Royal College of Anaesthetists

Chapter 6

Guidelines for the Provision of Anaesthesia Services (GPAS)

Guidelines for the Provision of Anaesthesia Services for Day Surgery 2025

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Declarations of interest

All chapter development group (CDG) members, stakeholders and external peer reviewers were asked to declare any pecuniary or non-pecuniary conflict of interest, in line with the guidelines for

the provision of anaesthetic services (GPAS) conflict of interest policy as described in the GPAS chapter development process document.

The nature of the involvement in all declarations made was not determined as being a risk to the transparency or impartiality of the chapter development. Where a member was conflicted in relation to a particular piece of evidence, they were asked to declare this and then, if necessary, remove themselves from the discussion of that particular piece of evidence and any recommendation pertaining to it.

Medicolegal implications of GPAS guidelines

GPAS guidelines are not intended to be construed or to serve as a standard of clinical care. Standards of care are determined based on all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

Promoting equality and addressing health inequalities

The Royal College of Anaesthetists (RCoA) is committed to promoting equality and addressing health inequalities. Throughout the development of these guidelines, we have:

- given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant Protected Characteristic (as defined in the Equality Act 2010) and those who do not share it
- given regard to the need to reduce inequalities between patients in access to, and outcomes from healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities.

GPAS Guidelines in context

The GPAS documents should be viewed as 'living documents'. The GPAS guidelines development, implementation and review should be seen not as a linear process, but as a cycle of interdependent activities. These in turn are part of a range of activities to translate evidence into practice, set standards and promote clinical excellence in patient care.

Each of the GPAS chapters should be seen as independent but interlinked documents. Guidelines on the general provision of anaesthetic services are detailed in the following chapters:

- Chapter 1: Guidelines for the Provision of Anaesthesia Services: The Good department
- Chapter 2: Guidelines for the Provision of Anaesthesia Services for the Perioperative Care of Elective and Urgent Care Patients.

These guidelines apply to all patients who require anaesthesia or sedation, and are under the care of an anaesthetist. For urgent or immediate emergency interventions, this guidance may need to be modified as described in Chapter 5: Guidelines for the Provision of Emergency Anaesthesia.

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The rest of the chapters of GPAS apply only to the population groups and settings outlined in the 'Scope' section of these chapters. They outline guidance that is additional, different or particularly important to those population groups and settings included in the 'Scope'. Unless otherwise stated within the chapter, the recommendations outlined in chapters 1–5 still apply.

Each chapter will undergo yearly review, and will be continuously updated in the light of new evidence.

Guidelines alone will not result in better treatment and care for patients. Local and national implementation is crucial for changes in practice necessary for improvements in treatment and patient care.

Aims and objectives

The objective of this chapter is to promote current best practice for service provision in day surgery anaesthesia. The guidance is intended for use by anaesthetists with responsibilities for service delivery and by healthcare managers.

This guideline does not describe clinical best practice in day surgery anaesthesia comprehensively, but is primarily concerned with the requirements for the provision of a safe, effective, well-led service, which may be delivered by many different acceptable models. The guidance on provision of day surgery anaesthesia applies to all settings where this is undertaken, regardless of funding arrangements. All age groups are included within the guidance unless otherwise stated, reflecting the broad nature of this service.

A wide range of evidence has been rigorously reviewed during the production of this chapter, including recommendations from peer-reviewed publications and national guidance where available. However, both the authors and the Chapter Development Group (CDG) agreed that there is a paucity of level 1 evidence relating to service provision in day surgery anaesthesia. In some cases, it has been necessary to include recommendations of good practice based on the clinical experience of the CDG. We hope that this document will act as a stimulus to future research.

The recommendations in this chapter will support the RCoA's Anaesthesia Clinical Services Accreditation (ACSA) process.

Scope

Clinical management

Key components for the provision of anaesthesia services for day surgery or to ensure provision of high-quality anaesthetic services for day surgery.

Areas of provision considered:

- organisation and administration
- levels of provision of service, including (but not restricted to) staffing, equipment, support services and facilities
- patient information
- areas of special requirement, such as children, prisoners, surgery on isolated sites
- training and education
- audit and quality improvement
- research and areas for further development.

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Target audience

All staff groups working in day surgery, including (but not restricted to) consultant anaesthetists, staff grade, associate specialist and specialty anaesthetists, anaesthetists in training, operating department practitioners, nurses and managers involved in day surgery.

Target population

All ages of patients undergoing day surgery.

Healthcare setting

All settings within the hospital in which day surgery is provided.

Exclusions

- Clinical guidelines specifying how healthcare professionals should care for patients.
- National level issues.
- Provision of day surgery services provided by a specialty other than anaesthesia.

This chapter encompasses the anaesthetic service provision for 'true' day surgery patients. It does not include '23-hour stay', endoscopy or outpatient procedures. Patients suitable for true day surgery are those undergoing surgery requiring operating theatre facilities and/or a general anaesthetic and who are admitted, operated on and discharged on the same calendar day of their surgical treatment.[1]

Introduction

Day surgery is the planned admission of a surgical patient for a procedure where the patient is admitted, undergoes surgery and is discharged on the same calendar day.[1] If the patient remains in a hospital bed overnight on the day of their surgery they are classed as having undergone inpatient surgery. The term '23-hour stay' surgery is short-stay inpatient surgery and is not included in the UK definition of day surgery. The NHS Plan (2000) stipulated that at least 75 per cent of elective surgery should be undertaken on a daycase basis.[1] In 2004, the Department of Health NHS Modernisation Agency, in its *10 High Impact Changes For Service Improvement and Delivery*, states that day surgery rather than inpatient surgery should be treated as the norm for elective surgery.[2] In the intervening years, huge strides have been made in the development of day surgery across the country; however, there is wide variation.[3] The top-performing units are achieving very high daycase rates; however, many struggling to reach the 85 per cent target recently set by GIRFT/NHSE.[4] While absolute day case rates for an individual hospital may reflect differences in case mix, there is still wide variation across the country when comparing individual procedures.[3]

Day surgery encompasses a spectrum of surgical procedures that allow the patient to go home on the day of surgery, often after only a few hours. It represents high-quality patient care, which includes surgical techniques with reduced tissue trauma, and employs enhanced recovery, effective analgesia, minimal adverse events, provision of appropriate information and postoperative support. Improvements in the provision of anaesthesia and analgesia and the introduction of minimal-access surgical techniques allow a range of procedures to be undertaken on a daycase basis, which formerly would have required inpatient services.

