

Anaesthetic Services in Remote Sites

This document incorporates and replaces earlier guidelines giving advice for the provision of general anaesthesia in sites remote from a main theatre facility.

Introduction

Remote sites: definition

The RCoA defines a remote site as any location at which an anaesthetist is required to provide general/regional anaesthesia, or sedation away from the main theatre suite and/or anaesthetic department and in which it cannot be guaranteed that the help of another anaesthetist will be available. This may be either within or away from the base hospital. The relative isolation may be created by horizontal (e.g. corridors and roads) or vertical (e.g. stairs and lift) separation, by locked doors, local traffic conditions or by a combination of factors. This guidance is particularly directed to the anaesthetist working alone in a remote site. Where a small suite of theatres is remote from the main site, different supervision arrangements may be appropriate to ensure safe provision of intra-operative care.¹

All patients requiring anaesthesia (including pre and post-operative care), intensive care and pain medicine must be cared for under the direction of an appropriate named consultant; this also applies when an anaesthetist is asked to provide sedation. Wherever possible anaesthesia in remote sites should be provided by appropriately experienced consultants. On some occasions, consultants will themselves carry out the clinical aspects of the work; on other occasions, when appropriate, trainees or Specialty Doctors may provide direct care provided they have the appropriate competencies, without direct consultant supervision. To ensure the safety of patients, a trainee must be responsible to, and subject to clinical supervision by a designated consultant **at all times**.² This includes those occasions during elective, urgent and emergency work when the trainee, as part of their training, is deemed competent to make decisions without immediate reference to a more senior clinician.

Remote sites: risks

Available information suggests that the provision of anaesthesia/deep sedation³ in remote sites presents potentially significant risks for the patient related to:

- Unfamiliarity of the anaesthetist with one or more of the following:
 - The isolated environment.
 - The available equipment.
 - The assistance being provided.
 - The procedure being undertaken.
- Difficulties with communication and the immediate availability of senior assistance.

Remote sites: recommendations

- 1 All anaesthetists, as part of their Trust induction process, should be fully familiarised with all remote areas of anaesthetic provision, prior to their undertaking anaesthetic procedures in that location.
- 2 Wherever possible all anaesthetic equipment should be standardised across all areas providing anaesthetic services. This should include routine anaesthetic equipment as well as all other equipment available for resuscitation and life support. Where standardisation across all anaesthetic areas is not possible, all staff should be provided with regular opportunities to fully familiarise themselves with all equipment used in anaesthetic practice in their respective Trust through formalised equipment training sessions. A Departmental record of equipment training for individual personnel should be kept.

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- 3 Mandatory monitoring should be as for any location where anaesthesia is conducted:^{1,4} a pulse oximeter, non-invasive BP cuffs, ECG and end-tidal CO₂ are a minimum requirement. Where muscle relaxants are used, a peripheral nerve stimulator is recommended. Fixed-line telephones should be available to provide immediate access to senior support at all times.
- 4 A fully trained and dedicated anaesthetic assistant should be available at all times to allow the provision of an identical level of anaesthetic support to that being provided in non-remote sites.^{1,5}
- 5 Prior to commencing any procedure involving provision of anaesthesia/sedation it is the duty of the whole team to ensure the highest standards of patient safety at all times. Routinely this should include a team based safety briefing prior to the procedure, as well as individual patient safety checks, including the WHO checklist and the VTE assessment where indicated.^{6,7}
- 6 Patients who have had a procedure under general anaesthesia or deep sedation³ require expert recovery care – this may be provided either in the procedure room by appropriately qualified recovery staff⁸ or the patient may be transferred to the recovery room of operating theatres.^{9,10} In this latter situation the availability of and familiarity with appropriate equipment (for both monitoring and vital organ support) during transfer should be verified prior to the procedure being undertaken. In certain circumstances a patient may need to be ventilated in the postoperative period. The availability of an ICU bed should be confirmed prior to the procedure. It is the ultimate responsibility of the anaesthetist conducting the cases to check the machine, anaesthetic drugs, emergency drugs and the defibrillators and to identify an assistant to help them.
- 7 Accurate documentation of the anaesthetic procedures undertaken as well as a detailed record of the patient monitoring used is essential in all cases.
- 8 Wherever possible anaesthesia in remote sites should be provided by appropriately experienced consultants.
 - a There may be occasions however when a consultant may not be immediately available, such that trainees or non-consultant grades might be required to provide anaesthetic services at a remote site.¹¹ Except in exceptional circumstances trainees would be expected to have successfully completed the relevant higher units of training[†] and even then they should only undertake anaesthetic care if the following criteria can be met:
 - i The trainee or non-consultant grade is judged by the Clinical Director in conjunction with the College Tutor/Educational Supervisor as appropriate to possess the knowledge, skills, professional judgment and experience required to undertake such duties; indeed for senior trainees with the required higher competencies such unsupervised clinical experience is an important component of training.
 - ii A consultant is available to provide advice or help throughout the period that the trainee or non-consultant grade is anaesthetising in a remote site. Consultant assistance should be available within 30 minutes of being requested.¹
 - iii Skilled and dedicated assistance for the trainee anaesthetist is available in the remote site at all times.
 - iv The anaesthetic equipment and monitoring comply with the current recommended guidelines and standards appropriate to the work being performed in the remote site.
 - v The trainee has the confidence to work at the proposed level of supervision.

