

## **Guidelines for Anaesthesia in the non-theatre environment**

**Reference Number: CG0029**

|                                       |  |
|---------------------------------------|--|
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## **1. Introduction**

- There are increasing numbers of surgical, diagnostic and therapeutic procedures performed outside of the main theatre environment.
- These procedures may require anaesthetic interventions through monitored care, sedation, regional anaesthesia or general anaesthesia.
- The challenge for anaesthesia is to develop a framework that supports and regulates the safe delivery of anaesthetic care.
- This guidance should be applied to all non-theatre services delivered that require anaesthetic interventions.
- The physical environment can be challenging for the safe provision of anaesthesia when compared with the main theatre environment.
- Personnel should be appropriately trained resuscitation providers, basic life support (BLS) in adult areas and paediatric intermediate life support (PILS) in paediatric areas.
- Facilities delivering anaesthesia and sedation by anaesthetic providers should develop a culture of safety that reflects anaesthesia guidelines.
- The safe delivery of anaesthesia through pre-operative assessment, case selection, anaesthesia delivery, recovery and post-operative care should not be compromised.
- The anaesthesia providers should develop safe practice guidelines that consider the assessment, induction, recovery and discharge of patients. Site specific standard operating procedures (SOPs) for each remote site should be easily accessible on the intranet.
- Staff working in these areas should be familiar with procedure-specific risks such as radiation exposure and infection control.
- Compliance with the safe surgery checklist is obligatory.

## **2. Purpose/Scope**

### **Purpose**

- To promote current best practice for service provision for anaesthetic care in the non-theatre environment.
- To reinforce the requirements for the provision of a safe, effective and well-led service.
- The guidance on provision of anaesthetic care in the non-theatre environment applies to all settings where this is undertaken.
- Guidance relating to anaesthesia in the non-theatre environment will be documented and accessible.
- All age groups are included within the guidance unless otherwise stated, reflecting the broad nature of this service.

- The recommendations in this guideline will support the Royal College of Anaesthetists (RCoA) Anaesthesia Clinical Services Accreditation (ACSA) process.

## **Scope**

### **Target audience**

All staff groups providing anaesthesia in the non-theatre environment, including but not restricted to anaesthetists, anaesthesia practitioners (ODPs) and recovery nurses.

### **Target population**

All ages of patients undergoing anaesthesia in the non-theatre environment.

### **Healthcare setting**

All non-theatre settings within Bradford Teaching Hospitals Foundation Trust in which anaesthesia services are provided.

Areas of provision include:

- Paediatric patients
- The provision of CT & MRI scans in the radiology department
- Elective Endovascular Abdominal Aortic Aneurysm surgery in Room 6, Radiology department.
- Anaesthesia for direct current cardioversion (DCCV) in ward 22 day case annex
- Anaesthesia for Endoscopy procedures

### **Exclusions**

- Provision of services provided by a specialty other than anaesthesia.
- Patients undergoing anaesthesia within a critical care setting.
- Patients undergoing anaesthesia in a non-hospital environment.

### **3. Responsibilities**

#### **Staffing Requirements**

- A clinical lead for anaesthesia in the non-theatre environment (ANTE) should be appointed. They should be involved in developing the service and ensuring that safety standards are met and regular audits are conducted.
- A dedicated, skilled anaesthetic practitioner should be available in all locations outside the operating theatre where anaesthesia is undertaken by an anaesthetist.
- Patients recovering from anaesthesia or sedation in an isolated unit should receive the same standard of care as that required in an operating theatre post-anaesthetic care unit.
- If sedation is administered by an anaesthetist, then a suitably trained individual should be present to assist the anaesthetist. (1)
- For major vascular surgery, transfer to the main post-anaesthesia care unit by appropriately trained personnel may be required.

#### **Equipment, Services and Facilities**

##### **Equipment**

- Certain essential anaesthetic equipment are located in radiology, these are checked on a regular basis by the Theatre ODP's
  1. MRI compatible anaesthetic machine, kept in scan room and not to be moved
  2. Non-MRI compatible anaesthetic machine located outside the scan room
  3. Anaesthetic machine located in CT scan room
  4. Difficult Airway trolley located in the main radiology recovery/receiving area
- There are 2 resus trolleys which are located outside room 6 and in the main recovery/receiving area. Radiology check these.
- For cases carried out in rooms 1&6 in radiology and ward 22 day case annex an anaesthetic machine located in modular recovery 1&2 is taken down. This is not ideal and has been identified on the risk register.
- An anaesthetic cart located in modular recovery 1&2 is also taken down for these cases. It contains a locked drug drawer as well as a good selection of anaesthetic single use items.
- All patient trolleys should be capable of tipping into the head-down position and be easily transferrable to the rest of the hospital.
- Equipment for monitoring SpO<sub>2</sub>, ECG, non-invasive blood pressure (NIBP) and continuous waveform capnography (EtCO<sub>2</sub>) should be available for all patients at all sites where patients receive general anaesthesia or deep sedation.