Day surgery outcomes can be measured in terms of quantity (percentages of procedures undertaken on a daycase basis) and quality (for example unplanned admission rates, patient satisfaction, postoperative symptoms). For a hospital to have successful day surgery outcomes, a variety of clinical and managerial processes are required. There should be a multidisciplinary management team responsible for the strategic development and running of the day surgery unit and a dedicated clinical lead or clinical director with allocated programmed activities to allow them to lead service development. Consultant or autonomously practising anaesthetic

involvement is essential in the development of policies, protocols and guidelines designed to facilitate smooth running of the day surgery unit and preoperative assessment processes.[5,6,7,8,9]

There should be a clear day surgery process for all patients for day surgery treated within the trust whether through dedicated facilities, which is the ideal scenario, or through the inpatient operating theatres, which should only be supported if the development of dedicated facilities is either not a viable option or there is insufficient capacity to accommodate all day surgery activity.[5,9]

BADS and GIRFT recommends that day case surgery is the default for all suitable elective surgical procedures Processes should be in place to ensure that all appropriate patients are considered for day surgery management.[3,9,19] This includes adopting the British Association of Day Surgery *Directory of Procedures* and ensuring that all recommended procedures default to day surgery management where clinically appropriate.[10] This is particularly relevant for the GIRFT high volume low complexity (HVLC) procedures.[11] Preoperative assessment processes, which enable the majority of patients to be safely cared for within day surgery pathways, are essential.[9] This includes children, the elderly and patients with complex medical conditions.[9,12]

Anaesthesia for day surgery should be consultant-led and all anaesthetists delivering day surgical care must be trained, experienced and skilled in the practice of anaesthesia for day surgery to provide the high-quality anaesthesia pivotal to successful outcomes.[6] The day surgery unit provides an ideal training opportunity and training in anaesthesia for day surgery is essential. Anaesthesia trainees may undertake day surgery lists under appropriate senior supervision. During their day surgery training, anaesthetists need to develop techniques that permit their patients to undergo surgical procedures with minimum stress and maximum comfort and optimise their chance of early discharge.

Effective audit is essential in the provision of quality anaesthesia for day surgery.[3,5,6,9,13,14]

Some day surgery units or 'treatment centres' may be sited in a geographically separate location from the main hospital building. Self-contained units must be sufficiently equipped and have access to all the necessary perioperative support services.[15] Patient selection should consider the availability of additional help in an emergency, and ease of overnight admissions if required. Patients deemed unsuitable for anaesthesia or surgery in these isolated locations may very well still be appropriate for a day surgery pathway managed through the main hospital facilities.

Anaesthetists play a pivotal role in achieving successful outcomes for day surgery patients. Working as part of the multidisciplinary team, anaesthetists can and should contribute in more ways than solely providing anaesthesia.

Recommendations

The grade of evidence and the overall strength of each recommendation are tabulated in Appendix 1.

1 Organisation and administration

1.1 Day surgery should be a consultant or autonomously practising anaesthetist/surgeon-led service with a dedicated clinical lead or clinical director who has programmed activities allocated to the role within their job plan. The role of the clinical director is to champion the cause of day surgery and to ensure that best practice is followed. This role may involve the development of local policies, guidelines and clinical governance, and should be recognised by adequate programmed activity allocation and provided with the administrative and secretarial support necessary to achieve these goals.[3,5,9,13,16]

1.2 The day surgery unit should have appropriate administrative support involving patient booking for lists and preoperative assessment services, communication with patients about

admission times and starving instructions, and reception staff to meet and greet patients on the day of surgery and admit them electronically for their procedure.[12]

1.3 Day surgery should be represented at board level.[3,9,13]

1.4 There should be a senior nurse manager or appropriately trained allied health professional who, together with the clinical director, can provide the day to day management of the unit.

1.5 Many larger units, especially those that are freestanding, should consider having a separate business manager to support the clinical director and senior nurse.

1.6 The clinical director should chair a management group and should liaise with all those involved in day surgery. This group will include representatives from surgery, anaesthesia, nursing, pharmacy, management, finance, community care (both nursing and medical), audit, professions allied to medicine and representatives of patient groups.

1.7 Effective preoperative assessment and patient preparation, performed as early as possible in the planned patient pathway, is essential to the safety and success of day surgery[5,8,12,17]

1.8 Local preoperative assessment guidelines and protocols should be established. These should be in line with current national recommendations from the British Association of Day Surgery, Getting It Right First Time, the Centre for Perioperative Care, NHS England and the Preoperative Association.[4,18,19,20,21]

1.9 Protocols should be available to maximise the opportunity for patients with significant comorbidities (e.g. diabetes, morbid obesity, sleep apnoea) to be safely managed via a daycase pathway. Preoperative assessment should be inclusive not exclusive.[3,5,12,16]

1.10 Appropriate investigation should be ordered at preassessment, according to a locally agreed protocol. A mechanism for review and interpretation of the results of tests ordered before the day of surgery should be in place.[21,22]

1.11 The patient should be provided with verbal and written information or directed to available electronic media outlining the day surgery pathway, planned procedure and anaesthetic, and expectation of postoperative recovery, to reinforce the day surgery message.[12,17]

1.12 A consultant or autonomously practising anaesthetist should be available to review an individual patient's suitability for day surgery and to assist with preoperative optimisation, in discussion with medical specialists as appropriate. A referral service for nurses or appropriately trained allied health professionals to allow complex patients to have anaesthetic review should be developed.[5,12,13]

1.13 Consideration should be given to the optimisation of waiting lists so that patients are ready to be listed once they reach the date for surgery.[17,23]

1.14 Mixed inpatient and day surgery lists may increase flexibility, but this practice should be minimised, as conflicting priorities can compromise the care of both groups.[9]

1.15 If it is occasionally necessary to undertake daycase surgery on inpatient operating lists, the day cases should be prioritised at the beginning of the list to allow time for postoperative recovery and discharge. Starting the list with a daycase patient may improve efficiency (no delay to starting list) in times of bed pressures.

1.16 Daycase patients should ideally be cared for in dedicated day surgery ward areas to ensure safe and timely discharge.

1.17 Locally agreed guidelines and policies should be in place for preoperative management on the day of admission. This should include assessment for risk of venous thromboembolism, pregnancy, premedication and pathways for major surgery (e.g. daycase arthroplasty).[3,9,24]

1.18 Locally agreed policies should be in place for the management of postoperative pain after day surgery. This should include pain scoring systems in recovery and a supply of pain relief medication on discharge, with written and verbal instructions on how to take medications and what to take when the medications have finished. Information on over-the-counter analgesics to have at home should be given at preoperative assessment.

1.19 There should be agreed protocols for the care of patients who require unplanned hospital admission following their daycase procedure.[9]

1.20 Patients may be discharged home with residual sensory or motor effects after peripheral nerve or plexus blocks (not after neuraxial anaesthesia). Duration of the effects should be explained, and the patient should receive written instructions as to how to care for their numb limb until normal sensation returns.

1.21 Discharge should be delegated to nursing staff or allied health professionals trained in nurse-led discharge, according to local protocols.[5,9,25]

1.22 Postoperative short-term memory loss may prevent verbal information being assimilated by the patient.[26] If postoperative analgesia has been provided, clear written instructions on how and when to take medication should be provided. Other important information should also be provided in writing.[5,9,12]

1.23 A 24-hour telephone number should be supplied so that every patient knows whom to contact in case of postoperative complications. This should ideally be connected to an inpatient surgical area of the appropriate specialty and should not be an answerphone.

1.24 Following procedures performed under general or regional anaesthesia, a responsible adult should escort the patient home and should provide support for the first 24 hours after surgery.[5] A carer at home may not be essential if there has been good recovery after brief or non-invasive procedures and where any postoperative haemorrhage is likely to be obvious and controllable with simple pressure.[9,19]

1.25 Transport home should be by private car or taxi; public transport is not normally acceptable following general or regional anaesthesia.

1.26 Where the patient's general practitioner (GP) practice may need to provide postoperative care within a short time of discharge, arrangements for this should have been made with the GP in advance of the patient's admission.

1.27 The patient's GP should be informed of the patient's procedure as soon as practical, and provided with a written discharge summary, which will usually be completed by the surgeon.

1.28 All patients should receive a copy of their discharge summary in case emergency treatment is needed overnight.

1.29 A number of urgent surgical operations (e.g. abscess drainage, superficial lacerations or hand trauma) can be managed on a daycase basis, with semi-elective admission to day surgery facilities on the day of operation and discharge later the same day.[10,17,27] Effective preoperative assessment will add to success for these patients. In contrast, the accommodation of emergency inpatients within the ward environment of day surgery facilities, without alteration of the surgical pathway, represents a failure of bed capacity planning and causes disruption of effective day surgery.[3,9]

2 Patient information

The Royal College of Anaesthetists has developed a range of Trusted Information Creator Kitemark-accredited patient information resources that can be accessed from the RCoA website. The main leaflets are now translated into more than 20 languages, including Welsh.

2.1 Patients should be provided with information specific to their condition/indication for surgery in addition to information about day surgery. Clear and concise information given to patients at the right time and in the correct format is essential to facilitate good day surgery practice.[5] This information should be provided before the day of surgery and may be given to patients at the surgical clinic or at their preoperative assessment. Verbal information should always be reinforced with printed material or information available from specialist sources online such as the RCoA website. Alternative means of communication with patients, including the internet, email and text messaging, should be considered.[12,17]

2.2 An explanation of the of the patient pathway for the day of surgery and written information should be provided. This could include infographics or video.[12]

2.3 Information should be arranged in such a way that is comprehensive, comprehensible, age appropriate and suitable for patients with special needs and those with other difficulties in understanding and considering the information. It may be necessary to provide information leaflets in a number of different languages to accommodate the needs of the local population.

2.4 The information should be sufficient to allow informed consent and patients should have an opportunity to ask for further information or clarification.[12,17,28,29]

2.5 In addition to clinical information, patients should be provided with:

- the date and time of admission to the unit
- location of the unit, travel and parking instructions, including information regarding parking costs, if relevant
- any relevant preoperative preparations required of the patient
- information on the anaesthetic to be provided, including clear instruction for preoperative fasting and hydration, and the way in which patients will manage their medication
- requirement to arrange an escort home and a postoperative carer if indicated
- postoperative discharge information, including details of follow-up appointments, management of drugs, analgesia, including stepping down of pain relief, opioids, dressings, and clear instructions on whom to contact in the event of postoperative problems.[12,30]

2.6 Patients should also be made aware at the preoperative assessment visit that conversion to inpatient care is always a possibility and that they should consider how this may impact on their home arrangements, including any dependent relatives.

3 Staffing requirements

3.1 Preoperative assessment clinics should have a nominated consultant or staff grade, associate specialist or specialty doctor lead involved in developing local protocols, coordination of day surgery preoperative services, selection of patients with complex issues for day surgery and audit of outcomes.[12,13]

3.2 Preoperative assessment staff should be specifically trained in day surgery preoperative assessment, including optimisation and preparation for day surgery.

3.3 Where possible, progress should be made towards development of dedicated day surgery teams with preoperative assessment delivered by the day surgery team to reinforce the day surgery message.

3.4 High-quality anaesthesia is pivotal to achieving successful outcomes following day surgery. The majority of anaesthesia for day surgery should be delivered by consultants or autonomously practising anaesthetists. Staff grade, associate specialist and specialty doctors and experienced trainee anaesthetists may also provide anaesthesia for day surgery. However, these doctors should be suitably experienced and skilled in techniques appropriate to the practice of day surgery and have undertaken appropriate training in the provision of anaesthesia for day surgery.[12,24]

3.5 Anaesthetists should have been trained in this field to the standards required by the Royal College of Anaesthetists.[12]

3.6 There should be adequate staffing levels provided within the department to ensure that there is minimal handover of patients between staff.[31]

3.7 Anaesthesia associates should work under the supervision of a consultant or autonomously practising anaesthetist at all times, as required by the RCoA.[32]

3.8 The secondary recovery area in the day surgery unit (day surgery ward) should be staffed to match patients' needs. Consideration should be given to the skill mix as well as numbers of staff.

3.9 The secondary recovery area in the day surgery unit (day surgery ward) should be staffed with adequate numbers of registered nurses or allied health professionals trained in nurse-led discharge.[5,25]

3.10 When children are present on the unit, there should be a registered paediatric nurse present at all times. The Royal College of Nursing standards recommend two registered paediatric nurses at all times.[33,34,35]

3.11 When children are present on the unit, support workers and health play specialists should play a key role within day surgery provision.[33]

4 Facilities, equipment and support services

Facilities

4.1 The ideal day surgery facility is a purpose built, self-contained, ring-fenced day surgery unit with its own preoperative, intraoperative and postoperative facilities. This unit may be contained within a main hospital or in its grounds to allow access to higher-level patient support services, if required, or it may be a freestanding unit remote from the main hospital site.[5,9,15,36]

4.2 A viable alternative is for patients to be admitted to and discharged from a dedicated day surgery ward, with surgery undertaken in the main theatre suite. This arrangement may be more flexible for complex surgery and avoids duplicating theatre skills and equipment. Day surgery patients should be prioritised as first on the main theatre list to allow recovery time for successful day surgery discharge.[5,9]

4.3 Daycase patients should only be channelled through inpatient wards in exceptional circumstances because this greatly increases their chances of an unnecessary overnight stay.[37]

4.4 The day surgery unit should have no capacity to accept inpatient or emergency patients who are not on a planned day surgery pathway.[5,9]

4.5 Adequate time and facilities should be provided within the day surgery unit to enable the multidisciplinary day surgery clinical team to undertake all aspects of the admission process, including clinical examination, further discussion about the procedure and delivery of information while maintaining patient dignity and privacy.[12,34,36]

4.6 The minimum operating facility required is a dedicated operating session in a properly equipped operating theatre to the same standards as an inpatient theatre.[12,36]

4.7 Secure storage for patients' belongings, clothes and medications should be available while they undergo their surgery.[36]

4.8 Waiting areas should be available for parents and carers who are providing support to patients immediately after surgery.[12,34,36]

4.9 Children should be separated from and not cared for directly alongside adults throughout the patient pathway, including reception and recovery areas. Where complete separation is not possible, the use of screens or curtains, while not ideal, may provide a solution.[33,34]

4.10 Dedicated second-stage recovery (which is usually the day surgery ward) should be provided separately from inpatient ward areas. Ideally, this area should have a single-sex set-up with respect for gender identity.[38]

4.11 The day surgery ward should provide essential, close and continued supervision of all patients, who should be visible to the nursing staff while maintaining privacy and dignity.

4.12 The day surgery ward should have the facility to provide drinks and snacks after surgery.[36]

Equipment

4.13 Equipment to allow full individualised preoperative assessment for day surgery patients should be available, including a 12-lead ECG machine, a sphygmomanometer for blood pressure, weighing scales and equipment for taking blood samples to the same standard as for inpatient preoperative assessment.[12,17]

4.14 Theatre and anaesthetic-related equipment should always be equivalent to that provided for inpatient surgery. It should be regularly maintained and where possible standardised across all theatre suites within a hospital.[12,36]

4.15 Full resuscitation equipment and drugs should be provided as outlined by the Resuscitation Council UK and local policy. A cardiac arrest trolley and defibrillator should be provided in the first-stage recovery area.[12,36]

4.16 The use of operating trolleys for the entire patient pathway should be considered to maximise efficiency and reduce manual handling. No beds should be present on the day surgery ward.[5,9,15]

4.17 The recommended Association of Anaesthetist standards of anaesthetic monitoring should be met for every patient.[39]

4.18 Peripheral nerve blocks or short-acting spinal anaesthesia often provide excellent conditions for day surgery. Equipment to facilitate these techniques such as nerve stimulators, ultrasound machines, NRFit spinal needles and syringes should be available.[5,12]

4.19 Short-acting anaesthetic drugs and appropriate equipment to facilitate their delivery should be available to day surgery units. Total intravenous anaesthesia with appropriate depth of anaesthesia monitoring is effective in reducing postoperative nausea and vomiting. Equipment for its use should be available in day surgery theatres.[26,39,40]

4.20 Each day surgery unit should have a fully equipped recovery area, staffed by recovery personnel trained to defined standards.[12,39,41]

Support services

4.21 Preoperative assessment services if provided within the day surgery unit should have support from investigation laboratories or clinical testing services to support diagnosis for risk assessment and optimisation of patients. This will allow day surgery selection to be maximised for high-risk patients.[12,17]

4.22 Access for preoperative assessment staff to multidisciplinary teams support from other physicians, medical specialists, anaesthetists, surgeons and pain management teams should be available.[12]

4.23 If day surgery does not have preoperative assessment within the unit, there must be an appropriate preoperative assessment service to support effective day surgery patient selection and preparation.

4.24 Support services including radiology, pharmacy and investigative laboratories should be available.

4.25 The facility to perform a 12-lead ECG and other point of care tests, such as international normalised ratio, should be available within the day surgery unit itself.

Information technology

4.26 The day surgery unit requires sufficient numbers of IT equipment (computers, screens and mobile computers on wheels) to enable clinicians to access and input the electronic patient record in a timely manner.[5,8,12]

4.27 The day surgery unit requires well-functioning WiFi to support the IT systems in place and maintain efficient running of the service.[5,8,12]

4.28 Results from investigations should be available via the electronic patient record or via an appropriate IT system.[16]

4.29 The day surgery unit must have a clear action plan of what to do in case of failure of IT system and the need to revert temporarily to paper and any equipment or documents must be readily available (e.g. drug kardexes).

5 Areas of special requirement

Children

Day surgery is particularly appropriate for children.

5.1 The lower age limit for day surgery depends on the facilities and experience of the staff and the medical condition of the infant and proposed surgery Not less than 60 weeks post-conceptual age are normally considered unless medically fit and the unit has the

appropriate expertise. Risks should be discussed with parents and carers on an individual basis.[33,34,42]

5.2 For children, a staff member with an advanced paediatric life support qualification or an anaesthetist with paediatric competencies should be immediately available.[43,44]

5.3 Infants with a history of chronic lung disease or apnoea should be managed in a centre equipped with facilities for postoperative ventilation.

5.4 Infants, children and young people should, where possible, be cared for in a dedicated paediatric unit or should have specific time allocated in a mixed adult/paediatric unit, where they are separated from adult patients.[33,45] Environment should be safe and well suited to age and stage of development of the child or young person.[35]

5.5 Nursing staff caring for children should be skilled in paediatric and day surgical care and trained in child protection.[34,44]

5.6 There should be access to a paediatrician. Where the day surgery unit does not have inpatient paediatric services, robust arrangements should be in place for access to a paediatrician and transfer to a paediatric unit if necessary.[33]

5.7 A preadmission programme for children should be considered, to decrease the impact and stress of admission to the day surgery unit on the day of surgery.[45,46,47,48]

5.8 Children requiring day-stay anaesthesia for non-surgical procedures such as imaging, endoscopy, laser treatment to skin lesions, radiotherapy, and oncology investigations and treatments should have the same standards of care as those having surgical procedures.

5.9 Special considerations for younger children undergoing day case tonsillectomy/ adenoidectomy surgery should be made depending of expertise at the centre and current national guidelines. Skilled preoperative assessment services, including thorough assessment of children with obstructive sleep apnoea (OSA) and experienced anaesthetists and surgeon are required to deliver this safely. Surgery and perioperative care, including care on the post-anaesthetic care unit and on the ward, should be delivered by a team with ongoing experience with young children and who maintain regular training.[42]

5.10 Patients who have begun menstruation should have their pregnancy status ascertained on the day of surgery. Departments should have a policy for pregnancy testing and documentation in line with the Royal College of Paediatrics and Child Health 2012 guidance for clinicians.[34,49]

5.11 Emergence delirium is more common in young children having short procedures; it is distressing for parents and staff, and impairs the quality of recovery. Anaesthetic techniques should be modified to minimise the risk of emergence delirium in susceptible children to facilitate smooth recovery and discharge.[5,50,51]

Prisoners

5.12 Pathways and policies for treating prisoners as day cases should be agreed with the local prison services.[52] This should include a risk assessment and information required to determine whether adjustments are needed to maintain the privacy and dignity of the patient and the safety of staff and other patients. The preoperative assessment team must highlight these requirements to the day surgery team.

5.13 The hospital should ensure that prisoners have adequate access to postoperative analgesia. Some prisons do not have the facility to provide analgesia if the medical officer is not on duty. In these cases, arrangements are required to enable the prisoner to access the required

postoperative medication within the prisoner's cell or for additional arrangements to be made to enable patients to receive overnight postoperative analgesia.

5.14 The hospital should consider making an agreement on the safe provision of privacy and dignity for prisoners with the local prison governor regarding the use of restraints.[52]

5.15 The staff should ensure that patients have sufficient information and autonomy to give informed consent, including access to translation where appropriate.

5.16 The hospital staff should ensure that aftercare and observation is as adequate as for a patient returning home with a carer and the security service staff must have some understanding of the procedure performed and provide aftercare in accordance with clinical advice.[3,17]

Emergency day surgery

5.17 A number of urgent surgical operations can be efficiently and effectively treated as day cases via a semi-elective pathway (see BADS Directory of Procedures).[10] Patients suitable for treatment as day cases should be identified by the surgical team.[3,8,17]

5.18 Pathways should be developed to facilitate access to day case surgery for urgent surgery which may prevent recurrent admissions while awaiting elective surgery. This includes robust preoperative assessment process to facilitate day case surgery.[3,,27,53]

5.19 It is essential to determine whether the patient is safe to be sent home with oral treatment and analgesia for up to 24 hours while awaiting urgent surgery on a daycase basis.[27]

Frail and older patients

5.20 Day surgery can be an advantageous choice for the frail or older patient allowing better recovery in their own familiar environment at home and avoiding a hospital stay with risk of exposure to infections.[54]

5.21 Patients who are frail or elderly with many comorbidities should be identified early at preoperative assessment and risk assessments made.[12,17,54]

5.22 Perioperative plans should be made with carers or relatives involving access to day surgery pathways to increase the chance of success.[12]

5.23 Multidisciplinary involvement early to optimise frail or elderly comorbid patients may help decrease postoperative complications.[12,54,55]

5.24 Planned early mobilisation and multimodal, opiate light analgesic regimens should be used to reduce postoperative delirium in high-risk frail or elderly patients.[54]

5.25 Equipment available to measure depth of anaesthesia may help to facilitate recovery with fewer postoperative complications.[55]

Breastfeeding patients

5.26 Where possible, day surgery is preferable to avoid disrupting normal routines. the Association of Anaesthetists Guidelines on breastfeeding and sedation in breastfeeding women should be followed.[56]

5.27 Patients should be supported to breastfeed as normal following surgery with appropriate facilities, including allowing the infant to feed in the perioperative period. There is no requirement to discard breast milk immediately after surgery.[56]

5.28 Multimodal analgesia should be used, including regional anaesthesia. Opioid analgesia can be used if required, but the patient should be given advice regarding observing the infant for signs of excessive drowsiness. Additional advice for prescribing for breastfeeding patients can be found in the guideline from Association of Anaesthetists Guidelines on breastfeeding and sedation in breastfeeding women.[45]

Morbidly obese patients

5.29 There should be no restriction to treating a patient as a day case based on weight alone. Even patients who are morbidly obese can be safely cared for in expert hands with appropriate resources.[57,58]

5.30 Anaesthetic review at preassessment is recommended for those patients whose body mass index (BMI) is greater than 40 kg/m^2 with associated comorbidities. Optimisation is important but should allow safe day surgery. Patients who are super morbidly obese (BMI > 50 kg/m^2) need particular care in preoperative assessment and optimisation and may need additional equipment or staffing to be arranged for safe management.[12,57]

5.31 Patients should be assessed for their risk of sleep apnoea using validated tools such as STOP BANG.[5] Such tests should be embedded in the preoperative assessment process and should be followed by referral for treatment with continuous positive airway pressure (CPAP). Obstructive sleep apnoea is a multisystem disorder. Thorough preoperative investigation to exclude associated cardiac disorders (Including right-heart strain or pulmonary hypertension), metabolic dysfunction or neuropsychiatric disorders, is important.[58] Anaesthetic review can determine suitability to proceed to day surgery.[12,17,59]

5.32 While even patients who are morbidly obese (BMI > 40 kg/m^2) can be cared for through a day surgery pathway, it may be inappropriate to operate on them in an isolated environment. In this case, their surgery could be undertaken through a day surgery pathway using the main hospital operating theatres if this environment has the specialist equipment required for obese patients. The patient should, where possible, be transferred to the day surgery unit for subsequent secondary recovery and discharge.[57]

Patients with severe anxiety or Learning disability

5.33 Pathways for patients with additional needs, such as severe anxiety or learning difficulties, should be developed so individualised care can be delivered to minimise anxiety and stress to the patient.

5.34 Pathways should be multidisciplinary, starting at preoperative assessment and involving a learning difficulty nurse specialist, if appropriate, the patient's usual care team, the day surgery team anaesthetist for the list and a surgeon, as appropriate.[12]

5.35 Patients GP or psychiatrist may need to be involved if sedation prior to coming to hospital is required.

5.36 It is recommended that the day surgery team has a lead nurse to oversee this pathway.

5.37 Appropriate planning and discussion is required, depending on the level of adjustments that may be needed to the pathway, so the pathway needs to include a method of highlighting these patients early in the process.[60,61]

5.38 Consideration is needed regarding admission times and where the patient is on the list.

5.39 A postoperative analgesia plan should be discussed and agreed as part of the planning process.

Isolated sites

5.40 Preoperative assessment should identify those patients suitable for day surgery in an isolated site.[17]

5.41 Where day surgery is performed in isolated units, practice should comply with the RCoA guidelines on anaesthetic services in remote sites.[62]

5.42 There should be agreed pathways for patients who require admission to hospital following their day surgery procedure.[5]

6 Training and education

6.1 All day surgery staff should receive appropriate training, which should be tailored to meet the needs of the individual staff member and the day surgery unit.[5,13]

6.2 Standards and training for clinical staff working within the primary recovery area should be as defined within RCoA guidelines for the provision of anaesthesia services for the perioperative care of elective and urgent care patients.[12]

6.3 Training should be multidisciplinary, with the use of simulation encouraged.[16]

6.4 Appropriate and comprehensive training for anaesthetists in this subspecialty should be given according to current standards as defined by the RCoA.[63]

6.5 Training for all clinical staff involved in the day surgery pathway should emphasise the following aspects:

- patient selection and optimisation for day surgery
- provision of effective postoperative pain relief[64]
- strategies for dealing with postoperative nausea and vomiting
- the necessity of a multidisciplinary team approach in day surgery care
- the requirement for 'street fitness' on discharge
- the postoperative care of patients in the community.

7 Financial considerations

There is a huge focus on the elective recovery programme and reduction in the backlog of patients waiting for elective surgery. Over 75% of this surgery involves day surgery procedures.[11,65] Creation of surgical Hub centres to facilitate this is being developed. Resources should be delivered to allow perioperative processes to be optimised to maximise day surgery numbers.

7.1 Funding for pathway redesign and facilities has been provided by central government and local commissioners. Cost analysis should consider all finances, including capital and maintenance costs, staffing and training costs for both the theatre and the ward, as well as costs related to the procedure itself.[21]

7.2 When selecting options for anaesthetic techniques within the day surgery unit, consideration should be given not only to the cost of delivering that anaesthetic but to the wider patient outcome costs. High-quality anaesthetic techniques and consumables, including drugs, maybe economically viable even if apparently more expensive.[24]

7.3 Business planning by hospitals and surgical departments should ensure that the best resources in terms of equipment and staffing are available within the day surgery unit to provide high-quality, efficient, cost-effective day surgery services. [13,21]

7.4 Investment in senior staff experienced in the practice of day surgery is required to ensure high-quality efficient processes.[24]

7.5 Investment in senior staff experienced in the practice of day surgery is required to ensure high-quality efficient processes.[9,13]

8 Audit and quality improvement

8.1 The Royal College of Anaesthetists has published guidance for audits and quality improvement projects in day surgery.[6] Each day surgery unit should have a system in place for the routine audit of important basic clinical and organisational parameters such as:

- clinical: unplanned inpatient/overnight admissions following surgery, postoperative symptoms (e.g. pain, nausea and vomiting)
- organisational: non-attendance rates, patients cancelled on the day of operation.

8.2 Outcome measures in day surgery that should also be monitored are:[9,21]

- clinical: perioperative clinical adverse events, postoperative morbidity (sore throat, headache, drowsiness, venous thromboembolisms, unplanned return to theatre on same day of surgery, unplanned return or readmission to day surgery unit or hospital)
- comparator: outcomes for more complex operations should be compared to ensure that day surgery clinical and patient outcomes match those with longer hospital stays
- organisational: the proportion of elective surgery performed as day surgery, theatre use (late starts, early finishes)[14]
- qualitative: patient satisfaction, friends and family data, patient-reported outcome measures.

8.3 Current practice in day surgery includes more complex procedures and more elderly patients. Audit of complications related to wound-healing process and impaired mobility based on risk scores can help to improve the safe delivery of a day surgery service.

8.4 Audits should rely only on procedure specific data and not on overall percentages. Auditors can compare activity by procedure and unit.[14]

8.5 Audit and quality improvement should be coordinated and led by designated staff members. Audit and quality improvement should feed into the hospital's governance process.[14]

8.6 Audit and quality improvement should be integrated into wider areas of anaesthetic and surgical practice.[21]

8.7 Audit in clinical practice and patient care in day surgery should involve all staff. A system should exist for the regular feedback of audit information to staff, to reinforce good practice and help to effect change and, hence, drive quality improvement. This feedback may take the form of regular meetings or updates, or a local newsletter.[21]

8.8 For commissioning purposes, suggested indicators of quality of a day surgery unit include:[9,21]

- day surgery existing as a separate and 'ring-fenced' administrative care pathway
- a senior manager directly responsible for day surgery

- preoperative assessment undertaken by staff familiar with the day surgery pathway
- provision of timely written information
- appropriate staffing levels
- nurse-led discharge
- provision for appropriate postoperative support including follow-up and outreach after home discharge
- involvement and feedback from patients, the public and community practitioners.

This list is not exhaustive and other factors such as theatre use, levels of unplanned overnight admissions after day surgery, management of pain relief and postoperative nausea/vomiting, and complication and readmission rates are also important quality indicators that should be audited regularly.

Research and areas for future development

Research into best practice day surgery should be encouraged.

The following areas are suggested for future research and development:

- procedures not currently undertaken as day surgery, including urgent/emergency surgery that could move into the day surgery arena
- whether a specific ring-fenced day surgery preoperative assessment service leads to fewer avoidable cancellations on the day of surgery
- whether patients are established on effective CPAP for severe obstructive sleep apnoea safe to undergo more complex day surgery operations
- how much the use of opioids can be reduced in day surgery.

9 Implementation support

The Anaesthesia Clinical Services Accreditation (ACSA) scheme, run by the RCoA, provides a set of standards based on the recommendations contained in the GPAS chapters. As part of the scheme, departments of anaesthesia self-assess against the standards and undertake quality improvement projects to close the gap. Support is provided by the RCoA in the form of the good practice library, which shares documents and ideas from other departments on how to meet the standards. Further advice can be obtained from the ACSA team and department's assigned College guide.

The ACSA standards are regularly reviewed on at least a three yearly basis to ensure that they reflect current GPAS recommendations and good practice. This feedback process works both ways and the ACSA scheme regularly provides CDGs with comments on the GPAS recommendations, based on departments' experience of implementing the recommendations.

Further information about the ACSA scheme can be found here: https://www.rcoa.ac.uk/safety-standards-quality/anaesthesia-clinical-services-accreditation

Abbreviations

ACSA	Anaesthesia Clinical Services Accreditation
BMI	body mass index
CDG	Chapter Development Group
CPAP	continuous positive airway pressure
GP	general practitioner
GPAS	Guidelines for the Provision of Anaesthetic Services

NHS	National Health Service
OSA	
RCoA	Royal College of Anaesthetists
STOP BANG	snoring, tiredness, observed apnoea, high blood pressure (STOP) body mass index, age, neck circumference, and gender (BANG)

Glossary

Clinical lead – staff grade, associate specialist and specialty doctors undertaking lead roles should be autonomously practising doctors who have competence, experience and communication skills in the specialist area equivalent to consultant colleagues. They should usually have experience in teaching and education relevant to the role and they should participate in quality improvement and continuing professional development activities. Individuals should be fully supported by their clinical director and be provided with adequate time and resources to allow them to effectively undertake the lead role.

Immediately – unless otherwise defined, 'immediately' means within five minutes.

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Appendix 1: Recommendations grading

The grading system is outlined in the methodology section of this chapter. The grades for each of the recommendations in this chapter are detailed in the table below:

Recommendation Number	Level of Evidence	Strength of Recommendation
1.1	C	Strong
1.2	C	Strong
1.3	C	Strong
1.4	GPP	Moderate
1.5	GPP	Moderate
1.6	GPP	Strong
1.7	C	Strong
1.8	C	Strong
1.9	C	Strong
1.1	C	Strong
1.11	C	Strong
1.12	C	Strong
1.13	C	Moderate
1.14	C	Moderate
1.15	C	Moderate
1.16	GPP	Moderate
1.17	C	Moderate
1.18	GPP	Strong
1.19	C	Moderate
1.2	GPP	Moderate
1.21	C	Moderate
1.22	C	Strong

1.23	GPP	Moderate
1.24	C	Moderate
1.25	C	Moderate
1.26	GPP	Moderate
1.27	GPP	Moderate
1.28	GPP	Moderate
1.29	C	Moderate
2.1	C	Strong
2.2	C	Moderate
2.3	C	Moderate
2.4	C	Moderate
2.5	C	Strong
2.6	GPP	Moderate
3.1	C	Moderate
3.2	C	Moderate
3.3	GPP	Moderate
3.4	C	Moderate
3.5	C	Strong
3.6	C	Moderate
3.7	C	Strong
3.8	GPP	Moderate
3.9	C	Moderate
3.1	C	Moderate
3.11	C	Moderate
4.1	C	Moderate
4.2	C	Moderate

4.3	C	Moderate
4.4	C	Strong
4.5	C	Strong
4.6	C	Moderate
4.7	C	Moderate
4.8	C	Moderate
4.9	C	Moderate
4.1	C	Moderate
4.11	C	Moderate
4.12	C	Moderate
4.13	C	Strong
4.14	C	Strong
4.15	C	Strong
4.16	C	Moderate
4.17	C	Strong
4.18	C	Strong
4.19	C	Strong
4.2	C	Strong
4.21	C	Strong
4.22	C	Strong
4.23	GPP	Strong
4.24	C	Moderate
4.25	GPP	Moderate
4.26	C	Moderate
4.27	C	Moderate
4.28	C	Moderate

4.29	GPP	Moderate
5.1	C	Moderate
5.2	C	Strong
5.3	C	Strong
5.4	C	Strong
5.5	C	Strong
5.6	C	Strong
5.7	C	Moderate
5.8	C	Strong
5.9	C	Strong
5.1	C	Strong
5.11	C	Strong
5.12	GPP	Moderate
5.13	GPP	Moderate
5.14	GPP	Moderate
5.15	GPP	Moderate
5.16	GPP	Moderate
5.17	C	Strong
5.18	C	Moderate
5.19	C	Moderate
5.2	C	Strong
5.21	C	Strong
5.22	C	Moderate
5.23	C	Strong
5.24	C	Strong
5.25	C	Moderate

5.26	C	Moderate
5.27	C	Moderate
5.28	C	Moderate
5.29	C	Moderate
5.3	C	Moderate
5.31	C	Moderate
5.32	C	Moderate
5.33	GPP	Moderate
5.34	C	Moderate
5.35	GPP	Strong
5.36	GPP	Moderate
5.37	C	Moderate
5.38	C	Moderate
5.39	GPP	Moderate
5.4	C	Moderate
5.41	C	Strong
5.42	C	Strong
6.1	C	Strong
6.2	C	Strong
6.3	C	Moderate
6.4	C	Strong
6.5	C	Strong
7.1	GPP	Moderate
7.2	GPP	Moderate
7.3	C	Strong
7.4	C	Strong

7.5	C	Strong
8.1	C	Strong
8.2	C	Strong
8.3	GPP	Moderate
8.4	C	Moderate
8.5	C	Moderate
8.6	C	Moderate
8.7	C	Moderate
8.8	C	Strong

About these guidelines

Methodology

The process by which this chapter has been developed has been documented within the GPAS Chapter Development Process Document, which is available on request.

The evidence included in this chapter is based on a systematic search of the literature. Abstracts were independently screened by two investigators and reviewed against inclusion and exclusion criteria. Data were extracted by one investigator in accordance with predefined criteria. The review objective was to determine the key components needed to ensure provision of high-quality perioperative services for patients who have undergone surgery and/or interventions which involve anaesthesia.

Search strategy

Searches were performed on Embase (1980 to 2015), Ovid MEDLINE (1946 to present), CINAHL and Cochrane Library, for the literature search strategy, outcomes, databases, criteria for inclusion and exclusion of evidence (for the full chapter search protocol please contact the RCoA). A hand search of the literature was also conducted by the authors using the reference lists of relevant original articles and review articles.

The literature search was performed in November 2021.

The authors and researcher independently reviewed the abstracts and titles of the studies found in the initial search. After agreement on the primary selection of papers, full-text versions were accessed and reviewed against the following predefined inclusion and exclusion criteria. The full-text papers were also reviewed by the CDG for suitability. The final list of publications used can be found in the references.

Inclusion criteria

The literature review considered studies that included the following patient population with all of the inclusion criteria listed below:

- all patients undergoing elective or emergency anaesthesia

- all staff groups working within Neuroanaesthetic care, under the responsibility of an anaesthetic clinical director, including (but not restricted to) consultant anaesthetists, autonomously practising anaesthetists, anaesthetists in training, nurses, operating department practitioners, surgeons, pharmacists, general practitioners, radiologists and radiographers.

Exclusion criteria

The literature review used the following exclusion criteria:

- provision of neuroanaesthesia provided by a speciality other than anaesthesia.

Data extraction and analysis

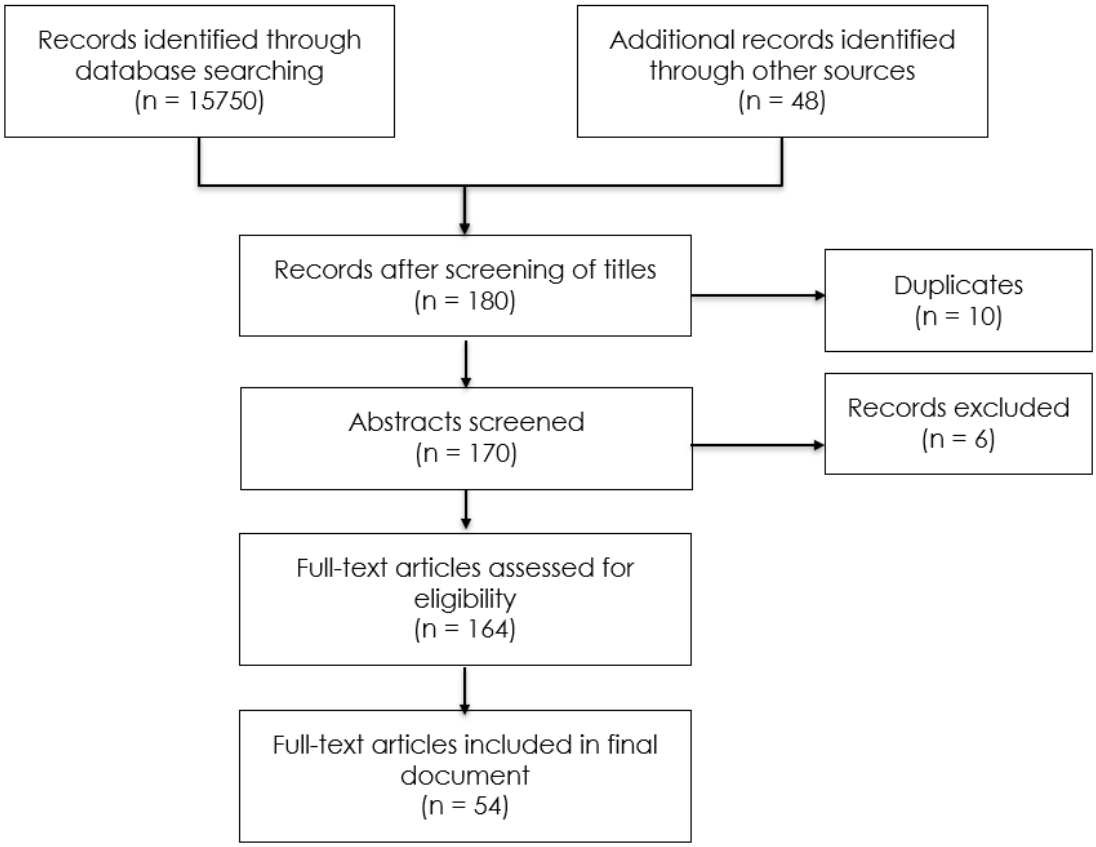
Data were extracted by the authors using a proforma. The study characteristics data included:

- the journal and country of publication
- the number of patients recruited into the study
- the study design
- patient characteristics
- outcome data
- the logic of the argument
- author's conclusions
- reviewer's comments.

The patient characteristics data extracted were: age, gender and type of surgery. The analysis considers studies that included any clinical outcome, including (but not restricted to) survival, length of stay – critical care or hospital, morbidity, adverse effects and complications.

