Chapter 11
Guidelines for the Provision of Anaesthesia Services (GPAS)
Guidance on the Provision of Anaesthesia Services for Acute Pain Services 2017

Author
Dr M Rockett, Plymouth Hospitals NHS Trust

In association with the Faculty of Pain Medicine

When considering the provision of anaesthesia, the Royal College of Anaesthetists recommends that the following areas should be addressed. The goal is to ensure a comprehensive, quality service dedicated to the care of patients and to the education and professional development of staff. The provision of adequate funding to provide the services described should be considered. These recommendations form the basis of the standard expected for departmental accreditation.
Introduction

- The acute pain service (APS) comprises a multidisciplinary team including appropriately trained acute pain consultant or Staff Grade, Associate Specialist and Specialty (SAS) anaesthetists and nurses specialised in pain management.
- After the publication of the joint working party of the Royal College of Surgeons and College of Anaesthetists report 'Pain after Surgery' document in 1990, the provision of APSs in UK hospitals expanded rapidly. The percentage of UK hospitals with an APS increased from 44% in 1995 to >80% in 2004. However, further progress has been difficult to sustain, particularly in terms of quality and consistency. Recent UK and European surveys of APSs demonstrate a wide variation in service provision, with many APSs not meeting minimal quality standards (for example, 45% of German APSs met the specified standards in 2016). A British survey in 2004 revealed that 69% of APSs were struggling or non-existent. Clinicians agree that most of the reasons for the failure of APSs to meet standards are organisational rather than technical; financial constraints were cited as being the major reason for failure in 53% of cases. It has proved difficult to implement early recommendations despite support from the Chief Medical Officer in his report of 2009.
- The Faculty of Pain Medicine (FPM) of the Royal College of Anaesthetists produced the Core Standards for Pain Management Services in the UK document in 2015 (CSPMSUK). This chapter should be read with reference to CSPMSUK, which informs part of the requirements detailed below. CSPMSUK provides a detailed model for APSs to emulate. Despite clear ongoing shortcomings in acute pain management when benchmarked against national standards, organisational change is difficult to achieve in most UK hospitals. The particular challenges faced by APSs have been investigated in three case studies and include: doubts and disagreements about the nature of the changes required to improve inpatient pain management; challenging local organisational contexts; the beliefs, attitudes and responses of health professionals and managers. In order to provide an adequate APS these challenges need to be addressed simultaneously at a local level. Embracing continuous quality improvement as a core value of the APS and utilizing change management techniques may increase the likelihood of success in the longer term.
- The relief of acute pain is primarily a humanitarian matter, but effective pain management may also result in improved clinical outcomes and reduced complication rates, particularly in high-risk patients undergoing major surgery. Providing safe and effective analgesia for an increasingly elderly and medically unwell surgical population is a significant challenge for APSs. Patients’ expectations of surgical outcome and pain relief are high, and it is difficult to meet these expectations with limited APS resources.
- Advances in minimally invasive surgery have resulted in a significant reduction in post-surgical pain in some cases. However, new techniques present challenges of their own, particularly when combined with enhanced recovery after surgery (ERAS) programmes in which the expectation is of early mobilisation and accelerated discharge from hospital. Meeting the goals of ERAS has led to rapid and significant changes in pain management techniques, which must be supported by a well-trained and informed APS. However, it is important that we recognise that ERAS protocols are not a replacement for APSs. Patients with complex medical problems, opioid tolerance or chronic pain account for 20-30% of all inpatients and cannot be effectively managed using rigid post-surgical pain management protocols. There is evidence from a Danish survey to suggest that a steady rise in the adoption of ERAS protocols from 40% of all hospitals in 2000 to 80% in 2009 was paralleled by the almost complete loss of APSs outside teaching hospitals over the same period.
- The traditional role of the APS was to manage acute pain after surgery. This remit is expanding in many hospitals to include the care of medical inpatients and patients with complex pain problems such as acute-on-chronic pain or opioid misuse.
- APSs are becoming involved in pre-operative prediction of those who are likely to suffer severe acute pain and those at risk of developing chronic pain. The potential for pre-operative optimisation of pain management, both in terms of analgesic drugs and pain coping strategies, is being evaluated as part of wider prehabilitation programmes.
- The combination of APSs with other teams, such as critical care outreach, is taking place in some hospitals, and there is evidence that this approach may reduce adverse events and improve analgesia in complex patients, but at the expense of an increased workload. However, there is also a risk of dilution of pain management skills and the loss of highly trained clinical nurse specialists in pain management.
- The role of the APS is therefore grounded in the compassionate aim of reducing suffering and pain, but also has an impact on recovery and rehabilitation, as well as preventing the progression from acute to chronic pain.
Levels of provision of service