[†] These may include the 'Non theatre', 'Sedation' and 'Transfer Medicine' higher units.

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Additional considerations

- 1** In circumstances where the anaesthetic services are being provided by a Specialty Doctor or where, in exceptional circumstances, a Specialty Doctor is providing supervision for a trainee doctor in a remote site, there must be the provision for direct or indirect consultant supervision for the trainee, or the availability for consultant advice and guidance for the Specialty Doctor, if providing anaesthesia on his own.¹² In most cases this consultant support/supervision would be provided through a 'starred consultant' system, or its like, utilised in many Departments of Anaesthesia. The pathway for supervision/ advice and guidance should be agreed and documented in the standard operating procedures for the respective anaesthetic departments in which the services are being provided. This information should be provided during the induction of any new anaesthetist into any Department of Anaesthesia, and again reinforced, ideally in writing, prior to any appropriately certified anaesthetist undertaking service provision in a remote site for the first time.
- 2** Anaesthetic services in remote sites are presently provided by a wide range of appropriately qualified anaesthetic practitioners including consultants, staff and associate specialists (SAS)/Specialty Doctor grades and trainees; in addition some hospitals have other practitioners including Trust Grades, Trust Fellows, GPs etc, providing such services.
- 3** All remote sites should, ideally, have a resuscitation team led by an Advanced Life Support Provider. Where this is not the case then there should be a requirement for all anaesthetists working on remote sites to provide competency based evidence of their ability to deliver both advanced life support and the safe inter-hospital transport of a patient potentially requiring multi-system support.
- 4** Anaesthetic services should only be provided in nationally certified locations, to patients whose clinical care is being provided by appropriately trained and qualified staff, all of whom have undergone annual appraisal of their workload and outcomes. Such appraisals should be carried out by a consultant familiar with the risks of remote site anaesthesia, examine an individual's ability to provide such anaesthetic services, agree any individual training requirements and document a training and assessment programme to ensure the safe provision of such services. Required competencies should be at least equivalent to those identified in the higher level units for sedation and 'Non Theatre' practice in the curriculum for a CCT in Anaesthetics 2010.

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References

- 1 Guidance for the provision of anaesthetic services for post-operative care. RCoA, London (www.rcoa.ac.uk/gpas).
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- 3 Safe Sedation Practice for Healthcare Procedures: Standards and Guidance. RCoA, London 2013 (<http://bit.ly/2m3rUfc>).
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- 7 Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. A report to Sir Liam Donaldson, Chief Medical Officer. DH, London 2007 (<http://bit.ly/MoudFY>).
- 8 UK National Core Competencies for Post-anaesthesia Care. AAGBI, London 2013 (<http://bit.ly/1jM9CaU>).
- 9 Guidance for the provision of anaesthetic services for intraoperative care. RCoA, London (www.rcoa.ac.uk/gpas).
- 10 Immediate post-anaesthesia recovery. AAGBI, London 2013 (<http://bit.ly/NZcc2B>).
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- 12 Curriculum for a CCT in Anaesthetics. Clinical supervision by Specialty Doctors (6.4). RCoA, London 2010 (<http://bit.ly/2s8qqO1>).

Dr Mike Nevin

Consultant Anaesthetist, University Hospitals, Bristol

Dr Liam Brennan

Consultant Anaesthetist, Cambridge University Hospitals NHS Foundation Trust, Cambridge

Royal College of Anaesthetists

Churchill House, 35 Red Lion Square, London WC1R 4SG
020 7092 1500 | standards@rcoa.ac.uk | www.rcoa.ac.uk

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Published 2014

Latest review date 2017