The results of the literature review can be seen below:

Preferred Reporting Systems for Systematic Review and Meta-analysis (PRISMA) flow chart



The evidence that is included in this chapter has been graded according to a grading system adapted from NICE and outlined below:

Level	Type of evidence	Grade	Evidence
Ia	Evidence obtained from a single large/multicentre randomised controlled trial, a meta-analysis of randomised controlled trials or a systematic review with a low risk of bias	**A**	At least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence level I) without extrapolation
Ib	Evidence obtained from meta-analyses, systematic reviews of RCTs or RCTs with a high risk of bias	**B**	Well-conducted clinical studies but no high-quality randomised clinical trials on the topic of recommendation (evidence levels Ib, II or III); or extrapolated from level Ia evidence
IIa	Evidence obtained from at least one well-designed controlled study without randomisation		

IIb	Evidence obtained from at least one well-designed quasi-experimental study		
IIc	Evidence obtained from case control or cohort studies with a high risk of confounding bias		
III	Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies		
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities	**C**	Expert committee reports or opinions and/or clinical experiences of respected authorities (evidence level IV) or extrapolated from level I or II evidence. This grading indicates that directly applicable clinical studies of good quality are absent or not readily available.
UG	Legislative or statutory requirements	**M**	This grading indicates that implementation of this recommendation is a statutory requirement, or is required by a regulatory body (e.g. CQC, GMC)
		GPP	Recommended good practice based on the clinical experience of the CDG.
Adapted from Eccles M, Mason J. How to develop cost-conscious guidelines. *Health Technology Assessment* 2001;5(16) and Mann T. Clinical guidelines: using clinical guidelines to improve patient care within the NHS. *Department of Health*, London 1996.			

Strengths and limitations of body of evidence

Most of the published evidence on perioperative care anaesthesia services is descriptive. There are publications describing aspects of this process based on expert opinion.

The limitations of the evidence are:

- the 'unmeasurables' (attitudes, behaviour, motivation, leadership, teamwork)
- few randomised controlled trials (RCTs); studies frequently use mixed populations of emergency and elective patients, or all emergency patients grouped together despite different underlying diagnoses
- papers often examine a single intervention within complex system or bundle
- papers are often examining small numbers and/or patients from a single centre
- poor use of outcome measures, frequently concentrating on easily measured short-term outcomes which are not patient centred
- generally, a paucity of long-term follow up
- there is no standard definition used of 'high risk'

- use of different risk-scoring systems
- decrease in outcome over time and geography when 'good papers' are used in quality improvement programmes
- application of international studies in systems with either more or less resources than the UK into NHS practice
- older studies may no longer be applicable within the NHS
- very few studies included any analysis of financial implications
- evidence was mainly based on literature graded III and IV.

Methods used to arrive at recommendations

Recommendations were initially drafted based on the evidence by the authors for the chapter. These were discussed with the CDG, and comments were received both on the content and the practicality of the recommendations. The level of evidence that was the basis for each recommendation was graded according to a grading system, and the recommendation was then graded taking into account the strength of the evidence and the clinical importance using a recommendations criteria form.

Recommendations were worded using the following system of categorisation:

Strength	Type of evidence	Wording
Mandatory	The evidence supporting the recommendation includes at least one with an 'M' grading	Wording should reflect the mandatory nature of the recommendation i.e. 'must'
Strong	Confidence that for the vast majority of people, the action will do more good than harm (or more harm than good)	Wording should be clearly directive 'should' or 'should not'
Weak	The action will do more good than harm for most patients, but may include caveats on the quality or size of evidence base or patient preferences	Wording should include 'should be considered'
Aspirational	While there is some evidence that implementation of the recommendation could improve patient care, either the evidence or the improvement is not proven or substantial	Wording should include 'could'
Equipoise	There is no current evidence on this recommendation's effect on patient care	Wording should include 'there is no evidence of this recommendation's effect on patient care'

Consultation

The chapter has undergone several rounds of consultation. The multidisciplinary CDG formed the first part of the consultation process. The authors and GPAS Editorial board identified key

stakeholder groups. Where stakeholders are represented by an association or other medical college, they were asked to nominate delegates to join the CDG. The GPAS Chapter Development Process Document (available on request) explains the recruitment process for those CDG members who were not directly nominated. The CDG members were involved in drafting the recommendations, and were provided with an opportunity to comment on all subsequent drafts of the chapter.

The chapter underwent peer review. Peer reviewers were identified by the GPAS Editorial Board, Clinical Quality and Research Board (CQRB) or through the Clinical Leaders in Anaesthesia Network. Nominees were either anaesthetists of consultant grade or were nominated by a key stakeholder group. Nominees had not had any involvement in the development of GPAS to date and were asked to comment upon a late draft of the chapter.

Following peer review, the chapter was reviewed by the College's CQRB and PatientsVoices@RCoA. Comments from all groups were considered and incorporated into a consultation draft.

The consultation draft of this chapter was circulated for public consultation from TBC. As well as being made available on the College's website and promoted via Twitter and the President's newsletter to members, the draft was also circulated to all key stakeholder groups identified by the authors and the College. A list of organisations contacted by the College is available from the GPAS team at the College: GPAS@rcoa.ac.uk.

The editorial independence of GPAS

The development of GPAS is wholly funded by the Royal College of Anaesthetists. However, only the GPAS technical team and the GPAS researcher are paid directly by the College for their work on GPAS: the GPAS Editors' employing organisation receives 2 programmed activities (PA) backfill funding. All funding decisions by the College are made by the chief executive officer, in collaboration with the senior management team and College Council.

The authors of the chapters are all fellows of the Royal College of Anaesthetists. Members of College Council cannot act as chair of any CDG, as this individual has the deciding vote under the consensus method of decision making used in the chapters. Where College Council members have been involved in chapter development, this has been declared and recorded.

All persons involved in the development of GPAS are required to declare any pecuniary or non-pecuniary conflict of interest, in line with the GPAS conflict of interest policy as described in the GPAS Chapter Development Process Document (available on request). Any conflicts of interest are managed on a case-by-case basis to maintain the transparency and impartiality of the GPAS document. The conflicts, and the way they were managed, are outlined at the beginning of the chapter.

The role of the GPAS Editorial Board and CQRB

The overall development of the entire GPAS document is overseen by the CQRB of the Royal College of Anaesthetists, which includes representatives from all grades of anaesthetist and from clinical directors, and which also has PatientsVoices@RCoA representation.

Responsibility for managing the scope of the document and providing clinical oversight to the project technical team is delegated by the CQRB to the GPAS Editorial Board, which includes individuals responsible for the various internal stakeholders (see above for membership). On the inclusion/exclusion of specific recommendations within each chapter, the Editorial Board can only provide advice to the authors. In the event of disagreement between the authors, the majority rules consensus method is used, with the GPAS Editor holding the deciding vote.

Both of these groups, along with the PatientsVoices@RCoA, review each chapter and provide comment prior to public consultation and are responsible for signoff before final publication. In the event of disagreement, consensus is reached using the majority rules consensus method, with the chair of CQRB holding the deciding vote.

Updating these guidelines

This chapter will be updated for republication in January 2025.

Guidelines will be updated on an annual basis. The researcher will conduct the literature search again using the same search strategy to uncover any new evidence and members of the public will be able to submit new evidence to the GPAS project team. Where new evidence is uncovered, the lead author will decide whether the recommendations that were originally made are still valid in light of this new evidence.

If new evidence contradicts or strengthens existing recommendations, the authors decide whether or not to involve the remainder of the CDG in revising the recommendations accordingly.

If new evidence agrees with existing recommendations, then a reference may be added but no further action is required.

If there is no new evidence then no action is required.

This chapter is due to be fully reviewed for publication in January 2028.

Every five years guidance will be submitted to a full review involving reconvening the CDG (or appointment of a new, appropriately qualified CDG), and the process described in the methodology section of this chapter begins again.

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