for both pre-operative and postoperative care. The times allocated might vary per patient but for most theatre lists it approximates to 1 hour per 4 hours spent in the operating theatre suite or 2 hours per 8 hours in the operating theatre suite.

2.5.12 High-risk patients should be discussed in regular specialty multidisciplinary team (MDT) meetings with anaesthetic representation. Such an arrangement facilitates robust team decision-making with regard to patient care while minimising delays in the surgical pathway. Clinical time should be agreed in job plans to reflect this commitment. There should be an anaesthetic MDT led by anaesthetists and including cardiologists, respiratory physicians, surgeons and haematologists to discuss high-risk surgical patients, do quick in-house referrals and make plans for pre-surgery optimisation and postoperative management.

18.3.22 In recent years there has been a trend towards assessment of elective patients in preadmission clinics, typically one to two weeks before surgery. This allows routine paperwork and investigations to be completed before admission, permits 'same day' admission and reduces the likelihood of delays or cancellation. Anaesthetists should be part of the pre-admission clinical pathway and this activity should be reflected in job plans.

STANDARD

5.4.1.3 Preoperative assessment includes a formal cardiac risk assessment and discussion of treatment options. Multidisciplinary discussion is routine for high-risk patients.

EVIDENCE REQUIRED

Evidence of local guidelines on referral pathways, clinical pathway for pre-assessment.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

- 2.5.12** High-risk patients should be discussed in regular specialty multidisciplinary team (MDT) meetings with anaesthetic representation. Such an arrangement facilitates robust team decision-making with regard to patient care while minimising delays in the surgical pathway. Clinical time should be agreed in job plans to reflect this commitment. There should be an anaesthetic MDT led by anaesthetists and including cardiologists, respiratory physicians, surgeons and haematologists to discuss high-risk surgical patients, do quick in house referrals and make plans for presurgery optimisation and postoperative management.
- 18.3.22** In recent years there has been a trend towards assessment of elective patients in preadmission clinics, typically one to two weeks before surgery. This allows routine paperwork and investigations to be completed before admission, permits 'same day' admission and reduces the likelihood of delays or cancellation. Anaesthetists should be part of the pre-admission clinical pathway and this activity should be reflected in job plans

STANDARD

5.4.1.4 There is access to respiratory function testing for cardiac and thoracic patients.

EVIDENCE REQUIRED

5.4.1

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

18.2.29 Access to measurements of respiratory function should be available for patients undergoing cardiac or thoracic surgery, including a facility for cardiopulmonary exercise testing.

STANDARD

5.4.1.5 All postoperative cardiac and thoracic patients are managed in a facility that provides an appropriate level of care.

EVIDENCE REQUIRED

This must be specified in standard operating procedures and patient pathways.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

- 18.1.8** Appropriate local arrangements should be made for the care of postoperative surgical patients being managed outside the main cardiothoracic intensive care unit (ICU), for example postoperative recovery areas and wards.
- 18.2.21** In some centres, selected cardiac surgical patients are managed in facilities other than designated ICUs following surgery. These are variously referred to as the high dependency unit (HDU), cardiac recovery or cardiac fast track unit. These areas aim to minimise the period of mechanical ventilation. The equipment, monitoring and staffing requirements for such a facility are no less than the requirements of patients cared for in Level 3 ICU. Agreed clinical criteria for the appropriate case mix should be in place. Suitably experienced anaesthetic and surgical staff should be immediately available. Arrangements should be in place for escalation to a Level 3 ICU facility as required.
- 18.2.23** After major thoracic surgery, patients should be transferred to an appropriately sized, equipped and staffed post-anaesthetic recovery area. Planned or emergency access to ICU or HDU should be available.
- 18.2.24** Non-invasive ventilation facilities should be available in the immediate postoperative period, for example bilevel positive airway pressure (BiPAP), continuous positive airway pressure (CPAP) and high-flow nasal oxygen therapy (HFNO)
- 18.2.33** For cardiac patients, dedicated echocardiography equipment, including transoesophageal echo should be immediately available in the operating suite and postoperative care areas. Those who deliver intraoperative echocardiography services should be trained to the level of competence defined by specialist bodies

STANDARD

5.4.1.6 There are agreed clear guidelines for the early postoperative management of patients undergoing cardiac surgery. These guidelines should have particular reference to criteria for weaning of sedation and extubation.

EVIDENCE REQUIRED

Copy of the protocol or standard operating procedure and admissions policies. Postoperative management guideline with criteria for suitability for extubation.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

18.2.21 In some centres, selected cardiac surgical patients are managed in facilities other than designated ICUs following surgery. These are variously referred to as the high dependency unit (HDU), cardiac recovery or cardiac fast track unit. These areas aim to minimise the period of mechanical ventilation. The equipment, monitoring and staffing requirements for such a facility are no less than the requirements of patients cared for in Level 3 ICU. Agreed clinical criteria for the appropriate case mix should be in place. Suitably experienced anaesthetic and surgical staff should be immediately available. Arrangements should be in place for escalation to a Level 3 ICU facility as required.

STANDARD

5.4.1.8 Clinical management protocols are in place for the routine management of cardiothoracic patients.

EVIDENCE REQUIRED

Copy of protocols, patient pathways and standard operating procedures (see helpnote for examples). Documentation of handover.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

18.2.27 Immediate access to expert haematology advice, haematology laboratory services and blood products should be available

18.2.32 Pain relief protocols should be clearly defined for thoracic and cardiac surgery patients

18.5.2 There should be a forum for discussion of matters relevant to both surgeons and anaesthetists, for example protocol development and critical incidents

18.5.3 Clinical protocols should be developed from national guidelines and reviewed on a regular basis.

HELPNOTE

There are very few national standards for cardiothoracic anaesthesia as there is little consensus on clinical management. Therefore agreed local guidelines should be in place and include;

1. Postoperative pathway and multidisciplinary responsibility
2. Anticoagulation and bleeding management protocol
3. Haemodynamic management protocol (to include fluids, vasoactive drugs and monitoring)
4. Infection control and antibiotic prophylaxis policy
5. Intraoperative echocardiography service protocol
6. Intraoperative and bypass monitoring protocol
7. Handover to postop team including paperwork

Much of postop management will come under the GPICS document. The above come under the umbrella of perioperative care (where theatre care has an important continuity with ICU care)

STANDARD

5.4.1.9 There is availability of other specialist services such as endocrine, gastroenterology, neurology, renal medicine, for consultation on complex patients.

EVIDENCE REQUIRED

Department list on hospital intranet. Copy of service level agreement where appropriate.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

18.2.27 Immediate access to expert haematology advice, haematology laboratory services and blood products should be available.

18.2.28 There should be immediate access to expert radiology advice, x-ray facilities and computerised axial tomography services for patients undergoing cardiac or thoracic surgery.

18.5.4 Hospitals should have systems in place to facilitate multidisciplinary meetings for both cardiac and thoracic services.

STANDARD

5.4.2.1 There is continuous availability of appropriately trained consultants 24 hours a day for cardiothoracic theatre and cardiothoracic ICU.

EVIDENCE REQUIRED

This must be visible from the rota and CPD and training records of anaesthesia and ICU consultants.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Impact on staff; Workforce management and support

GPAS REFERENCES

- 18.1.6** An appropriately trained consultant cardiac anaesthetist should be available at all times, through a formal on-call rota
- 18.1.7** Trained staff and appropriate facilities should be immediately available for emergency resternotomy and bypass. A suitably trained resident anaesthetist should be immediately available for emergencies
- 18.1.11** At centres where 24/7 primary percutaneous coronary interventions are performed, and in designated heart attack centres, which include out of hospital cardiac arrest patients, there should be provision for immediate availability of a resident anaesthetist, skilled assistance and appropriate equipment and facilities.
- 18.1.13** An appropriately trained consultant anaesthetist should be available at all times, through a formal thoracic or cardiothoracic anaesthetic on-call rota, particularly if lung transplantation is performed.
- 18.1.14** Wherever thoracic anaesthesia and surgery are performed there should be a resident anaesthetist available at all times.
- 18.4.5** Consultant anaesthetists intending to undertake anaesthesia for cardiac or thoracic surgery should have received training to a higher level in cardiac and/or thoracic anaesthesia, for a minimum of one year in recognised training centres, as part of general training. Those providing intensive care for cardiac surgical patients should have received training to the minimum level as defined by the Faculty of Intensive Care Medicine special skills year in cardiothoracic intensive care.

HELPNOTE

Consultant continuity of care must be available at all times.

STANDARD

5.4.2.2 Adequate numbers of suitably trained staff are immediately available for managing perioperative and catheter lab emergencies, such as resternotomy, in and out of hospital arrest.

EVIDENCE REQUIRED

This must be visible from the rota and described in standard operating procedures. There must be dedicated trained assistants available.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led, responsive

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Workforce management and support

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- 18.1.7** Trained staff and appropriate facilities should be immediately available for emergency resternotomy and bypass. A suitably trained resident anaesthetist should be immediately available for emergencies
- 18.1.11** At centres where 24/7 primary percutaneous coronary interventions are performed, and in designated heart attack centres, which include out of hospital cardiac arrest patients, there should be provision for immediate availability of a resident anaesthetist, skilled assistance and appropriate equipment and facilities.
- 18.4.1** Cardiac and thoracic anaesthesia is a 'key unit of training' for intermediate level training in anaesthesia. Trainee anaesthetists should be of appropriate seniority to be able to benefit from this area of training, at least Specialist Trainee Year 3

HELPNOTE

Each unit produces a rota to cover emergencies. Rotas usually apply to a unit, not to one theatre and are always prepared in advance. Immediately available = within five minutes.

STANDARD

5.4.2.3 Transoesophageal and transthoracic echo is immediately available in theatres, cath labs and ICU, with staff who are trained and competent to use it and supported by IT systems to enable storage and retrieval of studies for audit and training.

EVIDENCE REQUIRED

Presence of equipment; policy for reporting studies; evidence of training courses, CPD, exams or accreditation. Presence of reports and saved studies on hospital PACS systems.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led, responsive

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Workforce management and support

GPAS REFERENCES

18.2.11 Transoesophageal echocardiography should be immediately available.

18.2.22 Facilities should be available for the decontamination and safe storage of transoesophageal echocardiography probes in line with local and national recommendations. There should also be a method to report, archive and retrieve all echocardiography studies performed in cardiac theatres.

18.2.33 For cardiac patients, dedicated echocardiography equipment, including transoesophageal echo should be immediately available in the operating suite and postoperative care areas. Those who deliver intraoperative echocardiography services should be trained to the level of competence defined by specialist bodies.

18.4.4 Trainees planning to embark in a career in cardiac anaesthesia should be encouraged to undertake training and accreditation in transoesophageal echocardiography.

HELPNOTE

Reports and archived studies need to be available to those providing postop care.
Immediately available = within five minutes.

STANDARD

5.4.2.4 Specialised monitoring and equipment appropriate to the scale of surgery is available with staff who are trained and competent to use it. This is adequately maintained.

EVIDENCE REQUIRED

Presence of equipment e.g. IABP, ECMO, NIRS, CO monitoring, depth of anaesthesia, copy of service level agreements and staff rotas. Also fibreoptic bronchoscopic equipment for thoracic double lumen tube placement/checking. Monitoring equipment/portable ventilator for patient transfers e.g. to and from catheter laboratories.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

- 18.2.1** The same level of equipment should be available for cardiac and thoracic surgery as is available in general theatres as specified in chapter 3. Additional specialty specific monitoring is required and is detailed below.
- 18.2.2** The standard of monitoring in the operating theatre should allow the conduct of safe anaesthesia for surgery as detailed by the Association of Anaesthetists standards of monitoring
- 18.2.3** During the transfer of the patient at the end of surgery to the postoperative care unit there should be access to electrocardiogram (ECG), invasive blood pressure monitoring, pulse oximetry, disconnection alarm for any mechanical ventilation system, fractional inspired oxygen concentration, and end-tidal carbon dioxide.
- 18.2.4** Access to cardiac output monitoring should be available for high-risk cardiac cases and its availability for thoracic cases should be considered
- 18.2.8** A cell salvage service should be available for cases where massive blood loss is anticipated and for patients who decline blood products. Staff who operate this equipment should receive training and use it frequently to maintain their skills.
- 18.2.9** Ultrasound should be available for the placement of vascular catheters

Cardiac

- 18.2.10** Cardiac anaesthesia and surgery are carried out under intensive physiological patient monitoring. Equipment used routinely for monitoring during cardiac surgery should be available. This includes invasive pressure monitoring for both systemic arterial and central venous pressures.

- 18.2.11** Transoesophageal echocardiography should be immediately available.
- 18.2.12** Complex cases may require additional monitoring, such as pulmonary arterial pressure monitoring, measurement of cardiac output and cerebral near-infrared spectroscopy.
- 18.2.13** Monitoring during cardiopulmonary bypass should conform to the standards recommended by the joint working group of the Society of Clinical Perfusion Scientists of Great Britain and Ireland, Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC), and Society for Cardiothoracic Surgery in Great Britain and Ireland.
- 18.2.14** An intra-aortic counter pulsation balloon pump should be available.
- 18.2.15** Equipment for temporary pacing should be available.

Thoracic

- 18.2.16** Fibreoptic bronchoscopy should be immediately available for all cases where lung isolation is used.
- 18.2.17** A range of equipment to facilitate lung isolation should be available. This may include left and right double lumen tracheal tubes, bronchial blockers, dual lumen tracheostomy tubes, and airway exchange catheters.
- 18.2.18** Dedicated equipment for jet ventilation should be available for interventional airway procedures.
- 18.3.16** The use of extracorporeal membrane oxygenation (ECMO) for the management of adults with severe respiratory failure is currently confined to five UK cardiothoracic centres. Anaesthetists often institute ECMO and support retrieval of patients from non-specialist hospitals. Anaesthetists providing ECMO should be suitably trained.
- 18.3.18** The use of dedicated anaesthetic monitoring equipment, in addition to any monitoring used by cardiologists, is recommended. A remote or slave anaesthetic monitor display should be available to cardiologists

HELPNOTE

IABP= Intra-Aortic Balloon Pump.

ECMO= Extra Corporal Membrane Oxygenation.

NIRS= Near InfraRed Spectroscopy.

CO = CARDIAC OUTPUT monitoring.

STANDARD

5.4.2.5 Monitoring of cardiopulmonary bypass conforms to national standards and there is a dedicated trained perfusionist for every cardiac surgery case.

EVIDENCE REQUIRED

Presence of equipment, slave monitors and a copy of service level agreements.

PRIORITY

1

CQC KLoEs

Effective, responsive, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Workforce management and support

GPAS REFERENCES

- 18.1.7** Trained staff and appropriate facilities should be immediately available for emergency re sternotomy and bypass. A suitably trained resident anaesthetist should be immediately available for emergencies.
- 18.2.13** Monitoring during cardiopulmonary bypass should conform to the standards recommended by the joint working group of the Society of Clinical Perfusion Scientists of Great Britain and Ireland, Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC), and Society for Cardiothoracic Surgery in Great Britain and Ireland.
- 18.3.21** Where revision of rhythm management devices is considered to be at high risk of needing emergency surgical intervention, cardiopulmonary bypass equipment and a plan for surgery should be available at the start of the procedure.

STANDARD

5.4.2.6 There are dedicated operating theatres large enough for cardiac and thoracic surgery.

EVIDENCE REQUIRED

Copy of floor plans and the presence of facility

PRIORITY

2

CQC KLoEs

Effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery;

GPAS REFERENCES

18.2.19 Designated thoracic, cardiac or cardiothoracic wards should be considered.

18.2.20 Cardiac and thoracic surgery should ideally be performed in dedicated operating rooms. It is unlikely that an operating room will be kept available at all times for emergencies. Local arrangements for urgent and emergency cases should be in place.

HELPNOTE

Some centres have theatres dedicated to one or the other. No requirement to have theatres dedicated to one specific type of surgery. In most centres where cardiothoracic surgery exists, usually BOTH theatres can do either type of surgery.

STANDARD

5.4.2.7 Postoperative care facilities are appropriate to the level of care required, staffed by appropriately trained medical and nursing staff. There should be clear pathways for the transfer of patients between postoperative care facilities as determined by clinical need.

EVIDENCE REQUIRED

Copy of standard operating procedures, admission and discharge policies, floor plans and building notes.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

- 18.1.8** Appropriate local arrangements should be made for the care of postoperative surgical patients being managed outside the main cardiothoracic intensive care unit (ICU), for example postoperative recovery areas and wards.
- 18.2.21** In some centres, selected cardiac surgical patients are managed in facilities other than designated ICUs following surgery. These are variously referred to as the high dependency unit (HDU), cardiac recovery or cardiac fast track unit. These areas aim to minimise the period of mechanical ventilation. The equipment, monitoring and staffing requirements for such a facility are no less than the requirements of patients cared for in level 3 ICU. Agreed clinical criteria for the appropriate case mix should be in place. Suitably experienced anaesthetic and surgical staff should be immediately available. Arrangements should be in place for escalation to a level 3 ICU facility as required.
- 18.2.23** After major thoracic surgery, patients should be transferred to an appropriately sized, equipped and staffed post-anaesthetic recovery area. Planned or emergency access to ICU or HDU should be available.
- 18.2.33** For cardiac patients, dedicated echocardiography equipment, including transoesophageal echo should be immediately available in the operating suite and postoperative care areas. Those who deliver intraoperative echocardiography services should be trained to the level of competence defined by specialist bodies.

HELPNOTE

There are nursing standards for care of these type of patients. Level 3: one to one. Level 2: two to one. Medical staff also have national guidelines for Intensive care cover. Staffing should be flexible to cope with the needs of emergency patients.

STANDARD

5.4.2.8 Postoperative care facilities are appropriately equipped.

EVIDENCE REQUIRED

Review of facilities on visits and trust risk register.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

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- 18.2.33** For cardiac patients, dedicated echocardiography equipment, including transoesophageal echo should be immediately available in the operating suite and postoperative care areas. Those who deliver intraoperative echocardiography services should be trained to the level of competence defined by specialist bodies

STANDARD

5.4.2.9 Postoperative care facilities have dedicated beds for cardiothoracic patients.

EVIDENCE REQUIRED

Review of case cancellations with reasoning. Feedback from consultants/nursing staff and review of trust critical care escalation policy.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

18.1.8 Appropriate local arrangements should be made for the care of postoperative surgical patients being managed outside the main cardiothoracic intensive care unit (ICU), for example postoperative recovery areas and wards.

STANDARD

5.4.2.10 Postoperative care facilities are colocated with theatres or critical care.

EVIDENCE REQUIRED

Floor plan or inspection by the visiting reviewers.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

18.2.19 Designated thoracic, cardiac or cardiothoracic wards should be considered.

18.2.20 Cardiac and thoracic surgery should ideally be performed in dedicated operating rooms. It is unlikely that an operating room will be kept available at all times for emergencies. Local arrangements for urgent and emergency cases should be in place.

STANDARD

5.4.2.11 Point of care testing for blood gases, haematology, electrolytes and coagulation is available for cardiac surgery.

EVIDENCE REQUIRED

Presence of 'point of care' testing, equipment or facility. Copy of standard operating procedures.

PRIORITY

1

CQC KLoEs

Safe, effective, responsive

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance; Workforce management and support

GPAS REFERENCES

18.2.26 Where possible, point of care or near-patient testing should be used for blood gas analysis, measurement of electrolytes and blood sugar, haemoglobin and coagulation. This might include platelet mapping, thromboelastography or thromboelastometry.

STANDARD

5.4.2.12 There is a designated physiotherapy service for cardiothoracic patients.

EVIDENCE REQUIRED

This must be visible from rotas, standard operating procedures and service level agreements.

PRIORITY

1

CQC KLoEs

Effective

HIW Domains

Quality of patient experience; Safe and effective care

HIS Domains

Impact on patients, service users, carers and families; Safe, effective and person-centred care delivery

GPAS REFERENCES

18.2.30 Physiotherapy services should be available during the preoperative preparation and postoperative care of patients undergoing cardiac or thoracic surgery.

HELPNOTE

Physiotherapy is essential in the immediate postoperative period and also in rehab.

STANDARD

5.4.2.13 There is an accredited perfusion service for cardiac surgery that complies with national guidelines.

EVIDENCE REQUIRED

Copy of perfusion department documentation; society of perfusionists accreditation report.

PRIORITY

1

CQC KLoEs

Safe, effective

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

- 18.1.9** Perfusion services should be provided by suitably trained and accredited perfusion scientists and comply with Department of Health guidelines.
- 18.2.13** Monitoring during cardiopulmonary bypass should conform to the standards recommended by the joint working group of the Society of Clinical Perfusion Scientists of Great Britain and Ireland, Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC), and Society for Cardiothoracic Surgery in Great Britain and Ireland.
- 18.5.8** Perfusion services should be included in a clinical directorate or equivalent, under the managerial control of a consultant, who may be a consultant anaesthetist.

STANDARD

5.4.2.14 Anaesthetists undertake relevant CPD in cardiac anaesthesia, thoracic anaesthesia and echocardiography as appropriate.

EVIDENCE REQUIRED

Documentation of attendance at meetings, courses and conferences.

PRIORITY

1

CQC KLoEs

Safe, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Impact on staff; Workforce management and support;

GPAS REFERENCES

- 18.1.4** Consultant anaesthetists in cardiac and thoracic units should be responsible for the provision of service, teaching, protocol development, management, research and quality improvement. Adequate time should be allocated in job plans for these activities.
- 18.4.7** All staff should have access to adequate time, funding and facilities to undertake and update training that is relevant to their clinical practice, including annual mandatory training such as basic life support.
- 18.4.9** Departments should consider providing all newly appointed consultants, particularly those with limited experience, with a mentor to facilitate their development in cardiac or thoracic anaesthesia.

STANDARD

5.4.2.15 There is adequate time in job plans for pre and postoperative visiting of complex cardiac and thoracic patients.

EVIDENCE REQUIRED

Copy of job plans. Feedback from consultants on adequate patient availability for this.

PRIORITY

1

CQC KLoEs

Effective, caring

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance; Workforce management and support

GPAS REFERENCES

- 18.5.7** There should be sufficient numbers of clinical programmed activities in consultants' job plans to provide cover for all elective cardiac and thoracic operating lists and to provide adequate emergency cover.
- 18.3.22** In recent years there has been a trend towards assessment of elective patients in pre-admission clinics, typically one to two weeks before surgery. This allows routine paperwork and investigations to be completed before admission, permits 'same day' admission and reduces the likelihood of delays or cancellation. Anaesthetists should be part of the preadmission clinical pathway and this activity should be reflected in job plans.

STANDARD

5.4.2.16 There is a resident anaesthetist for postoperative and cath lab emergencies. This individual should be separate from the resident covering the cardiothoracic intensive care unit (ICU).

EVIDENCE REQUIRED

This is visible on the rota, grades and cover.

PRIORITY

1

CQC KLoEs

Responsive, safe

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery

GPAS REFERENCES

18.1.6 An appropriately trained consultant cardiac anaesthetist should be available at all times, through a formal on-call rota.

18.1.10 Interventional cardiology services increasingly require anaesthesia, critical care and nursing resources depending on procedural complexity and patient morbidity. General anaesthesia may be needed to facilitate complex interventions or required in an emergency for invasive cardiological procedures. Both eventualities require that appropriate anaesthetic staffing, skilled assistance, equipment and monitoring should be available

18.1.13 An appropriately trained consultant anaesthetist should be available at all times, through a formal thoracic or cardiothoracic anaesthetic on-call rota, particularly if lung transplantation is performed.

STANDARD

5.4.3.1 There are dedicated cardiac, thoracic, or cardiothoracic wards.

EVIDENCE REQUIRED

Presence of facility.

PRIORITY

2

CQC KLoEs

Safe, effective, caring

HIW Domains

Safe and effective care

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance

GPAS REFERENCES

18.2.19 Designated thoracic, cardiac or cardiothoracic wards should be considered.

STANDARD

5.4.3.2 The acute pain service has specific techniques available for thoracic patients, including epidural and other advanced techniques.

EVIDENCE REQUIRED

Copy of standard operating procedures, protocols and job descriptions.

PRIORITY

1

CQC KLoEs

Effective, caring, responsive

HIW Domains

Safe and effective care

HIS Domains

Impact on patients, service users, carers and families; Workforce management and support

GPAS REFERENCES

18.2.32 Pain relief protocols should be clearly defined for thoracic and cardiac surgery patients.

STANDARD

5.4.3.3 There are specific patient information leaflets for patients undergoing cardiac/thoracic surgery, with information regarding anaesthesia and perioperative care.

EVIDENCE REQUIRED

Leaflets must be available in the wards, in outpatient clinics, and enclosed with patient letters.

PRIORITY

1

CQC KLoEs

Caring, effective

HIW Domains

Safe and effective care

HIS Domains

Impact on patients, service users, carers and families; Safe, effective and person-centred care delivery

GPAS REFERENCES

- 18.9.1** Booklets providing information for patients about their stay in hospital should be available for all patients. This will include the patient information booklets published by the British Heart Foundation on cardiac disease, prevention, treatment and lifestyle modification, and those by the British Thoracic Society on lung disease and the Roy Castle Lung Cancer Foundation for information about lung cancer and its surgical treatment. Sources of information about the anaesthetic should also be available.
- 18.9.2** Information about cardiac rehabilitation generally, and information regarding the availability of such courses locally, should also be available.
- 18.9.3** Information on specific individual risks of invasive monitoring, e.g. risk of injury due to arterial and central venous lines, should be available to patients.
- 18.9.4** All cardiothoracic units should provide patient information about preoperative smoking cessation, including how to access local services to support patients wishing to quit before their operation.

STANDARD

5.4.4.1 There is a designated lead consultant for cardiac and/or thoracic anaesthesia with adequate sessional time.

EVIDENCE REQUIRED

Copy of job plan and meeting minutes. The department admin office and the governance department must be aware who these are.

PRIORITY

1

CQC KLoEs

Well-led, effective

HIW Domains

Management and leadership

HIS Domains

Impact on staff; Workforce management and support; Quality improvement-focused leadership

GPAS REFERENCES

18.1.5 Each unit should have a designated lead consultant anaesthetist who is responsible for cardiac anaesthesia services. This should be recognised in their job plan and they should be involved in multidisciplinary service planning and governance within the unit.

18.1.12 Each unit should have a designated lead consultant anaesthetist for thoracic anaesthetic services. This should be recognised in their job plan and they should be involved in multidisciplinary service planning and governance within the unit.

STANDARD

5.4.4.2 There is regular multidisciplinary clinical audit of cardiac and thoracic services with surgeons, cardiologists and nurses.

EVIDENCE REQUIRED

Copy of meeting minutes and the department rota.

PRIORITY

1

CQC KLoEs

Responsive, well-led

HIW Domains

Management and leadership

HIS Domains

Impact on staff; Workforce management and support; Quality improvement-focused leadership

GPAS REFERENCES

- 18.1.3** The complexity of some cases may necessitate anaesthetic involvement in multidisciplinary team meetings and this activity should be reflected in job plans.
- 18.3.5** Specialist anaesthetists should be involved in the discussion of referrals and planning when this is conducted in the setting of a multidisciplinary team. This should be recognised in job plans.
- 18.3.14** A multidisciplinary team should agree and document plans for the peripartum management of patients with known congenital or acquired cardiac disease in advance. Staff and facilities should be available for monitored or operative delivery, and for managing acute decompensation.
- 18.5.4** Hospitals should have systems in place to facilitate multidisciplinary meetings for both cardiac and thoracic services.
- 18.7.2** Regular clinical audit of the work of cardiac and thoracic anaesthesia services is essential. This might also include submission of data to national audits, such as the ACTACC national audit project which includes both cardiac and thoracic anaesthesia topics. Information technology (IT) support should be available for such activities.
- 18.7.3** Centres should consider contributing to multidisciplinary national benchmarking audits such as the National Cardiac Benchmarking Collaborative (NCBC).

STANDARD

5.4.4.3 Anaesthetists take part in regular, minuted, specific cardiac and thoracic M&M meetings with surgeons, cardiologists, nurses perfusionists and other relevant staff.

EVIDENCE REQUIRED

Copy of meeting minutes and the department rota.

PRIORITY

1

CQC KLoEs

Responsive, well-led

HIW Domains

Safe & effective care, Management & leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance; Quality improvement-focused leadership

GPAS REFERENCES

18.5.2 There should be a forum for discussion of matters relevant to both surgeons and anaesthetists, for example protocol development and critical incidents.

HELPNOTE

These should be minuted with specific outcome recommendations. The details of the patients to be discussed should be circulated in advance.

STANDARD

5.4.4.4 Anaesthetists take part in appropriate cardiac, thoracic and cardiology multidisciplinary team meetings with cardiac surgeons, cardiologists and nurses as recommend by NCEPOD.

EVIDENCE REQUIRED

Copy of meeting minutes, departmental rota and job plans.

PRIORITY

1

CQC KLoEs

Safe, effective, responsive, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance; Workforce management and support

GPAS REFERENCES

18.1.3 The complexity of some cases may necessitate anaesthetic involvement in multidisciplinary team meetings and this activity should be reflected in job plans.

18.5.4 Hospitals should have systems in place to facilitate multidisciplinary meetings for both cardiac and thoracic services.

STANDARD

5.4.4.5 Units take part in national benchmarking audit and disseminate this information to staff.

EVIDENCE REQUIRED

Copies of benchmarking exercises involved and records of local dissemination meetings and correspondence.

PRIORITY

3

CQC KLoEs

Safe, responsive, effective, well-led

HIW Domains

Safe and effective care; Management and leadership

HIS Domains

Safe, effective and person-centred care delivery; Policies, planning and governance; Workforce management and support

GPAS REFERENCES

18.7.3 Centres should consider contributing to multidisciplinary national benchmarking audits such as the National Cardiac Benchmarking Collaborative (NCBC).

HELPNOTE

NCBC would be the key audit here, also National Patient Blood Management Comparative audits.



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