- The anaesthetist should ensure that an adequate supply of oxygen is available before starting any procedure. Many of the sites where anaesthesia is provided outside the main operating theatres do not have piped oxygen.
- Where piped oxygen is available, back-up cylinders should always be available and appropriately stored.
- All anaesthetic equipment should be standardised where possible in all areas providing anaesthetic services, including equipment for resuscitation and life support, and such equipment subject to a standardised programme of maintenance.
- All staff should be provided with opportunities to familiarise themselves with all equipment by way of documented formal training sessions.
- All anaesthetic equipment should be checked before use in accordance with the AAGBI published guidelines.
- Anaesthetic machine checks should be recorded in a log by the anaesthetic practitioner and on the anaesthetic chart by the anaesthetist.
- All procedures should be compliant with National Safety Standards for Invasive Procedures (NatSSIPs) and local standards (BradSSIPs) and the Safe Surgery Checklist. An appropriate 'pre-list check' of the anaesthesia systems, facilities, equipment, supplies and resuscitation equipment should be performed prior to the start of each list.
- If applicable, measures to minimise heat loss by the patient should be available including those to provide active warming (eg: Bair Hugger).

## **Services**

- Patients should be appropriately monitored during their recovery. Patients recovering from anaesthesia or sedation in an isolated unit should receive the same standard of care as that required in an operating theatre post-anaesthesia care unit.
- Radiology has 3 designated recovery areas
  1. Next door to room 6 for cases from rooms 1&6
  2. In the main recovery/receiving area
  3. Outside MRI scan room specifically for MRI cases
- Recovery after cardioversion occurs in the room where the procedure is performed.
- The care of the patient remains the responsibility of the anaesthetist up to discharge for ambulatory procedures or ward transfer for inpatient procedures.

## **Facilities**

- Access to lifts for easy trolley transfer should be available. Oxygen cylinders, portable monitoring for SpO<sub>2</sub>, NIBP, ECG, capnography and portable suction device should be available for transfer of patients. Additional kit (portable ventilator, infusion pumps) may be required if the patient is sedated & ventilated.

- Environments in which patients receive anaesthesia or sedation should have full facilities for resuscitation available, including defibrillator, suction, oxygen, airway devices and a means of providing ventilation.
- Procedure rooms should be large enough to accommodate equipment and personnel with enough space to move about safely and enable easy access to the patient at all times.
- A post-anaesthesia care unit or equivalent should be available for each patient at the end of the procedure.<sup>2, 3</sup>
- Facilities to allow access to online information, such as electronic patient records (Powerchart), local intranet based guidelines and clinical decision aids, should be available.

## **Medication**

- A full range of emergency drugs including specific reversal agents such as Naloxone and Flumazenil should be immediately available.
- Drugs to treat rare situations, such as Dantrolene for malignant hyperthermia, or Intralipid for local anaesthetic toxicity should be available and located in designated areas. (ENT theatre recovery for Radiology; ICU for ward 22)
- There must be a system for ordering, storage, recording and auditing of controlled drugs in all areas where they are used, in accordance with legislation.
- Robust systems should be in place to ensure reliable medicines management, including storage facilities, stock review, supply, expiry checks, and access to appropriately trained pharmacy staff to manage any drug shortages.
- All local anaesthetic solutions should be stored separately from intravenous infusion solutions, to reduce the risk of accidental intravenous administration of such drugs.
- All drug-containing infusions and syringes should be clearly labelled.

## **4. Guidelines/Procedures**

### **EVAR's in Room 6**

The frequency with which complex procedures are carried out in the radiology department is increasing. Patients requiring general anaesthesia in the radiology department may have life-threatening conditions. The radiology department represents a more challenging environment in which to provide anaesthesia compared with an operating theatre.

- Local rules for interventional radiology must have been read and evidence provided of this to the IR Modality manager.
- Exposure to ionising radiation should be kept to a minimum by the use of lead gowns and thyroid shields.
- Remote slave monitors in screened viewing areas are not always provided; staff should remain as distant from the radiation source as possible if they must remain in the x-ray environment. Staff should inform the operating consultant if they need to attend to the patient close to the radiation source, so screening can be paused, if needed.
- As not all radiology tables tilt into a head-down position, a tipping trolley should be available for patients who require general anaesthesia, especially during induction and extubation.
- Procedure-specific agents, such as those required to manipulate coagulation or arterial blood pressure, should be available.

### **Magnetic Resonance Imaging (MRI)**

Providing anaesthesia in the MRI environment provides specific challenges. The AAGBI has produced recent (2019) National guidelines for the management of patients in the magnetic resonance (MR) suite are available.

- Anaesthetic equipment that is used in the MRI scanning room should be MR compatible.
- Remote monitoring of the patient with slave screens should be available to allow the anaesthetic team to monitor the patient from outside of the scanning room.
- Particular consideration should be given to the problems of using infusion pumps. All non-essential pumps and equipment should be removed from the patient before entering the scanning room. MRI- compatible infusion pumps should be available wherever anaesthesia is provided regularly. Infusions with extra-long giving sets can be used when MRI-specific pumps are not available; however this increases the risk of disconnections and leaks.
- All staff involved with transferring a patient to the MRI scanner should understand the unique problems caused by monitoring and anaesthetic equipment in this environment. It is not acceptable for inexperienced staff unfamiliar with the MR environment to escort or manage a patient in this environment, particularly out of hours.

- The patient and all staff should have an MRI safety and exclusion questionnaire completed before entering the scanning room.
- In the event of an adverse incident in the MRI scanning room, the patient should be removed from the scanning room without delay; immediate access to an anaesthetic preparation area or resuscitation area is essential.

## **Anaesthesia for Endoscopy, Spyglass List**

This service has its own recently reviewed SOP (appendix 1). The service usually takes place in Room 1 radiology, however due to a refurbishment of this room the service is currently taking place in theatres.

- Despite marked improvements in procedures, this is still a high-risk area.
- The complexity of gastrointestinal and respiratory endoscopic techniques is increasing and patient co-morbidities are challenging to operator-delivered sedation.
- Anaesthetic staff providing care in room 1 should be familiar with the facility, equipment and techniques.

## **Paediatrics**

- Children presenting for anaesthesia outside the operating room may present with their own challenges. This can relate to the procedure itself, the environment, as well as their psychological and physiological needs.
- Children may present for repeat scans.
- Children should always be managed in accordance with RCoA and Association of Paediatric Anaesthetists of Great Britain and Ireland recommendations.
- The standard of care provided to children during sedation or anaesthesia outside of theatre should be delivered to the same standards of care as applied to procedures performed in theatre.
- Anaesthetic equipment available in remote sites should mirror equipment available in the paediatric main theatre.

## **Training and Education**

- All anaesthetists should be fully familiarised with all remote areas of anaesthetic provision, e.g. as part of their induction process, prior to undertaking anaesthetic procedures in that location.
- Anaesthetic trainees working alone must be post final FRCA and ideally should have successfully completed the relevant higher units of training.
- Difficult tracheal intubation equipment, waveform capnography and training for the management of the emergency airway should be available.
- Training and exposure in the administration of sedation should be provided at all stages of anaesthetic training.

## **Organisation and Administration**

- Factors such as teamwork, communication and the use of checklists when working in less familiar environments are important.
- At the team briefing, an explicit plan should be agreed for getting help if needed; e.g. in the event of high blood loss, and life-threatening loss of the airway or respiratory function.
- Hospitals should have a system for multidisciplinary involvement in reporting and regular audit of critical incidents and near-misses.
- Environmental hazards such as radiation exposure, magnetic resonance (MR) fields and lack of a scavenging system should be considered by all staff before the start of each list.
- The anaesthetic chart and the perioperative care plan should be used for documentation for all cases. The anaesthetic chart should also include the name of the supervising consultant anaesthetist designated to provide direct or indirect advice.

## **Research, Audit and Quality Improvement**

- There should be a multidisciplinary programme for auditing anaesthesia and sedation services in the non-theatre environment.
- Audit should be under regular review by an anaesthesia clinical lead for non-theatre environment.
- Regular feedback from audit and improvement of standards should be provided by the anaesthesia clinical lead to anaesthetic staff.
- Compliance with agreed guidelines should be audited including World Health Organization (WHO) checklists, team brief, and a post-anaesthesia discharge checklist.

## References

1. BTHFT Sedation Policy
2. Guidelines for the Provision of Anaesthesia Services in the Non-theatre Environment 2019. <https://www.rcoa.ac.uk/document-store/guidelines-the-provision-of-anaesthesia-services-the-non-theatre-environment-2019>
3. Guidelines for the safe provision of anaesthesia in magnetic resonance units 2019. Anaesthesia 2019, 74, 638–650
4. Royal College of Anaesthetists 2010 Curriculum for a CCT in Anaesthetics. <https://www.rcoa.ac.uk/system/files/TRG-CU-CCT-ANAES2010.pdf>
5. AAGBI Recommendations for standards of monitoring during anaesthesia and recovery 2015 [https://www.aagbi.org/sites/default/files/Standards\\_of\\_monitoring\\_2015\\_0.pdf](https://www.aagbi.org/sites/default/files/Standards_of_monitoring_2015_0.pdf)
6. AAGBI Safety Guidelines Immediate Post-anaesthesia Recovery 2013 [https://www.aagbi.org/sites/default/files/immediate\\_post-anaesthesia\\_recovery\\_2013.pdf](https://www.aagbi.org/sites/default/files/immediate_post-anaesthesia_recovery_2013.pdf)

## Acknowledgements

With thanks to Nottingham University Hospitals NHS Trust for sharing their policy via the Royal College of Anaesthetists good practice library.

## Appendix 1

### Standard Operating Procedure for the GA Spyglass/ERCP service

|               |                   |                               |
|---------------|-------------------|-------------------------------|
| Working Group | Dr Rob Bowie      | Consultant Anaesthetist       |
|               | Dr Conrad Beckett | Consultant Gastroenterologist |
|               | Dr Sarah Jowett   | Consultant Gastroenterologist |
|               | Ms Kate Clough    | Principle Superintendent      |
|               | Radiographer      |                               |
|               | