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 | 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 **aspirational** for most, however they will provide targets for the highest performing departments to achieve.

All new standards are assigned to Priority 2 in their first year but may become Priority 1 after that. |
| Note 2 | On the use of the term 'policies' | 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 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. |
| Note 3 | For hospitals that do not provide services for children | If your department does not treat children it is acceptable to mark child specific standards as 'N/A'. Where the standard refers to both children 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. |
| Note 4 | On Staff Grade, Associate Specialist and Specialty (SAS) Doctors | 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’.

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. |
STANDARD

5.3.1.1 The process for preoperative assessment presenting for vascular surgery (including 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 Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.3.1 The pre-operative evaluation of patients presenting for vascular surgery presents particular challenges because of the incidence of co-existing disease, in particular cardiorespiratory disease, diabetes and renal disease, and an assessment of the benefit and risk to an individual with or without a surgical intervention is essential. All patients undergoing elective major vascular surgery should be seen well in advance of planned surgery to enable appropriate risk analysis.

15.3.2 Determination of a patient’s functional capacity is important to aid risk assessment, but this may be difficult if exercise tolerance is limited by peripheral vascular insufficiency, respiratory or other disease. Risk stratification based on clinical history may help guide management. Guidelines should be drawn up based on the best available evidence for further investigation, referral, optimisation and management.

15.3.3 Where facilities are available, pre-operative cardiopulmonary exercise testing should be used to help establish functional capacity and aid risk stratification. An increasing evidence base is now available to support its use in both the vascular and non-vascular setting.

15.3.4 The aims of pre-operative vascular assessment should be to assist risk assessment and the decision to perform surgery, to establish the best surgical options for an individual (for example deciding between open and endovascular surgery), to allow optimisation of co-existing medical conditions, to permit consideration and institution of secondary prevention measures, and to allow timing of surgery and required facilities to be planned. In order to fully achieve these aims, a properly resourced multidisciplinary pre-operative assessment clinic is required.

15.3.6 Short- and long-term outcome in vascular patients can be improved by certain lifestyle changes such as cessation of smoking, weight reduction and regular exercise, and pharmaceutical therapies. The preoperative assessment clinic should be used as an opportunity to implement these, and should therefore be operated by senior clinicians able to assess the need for such interventions, with access to appropriate support services (pharmacy, dietetics, smoking-cessation services).
STANDARD

5.3.1.2 Anaesthetic provision for elective major vascular surgery is delivered by a group of consultant anaesthetists with regular subspecialty vascular practice. There may be others who do not undertake vascular anaesthesia regularly but who have complimentary skills through other areas of practice.

EVIDENCE REQUIRED

Visible on the published anaesthetic rota. CD or management to provide evidence that appropriately trained and experienced anaesthetists are allocated for vascular lists. Vascular anaesthetists CPD records, MDT attendance, College logbooks etc.

PRIORITY

1

CQC KLoEs

Safe Effective Well-led

HIW Domains

Safe & effective care; Management & leadership

HIS Domains

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

GPAS REFERENCES

15.1.1 Vascular surgery is performed in many hospitals in the UK, ranging from district general to specialist units in large teaching hospitals. Recent evidence suggests that larger-volume units achieve better outcomes following AAA and other major arterial surgery. As a result, there is national pressure to concentrate vascular services in larger centres. The Vascular Society recommends that centres undertaking AAA surgery should perform a minimum of 100 elective interventions (open and endovascular repair) in each three-year period. Data entry to the National Vascular Registry is mandatory for both standard and complex aortic intervention. There are data fields directly relating to peri-operative anaesthetic care, i.e. pre-operative assessment, multidisciplinary team [MDT], anaesthesia techniques and analgesia. It is essential that the vascular anaesthetist ensures the accuracy of data submitted.

15.1.2 Vascular anaesthesia is increasingly recognised as a subspecialty within its own right, and has its own specialist society. The skills and knowledge required by all anaesthetists involved in the care of vascular surgical patients overlap with those in other areas of subspecialisation. Risk assessment and optimisation of co-existent medical conditions in the high-risk patient prior to major surgery is an integral component of this skill set. In the perioperative period, the vascular anaesthetist requires appropriate skill and knowledge with regard to invasive cardiovascular monitoring, cardioactive or vasoactive drugs, strategies for peri-operative organ protection (renal, myocardial and cerebral), the management of major haemorrhage and the maintenance of normothermia.

15.1.3 Additional skills required in specialist units include expertise in spinal cord protection, visceral perfusion and one-lung ventilation. In units designated as complex endovascular centres, additional programmed time should be provided to vascular anaesthetists delivering this service to allow them to engage with the complex MDT, provide training to allied specialties and provide adequately staffed pre-operative assessment clinics. The pre-operative assessment and decisions regarding the risks of vascular surgery are often complex and time-consuming and require detailed discussions with the patient and other colleagues. It is inappropriate that these decisions are devolved to trainees, and vascular anaesthetists involved in regular pre-operative risk assessment require the appropriate time and facilities to undertake and support these activities.

15.1.7 Anaesthesia for major vascular surgery of moderate complexity can be performed by experienced trainees under the supervision of a consultant or suitably trained and experienced SAS anaesthetist (see second bullet point in Summary above). However, trainees who are not directly supervised should not
undertake major vascular cases in high-risk patients or where surgery or anaesthesia is complex. There should be a named consultant anaesthetist responsible for every vascular surgical case. A SAS anaesthetist could be the named anaesthetist on the anaesthetic record if local governance arrangements have agreed in advance that, based on the training and experience of the individual doctor and the range and scope of their clinical practice, the SAS anaesthetist can take responsibility for patients themselves in those circumstances, without consultant supervision. These considerations also apply to vascular patients who require major lower limb amputation after unsuccessful interventions at limb salvage or reperfusion.
STANDARD

5.3.1.3 There are locally agreed guidelines for the assessment, risk stratification, medical optimisation and referral of high risk vascular patients

EVIDENCE REQUIRED
Evidence of local guidelines on perioperative referral pathways, including clinical pathway for pre-assessment

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES

15.3.1 The pre-operative evaluation of patients presenting for vascular surgery presents particular challenges because of the incidence of co-existing disease, in particular cardiorespiratory disease, diabetes and renal disease, and an assessment of the benefit and risk to an individual with or without a surgical intervention is essential. All patients undergoing elective major vascular surgery should be seen well in advance of planned surgery to enable appropriate risk analysis.

15.3.2 Determination of a patient’s functional capacity is important to aid risk assessment, but this may be difficult if exercise tolerance is limited by peripheral vascular insufficiency, respiratory or other disease. Risk stratification based on clinical history may help guide management. Guidelines should be drawn up based on the best available evidence for further investigation, referral, optimisation and management.

15.3.3 Where facilities are available, pre-operative cardiopulmonary exercise testing should be used to help establish functional capacity and aid risk stratification. An increasing evidence base is now available to support its use in both the vascular and non-vascular setting.

15.3.4 The aims of pre-operative vascular assessment should be to assist risk assessment and the decision to perform surgery, to establish the best surgical options for an individual (for example deciding between open and endovascular surgery), to allow optimisation of co-existing medical conditions, to permit consideration and institution of secondary prevention measures, and to allow timing of surgery and required facilities to be planned. In order to fully achieve these aims, a properly resourced multidisciplinary pre-operative assessment clinic is required.

15.3.5 Clinicians involved in vascular pre-operative assessment should have ready access to other specialists and tools for non-invasive risk assessment. Local expertise and facilities vary, and the precise type of assessment tool used is probably less important than the local expertise.

15.3.6 Short- and long-term outcome in vascular patients can be improved by certain lifestyle changes such as cessation of smoking, weight reduction and regular exercise, and pharmaceutical therapies. The preoperative assessment clinic should be used as an opportunity to implement these, and should therefore be operated by senior clinicians able to assess the need for such interventions, with access to appropriate support services (pharmacy, dietetics, smoking-cessation services).
STANDARD

5.3.1.4 Pre-operative preparation and optimisation should include multi-professional pathways and where appropriate functional capacity should be assessed in those patients who present for aortic surgery

EVIDENCE REQUIRED
Clinical guidelines and evidence of the use of functional capacity assessment (on site or at another Trust) in the clinical pathway. Ideally this should use an objective measure (such as cardiopulmonary exercise testing). Inspection of the weekly departmental rota and/or evidence within job plans for vascular anaesthetists that demonstrates adequate time is provided to deliver the preoperative assessment service for vascular patients. Pre-operative assessment should include a formal risk assessment and discussion of treatment options. Multidisciplinary discussion should be routine, especially when patients present a very high risk.

PRIORITY

1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

HIS Domains
Safe, effective and person-centred care delivery

GPAS REFERENCES

15.3.2 Determination of a patient’s functional capacity is important to aid risk assessment but this may be difficult if exercise tolerance is limited by peripheral vascular insufficiency, respiratory or other disease. Risk stratification based on clinical history may help guide management. Guidelines should be drawn up based on the best available evidence for further investigation, referral, optimisation and management.

15.3.3 Where facilities are available, pre-operative cardiopulmonary exercise testing should be used to help establish functional capacity and aid risk stratification. An increasing evidence base is now available to support its use in both the vascular and non-vascular setting.

15.1.4 The workload generated by urgent and elective vascular pre-operative assessment referrals should be acknowledged by appropriate recognition in terms of programmed activities within a department, whether or not a formal clinic operates.

15.1.7 Anaesthesia for major vascular surgery of moderate complexity can be performed by experienced trainees under the supervision of a consultant or suitably trained and experienced SAS anaesthetist (see second bullet point in Summary above). However, trainees who are not directly supervised should not undertake major vascular cases in high-risk patients or where surgery or anaesthesia is complex. There should be a named consultant anaesthetist responsible for every vascular surgical case. A SAS anaesthetist could be the named anaesthetist on the anaesthetic record if local governance arrangements have agreed in advance that, based on the training and experience of the individual doctor and the range and scope of their clinical practice, the SAS anaesthetist can take responsibility for patients themselves in those circumstances, without consultant supervision. These considerations also apply to vascular patients who require major lower limb amputation after unsuccessful interventions at limb salvage or reperfusion.

15.2.1 A vascular pre-operative assessment clinic provides the ideal environment for risk assessment, patient referral and optimisation in advance of surgery. Regular sessional time and programmed activities should be made available to adequately fulfil these requirements.
15.2.2 The clinic should be consultant-led, with adequate nursing, secretarial support, and office space.

15.2.3 The clinic should be supported by immediate access to baseline investigations such as blood tests, electrocardiography (ECG) and chest radiology.

15.2.4 Funding should be made available for the purchase of simple clinical equipment that may influence risk analysis during the clinic visit. This includes pulse oximetry, spirometry and blood gas analysis.

15.2.5 Appropriate time should be allocated to individual patients for risk assessment and informed discussion of complex issues relating to patient care.
STANDARD
5.3.1.5 Pre-operative assessment should include a formal risk assessment and discussion of treatment options. Multidisciplinary discussion should be routine, especially when patients present a very high risk

EVIDENCE REQUIRED
Evidenced from written documentation in the patient case notes and on the electronic correspondence for the trust

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.1.2 Vascular anaesthesia is increasingly recognised as a subspecialty within its own right, and has its own specialist society. The skills and knowledge required by all anaesthetists involved in the care of vascular surgical patients overlap with those in other areas of subspecialisation. Risk assessment and optimisation of co-existent medical conditions in the high-risk patient prior to major surgery is an integral component of this skill set. In the perioperative period, the vascular anaesthetist requires appropriate skill and knowledge with regard to invasive cardiovascular monitoring, cardioactive or vasoactive drugs, strategies for peri-operative organ protection (renal, myocardial and cerebral), the management of major haemorrhage and the maintenance of normothermia.

15.1.3 Additional skills required in specialist units include expertise in spinal cord protection, visceral perfusion and one-lung ventilation. In units designated as complex endovascular centres, additional programmed time should be provided to vascular anaesthetists delivering this service to allow them to engage with the complex MDT, provide training to allied specialties and provide adequately staffed pre-operative assessment clinics. The pre-operative assessment and decisions regarding the risks of vascular surgery are often complex and time-consuming and require detailed discussions with the patient and other colleagues. It is inappropriate that these decisions are devolved to trainees, and vascular anaesthetists involved in regular pre-operative risk assessment require the appropriate time and facilities to undertake and support these activities.

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15.3.2 Determination of a patient’s functional capacity is important to aid risk assessment, but this may be difficult if exercise tolerance is limited by peripheral vascular insufficiency, respiratory or other disease. Risk stratification based on clinical history may help guide management. Guidelines should be drawn up based on the best available evidence for further investigation, referral, optimisation and management.
The aims of pre-operative vascular assessment should be to assist risk assessment and the decision to perform surgery, to establish the best surgical options for an individual (for example deciding between open and endovascular surgery), to allow optimisation of co-existing medical conditions, to permit consideration and institution of secondary prevention measures, and to allow timing of surgery and required facilities to be planned. In order to fully achieve these aims, a properly resourced multidisciplinary pre-operative assessment clinic is required.
STANDARD
5.3.2.1 5-Lead ECG and non-invasive cardiac output monitoring devices are available in areas where major vascular surgery is undertaken

EVIDENCE REQUIRED
Local policy guidance, availability of monitoring within the theatre complex

PRIORITY
1

CQC KLoEs
Safe Well-led

HIW Domains
Safe & effective care

HIS Domains
Safe, effective and person-centred care delivery

GPAS REFERENCES
15.3.7 Patients undergoing major vascular surgery may suffer major blood loss or fluid shift. Usually, peri-operative invasive cardiovascular monitoring is indicated, and appropriate facilities, equipment and expertise should be available in all cases. Cardiovascular instability and myocardial ischaemia are common during major vascular procedures and are associated with a worse outcome. Specific 5-lead ST segment ECG monitoring and non-invasive cardiac output monitoring should be available routinely, and other monitoring modalities such as transoesophageal echocardiography may be required for certain cases. Transoesophageal echocardiography may be useful in the identification of thoracic aortic pathology, successful deployment of thoracic stent grafts and detection of early complications.
5.3.2.2 The standard of anaesthetic equipment, assistance, near patient testing and recovery facilities are identical wherever endovascular aortic aneurysm repair (EVAR) surgery occurs either inside or outside the vascular operating theatre.

EVIDENCE REQUIRED
Inspection of facilities. Evidence from lead clinician. All radiological protection precautions are available and used by anaesthetists.

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care

HIS Domains
Safe, effective and person-centred care delivery

GPAS REFERENCES
15.2.8 Major vascular surgery often requires the use of large amounts of ancillary equipment that is usually not required by other surgical specialties. This includes radiological equipment, rapid blood transfusion devices, cell salvage devices, additional monitoring and infusion devices, and occasionally extra-corporeal circulation devices. Vascular theatres should be of adequate size to use this equipment safely, with additional storage capacity.

15.2.9 Sufficient space should be available where patients are anaesthetised to perform invasive monitoring and regional anaesthesia techniques in a safe and sterile manner.

15.2.10 A portable ultrasound machine should be available to facilitate safe placement of invasive lines used for monitoring purposes.

15.2.11 If anaesthesia is induced in an anaesthetic room, then the monitoring should be of similar specification and condition to that used in the operating theatre.

15.2.12 All theatres in which aortic surgery is performed should have the capability to perform cell salvage and/or normovolaemic haemodilution. Essential equipment includes a rapid fluid-infusion device, fluid- and patient warming devices, and infusion pumps.

15.2.13 Facilities and equipment to perform one-lung ventilation must be available when thoracoscopic or thoracoabdominal procedures are performed.

15.2.14 Equipment must be available nearby for rapid blood gas analysis, tests of coagulation and the measurement of haematocrit and blood glucose. The provision of near-patient biochemistry testing is highly desirable.

15.2.15 There is an increasing trend for endovascular aortic surgery to be performed in the radiology suite because high-quality imaging equipment is static and located there. It is essential that where EVAR procedures are performed, such facilities should be of theatre specification to facilitate safe provision of anaesthesia, surgical cut-down and conversion to open repair, should the need arise.
15.2.16 The Medical Devices and Healthcare Regulatory Agency has recommended that the standards of anaesthesia facilities, equipment, near-patient testing and assistance should be equivalent to those for conventional operating theatres, including postoperative recovery.
STANDARD
5.3.2.3 Ancillary equipment to manage major haemorrhage such as cell salvage equipment (and personnel), rapid infusion devices and radiological equipment is immediately available 24 hours a day, 7 days a week

EVIDENCE REQUIRED
Inspection of facilities. Evidence from lead clinician

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care

HIS Domains
Safe, effective and person-centred care delivery

GPAS REFERENCES
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15.2.14 Equipment must be available nearby for rapid blood gas analysis, tests of coagulation and the measurement of haematocrit and blood glucose. The provision of near-patient biochemistry testing is highly desirable.
STANDARD
5.3.3.1 Assessments for patients presenting for elective major vascular surgery have adequate time to reflect on the outcome of risk assessments and to allow informed decision making

EVIDENCE REQUIRED
Leaflets and/or web-based information with detail on timing of the steps within the pathway should be available. An audit of feedback from patients and relatives may also be useful to demonstrate this standard

PRIORITY
1

CQC KLoEs
Safe Effective Caring Responsive Well-led

HIW Domains
Safe & effective care; Quality of patient experience

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

GPAS REFERENCES
15.7.1 Patients undergoing major vascular surgery are at significant risk of major complications, including death. All patients should be able to come to an informed decision about the relative risks and possible benefits of any planned surgical intervention. It is recommended that a specialist in vascular anaesthesia be involved both in assessing an individual patient’s general medical condition and fitness for surgery, and in the decision to perform surgery. This is particularly important in the highest-risk cases, and if surgery is declined by any of the parties involved.

15.7.2 All major complications should be explained to the patient in an appropriate setting and in a language they can understand. Explanations should include the consequences of these complications, e.g. renal failure requiring dialysis or stroke causing disability.

15.7.3 Options for postoperative pain relief and their risks should be discussed with the patient by the anaesthetist.

15.7.4 These discussions should occur well in advance of planned surgery to allow reflection and informed decision making. All such discussions should be documented, although it is still necessary to give relevant explanations at the time of the procedure.

15.7.6 The above evaluations and discussions are ideally held in the context of a pre-operative assessment clinic, and the facilities to support this should be provided.
STANDARD
5.3.3.2 Written information leaflets are provided which outline the risks associated with intervention

EVIDENCE REQUIRED
Inspection of current written documentation given to patients. Evidence from lead clinician and/or vascular nurse specialist

PRIORITY
2

CQC KLoEs
Safe Effective Caring Responsive Well-led

HIW Domains
Safe & effective care

HIS Domains
Safe, effective and person-centred care delivery

GPAS REFERENCES
15.7.5 Departments should be able to provide written information leaflets or direct patients to appropriate websites explaining the planned procedure and the possible risks
STANDARD
5.3.4.1 The department has a lead clinician for vascular anaesthesia

EVIDENCE REQUIRED
Name of lead clinician and able to contact them and confirm

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Management & leadership

HIS Domains
Quality improvement-focused leadership

GPAS REFERENCES
15.1.5 A vascular anaesthetist should be nominated as lead clinician for vascular anaesthesia. This role should include close collaboration with the wider vascular team and other specialists, e.g. radiologists, cardiologists, renal and respiratory physicians, attendance at vascular multidisciplinary meetings, promotion of local evidence-based guidelines and co-ordination of joint audit and research.
STANDARD

5.3.4.2 Anaesthetists contribute to and attend vascular MDT meetings to discuss patients presenting for aortic surgery and attend interdisciplinary audit meetings

EVIDENCE REQUIRED
Evidenced from weekly rota or from the vascular anaesthesia group. Minutes from the vascular MDT. Local clinical pathway/policies

PRIORITY

1

CQC KLoEs
Safe Effective Responsive Well-led

HIW Domains
Management & leadership

HIS Domains
Quality improvement-focused leadership

GPAS REFERENCES

15.4.2 In order to maintain the necessary knowledge and skills, vascular anaesthetists should have a regular commitment to the specialty, and adequate time must be made for them to participate in relevant multidisciplinary meetings and continuing professional development (CPD) activities. This should include the facility and resources to visit other centres of excellence, in order to exchange ideas and develop new skills where appropriate.

15.5.1 All departments undertaking major vascular surgical cases should organise regular interdisciplinary audit meetings with vascular surgeons and radiologists in addition to departmental clinical governance meetings.

15.5.2 Multidisciplinary team meetings provide the ideal forum for agreeing a planned team-based strategy for the management of high-risk cases, e.g. patients with abdominal aortic aneurysmal disease. When regional or national guidance is available, e.g. AAAQIP, it is recommended that this is followed.
5.3.4.3 Those consultants who cover emergency vascular surgery but who do not undertake regular vascular anaesthetic practice have programmed time to attend vascular CPD and attend vascular surgery lists in a supernumerary capacity

EVIDENCE REQUIRED
As evidenced by SPA time in current job plan of those who deliver emergency vascular anaesthesia cover out of hours. Evidence of regular local / national CPD events that are disseminated to colleagues who do not provide a regular commitment to vascular anaesthesia

PRIORITY
1

CQC KLoEs
Safe Effective Responsive Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.4.3 Much of the knowledge, skills and attitudes required to manage high-risk patients undergoing major vascular surgery successfully are not specific to the subspecialty. However, it is recognised that the outcome following major vascular surgery may be better if provided by those with a specialist interest. While all senior anaesthetists should have appropriate experience of relevant areas, such as in the management of major haemorrhage or use of invasive monitoring and vasoactive drugs, this may not reflect their current practice. Some of these individuals may not have a regular vascular anaesthesia commitment, but may be expected to provide emergency cover, particularly out of hours. Funded arrangements must be in place to enable all consultants and Staff Grade, Associate Specialist and Specialty (SAS) doctors providing occasional vascular anaesthesia cover to participate in appropriate CPD, including occasional accompanied sessions with vascular anaesthesia colleagues. Notwithstanding this, all anaesthetists must recognise and work within the limits of their professional competence.
STANDARD
5.3.4.4 Those delivering vascular anaesthesia care are registered with the National Vascular Registry (NVR). Data (particularly the anaesthetic data) is submitted to the NVR in a timely fashion

EVIDENCE REQUIRED
Summary of data print out from the NVR. This could be provided by the vascular anaesthetists working in the department

PRIORITY
1

CQC KLoEs
Effective Well-led

HIW Domains
Management & leadership

HIS Domains
Quality improvement-focused leadership

GPAS REFERENCES
15.1.1 Vascular surgery is performed in many hospitals in the UK, ranging from district general to specialist units in large teaching hospitals. Recent evidence suggests that larger-volume units achieve better outcomes following AAA and other major arterial surgery. As a result, there is national pressure to concentrate vascular services in larger centres. The Vascular Society recommends that centres undertaking AAA surgery should perform a minimum of 100 elective interventions (open and endovascular repair) in each three-year period. Data entry to the National Vascular Registry is mandatory for both standard and complex aortic intervention. There are data fields directly relating to peri-operative anaesthetic care, i.e. pre-operative assessment, multidisciplinary team [MDT], anaesthesia techniques and analgesia. It is essential that the vascular anaesthetist ensures the accuracy of data submitted.

15.5.4 Individual vascular anaesthetists are encouraged to contribute to the UK national audit database (National Vascular Registry), which incorporates a section dedicated to ‘anaesthesia’ as developed between the Vascular Anaesthesia Society of Great Britain and Ireland and partnership organisations. The systems needed to provide the necessary data should be available and supported.
STANDARD
5.3.4.5 Urgent care for patients who require vascular intervention is delivered by senior anaesthetists within office hours where possible. This includes all urgent vascular surgery.

EVIDENCE REQUIRED
Evidence from weekly theatre register, discussion with lead clinician for vascular (or deputy) and lead surgeon for vascular surgery.

PRIORITY
1

CQC KLoEs
Safe Effective Responsive Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.6.3 Patients requiring major vascular surgery frequently require level 2 or level 3 care afterwards. The funding and provision of critical care beds must be planned to meet the demands of the service and avoid unnecessary cancellations. Appropriate planning can also improve the use of theatre resources. Patients may present with conditions requiring urgent surgery, which is often best performed on the next available daytime list. Departments should ensure that theatre time is identified and that senior anaesthetists are available to facilitate the above recommendations.

15.6.4 Daytime vascular urgent or emergency lists should be organised and staffed by senior anaesthetists and surgeons working to a fixed sessional pattern and who have no conflicting clinical commitments. There is evidence that the outcome after lower limb amputation surgery is better when surgery is undertaken within normal working hours.

15.6.5 Individuals should not be pressurised into undertaking major vascular cases if any of these resources or expertise are not available.
STANDARD
5.3.4.6 Policies and guidelines on the perioperative management of blood pressure are available to anaesthetists who provide care for patients who present for urgent and elective carotid endarterectomy

EVIDENCE REQUIRED
Policy or guideline document provided

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.4.1 Anaesthetists with an appropriate level of training should manage patients undergoing major elective vascular surgery.

15.4.2 In order to maintain the necessary knowledge and skills, vascular anaesthetists should have a regular commitment to the specialty, and adequate time must be made for them to participate in relevant multidisciplinary meetings and continuing professional development (CPD) activities. This should include the facility and resources to visit other centres of excellence, in order to exchange ideas and develop new skills where appropriate.

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15.4.4 An appropriate training programme should be in place for trainee anaesthetists according to their grade. This programme should develop understanding of the widespread nature of cardiovascular disease as well as peri-operative management. The RCoA revised training curriculum (2010) provides explicit detail of the requirements.
STANDARD

5.3.4.7 In centres where endovascular repair is undertaken in areas outside the main operating department (angio suite) formal SOPs covering all aspects of care and responsibility should exist and identical safety procedures (such as those associated with the WHO checklist) should exist.

EVIDENCE REQUIRED
Policy or guideline document provided. Verbal confirmation from staff.

PRIORITY

1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES

15.1.8 When major arterial surgery is performed, the anaesthetist must be assisted by a fully trained anaesthetic assistant who has specific training and experience in vascular anaesthetic practice.

15.1.9 Additional trained theatre staff are required when cell salvage techniques are utilised.

15.1.13 Where vascular surgical procedures are performed in the radiology department, requirements in terms of anaesthetic assistance and post-operative nursing are identical to those of patients undergoing vascular surgery in the operating theatre suite.

15.2.9 Sufficient space should be available where patients are anaesthetised to perform invasive monitoring and regional anaesthesia techniques in a safe and sterile manner.

15.2.16 The Medical Devices and Healthcare Regulatory Agency has recommended that the standards of anaesthesia facilities, equipment, near-patient testing and assistance should be equivalent to those for conventional operating theatres, including postoperative recovery.

15.3.9 The considerations regarding monitoring, expertise, trained assistance and hypothermia are important whatever the location of the vascular intervention. This is particularly relevant when procedures are performed in a radiology suite, as the environment may be unfamiliar. It is important that all facilities required for periprocedural care are of the same standard as the operating theatre environment. This includes recovery facilities and postoperative care.

15.3.10 Units should possess adequate critical care facilities to provide appropriate level 2 or level 3 care. Prior to commencing individual major vascular cases, it should be ensured that a bed with the identified level of care is available for the patient.
STANDARD
5.3.4.8 In centres where complex endovascular repair (fenestrated, thoracic or branched EVAR) or open thoraco-abdominal aortic aneurysm repair is undertaken, policies and guidelines exist for the detection, prevention and treatment/management of spinal cord ischaemia

EVIDENCE REQUIRED
Policy or guideline document provided

PRIORITY
1

CQC KLoEs
Safe Effective Well-led

HIW Domains
Safe & effective care; Management & leadership

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

GPAS REFERENCES
15.1.3 Additional skills required in specialist units include expertise in spinal cord protection, visceral perfusion and one-lung ventilation. In units designated as complex endovascular centres, additional programmed time should be provided to vascular anaesthetists delivering this service to allow them to engage with the complex MDT, provide training to allied specialties and provide adequately staffed pre-operative assessment clinics. The pre-operative assessment and decisions regarding the risks of vascular surgery are often complex and time-consuming and require detailed discussions with the patient and other colleagues. It is inappropriate that these decisions are devolved to trainees, and vascular anaesthetists involved in regular pre-operative risk assessment require the appropriate time and facilities to undertake and support these activities.