1 Staffing requirements

1.1 Acute pain services should be multidisciplinary teams led by appropriately trained consultant or SAS anaesthetists. The minimum training requirement for new appointments to APS lead roles is Royal College of Anaesthetists higher pain training. Advanced pain training, or its equivalent, should be considered optimal. Consultants or other leads already in post need to demonstrate an ongoing significant interest in acute pain management by involvement in CME and job planning.

1.2 Adequate time should be made available for APS provision in job plans. Two clinical sessions for the lead and one session for all other doctors involved in the APS is recommended.

1.3 Paediatric pain management should be led by consultants or SAS doctors with appropriate expertise and training and delivered by an appropriately trained nursing team.

1.4 Specialist advice should be available at all times, with adequate cover to maintain this service when individuals are on leave.

1.5 An adequate number of clinical nurse specialists in pain medicine should be available to fulfil the following roles within working hours:

- provide advice to ward staff and other medical teams regarding all aspects of pain management
- review patients in pain with appropriate frequency to provide a safe and effective service
- provide education for ward staff; this must include basic pain assessment and treatment, as well as training in specialist pain management techniques as appropriate
- provide education for other staff, such as post anaesthetic care unit (PACU) staff or junior doctors
- liaise with the clinical lead in pain medicine to highlight complex or systematic problems.

1.6 Outside working hours arrangements for cover of the acute pain service, including appropriate expert advice, should be made available. This may be via suitably qualified senior anaesthetic trainees.

1.7 The APS should collaborate with allied health professionals including pharmacists, physiotherapists, clinical psychologists and experts in addiction medicine.

1.8 The APS should provide a hospital environment in which education, training and staffing levels ensure safe care when consultants in pain medicine are not immediately available.

1.9 Chronic pain management teams should be available to provide support to the APS in a timely fashion. This activity should be supported in chronic pain doctor job planning.

1.10 If possible, the acute and chronic pain services should be integrated, with team members working in both environments, to ensure coordinated care for patients with complex pain while in hospital and also for those recently discharged to the community.

1.11 There should be adequate administration and clerical staff to support the APS in the roles listed above.
Chapter 11
Guidance on the provision of anaesthesia services for acute pain services 2017

2 Equipment, support services and facilities

Equipment
2.1 There should be an adequate supply of:

- infusion pumps for neuraxial analgesia (epidural infusion / patient-controlled epidural infusion [PCEA] and potentially intrathecal infusion)
- infusion pumps for use with continuous regional analgesia catheters
- patient-controlled analgesia (PCA) infusion pumps
- infusion pumps for other analgesic drugs, e.g. ketamine, lidocaine.

2.2 Pumps should be single purpose, and appropriately coloured or labelled. They should have appropriate security and safety features, such as locks and pass codes.

2.3 Rolling equipment replacement and maintenance of equipment should be provided.

2.4 Clinical areas caring for patients receiving advanced analgesic techniques should have appropriate facilities for the non-invasive monitoring of vital signs.

2.5 Drugs for epidural use or for continuous regional anaesthesia infusions should be pre-prepared under aseptic conditions and clearly identifiable (such as different coloured lines, bags and labels).

2.6 Efforts should be made to minimise administration errors. For example, neuraxial drugs could be stored in controlled drug cabinets and signed out on a named-patient basis.

2.7 There should be a store of these drugs available to all clinical areas at all times, potentially stored within a PACU.

Facilities
2.8 There should be adequate office space and IT support for the APS.

2.9 There should be adequate storage space for analgesic devices.

3 Areas of special requirement

Children
3.1 Specific arrangements should be made for the management of pain in neonates, infants, children and young people.

3.2 The standard of care for neonates, infants, children and young people should be the same as for adults.

3.3 The service should be delivered by an appropriately trained team, with specific skills in paediatric pain management.

3.4 Paediatric pain management may be a separate service or part of the APS role.

Other areas
3.5 Specific arrangements and guidelines for the management of sub-groups of adult patients should be in place:

- vulnerable adults including those with dementia and those with a disability or learning difficulties
- non-English speakers
- patients with problem drug and alcohol use
- patients with opioid tolerance or dependence for other reasons
- patients with chronic pain.

3.6 Day case surgery perioperative care should include patient advice on pain management after discharge.
4 Training and education

4.1 There should be formal acute pain management training for APS members, ward staff and doctors at induction.

4.2 All staff providing acute pain management should be trained to an adequate level. Specific skills should include:

- competency in pain assessment using locally agreed and standardised tools
- an awareness of all appropriate treatment options
- the ability to recognise and manage common side effects and other problems.

4.3 All staff should know how to obtain expert advice when needed.

4.4 Ongoing education and skills development training should be made available to all members of the APS, appropriate to their roles. Funding and time should be available for staff to attend this training.

4.5 Training for anaesthetists to attain basic, intermediate and higher level competencies in pain medicine, as specified by the Faculty of Pain Medicine of the Royal College of Anaesthetists, should be provided. Where higher pain training is not feasible within an individual hospital, it should be available within the wider Deanery.

4.6 Under the guidance of the Regional Advisor for Pain Medicine, APSs in some centres should be able to support the provision of advanced level training in pain medicine.

4.7 Training should be provided for all junior doctors in basic pain assessment and management, provided by members of the APS.

5 Research, audit and quality improvement

5.1 Research in acute pain should be supported, particularly encouraging recruitment into well designed national and international multicentre studies.

5.2 There should be ongoing audit of effectiveness and safety of local pain management interventions. Some audit recipes are available in the RCoA audit recipe book.20

5.3 Local quality improvement projects based on the results of ongoing audit and snapshot audits should be encouraged.

5.4 The acute pain service should engage with critical incident reporting, root cause analysis and mortality and morbidity meeting reporting of adverse events.

6 Organisation and administration

6.1 Clear lines of communication and close working with other services such as chronic pain, palliative care, emergency medicine and primary care should be in place. This may have resource ramifications for the chronic pain management services.

Guidelines

6.2 Analgesic guidelines should be widely disseminated and easily available. For example, they may be stored on local hospital networks and available on wards as laminated sheets.

6.3 All guidelines should be regularly reviewed; a two-year interval is recommended.

6.4 Guidelines should cover all aspects of pain relief delivery and side effect management. Side effect management should be standardised and protocol driven.

6.5 Specific guidelines should be available for all advanced analgesic techniques, including epidural analgesia, patient controlled intravenous analgesia and continuous regional analgesia.

6.6 Guidelines for side effect management should include management of opioid toxicity or acute overdose, constipation and nausea and vomiting.

6.7 Guidelines and standards for the response to inadequate analgesia should be widely disseminated.

6.8 Where good evidence exists, consideration should be given to procedure specific analgesic techniques.21
6.9 Monitoring requirements should be standardised for advanced analgesic techniques. This includes safety checks for rare serious complications of neuraxial and regional analgesia.

**Assessment and record keeping**

6.10 Pain and its management should be regularly recorded in the patient notes and/or observation chart using validated tools for each clinical setting. Consistent tools should be used throughout the patient journey. Appropriate tools may include verbal rating scales, numerical rating scales, or the equivalent for paediatric patients. Tools such as the Abbey pain scale may be appropriate for non-verbal adults. In general, pain scores should be recorded contemporaneously with other vital signs.

6.11 Staff caring for patients should be trained in basic pain assessment methods.

6.12 Staff caring for patients with neuraxial or regional analgesic techniques should be aware of the potential complications and able to assess for their occurrence. In particular, the potential for neurological injury and local anaesthetic toxicity should be noted.

**7 Patient Information**

7.1 Patient information leaflets should be made available to cover analgesia in general and specific to individual surgical interventions such as arthroplasty. Leaflets should also explain pain management after discharge.

7.2 Specific documents should be available on advanced analgesic techniques such as epidural analgesia and patient-controlled analgesia.

7.3 Patients should undergo informed verbal or written consent for invasive analgesic procedures, and this must be documented following the GMC advice on informed consent.

7.4 Patient education regarding expectation of pain and analgesia after surgery should be given to all patients in the pre-operative period.
References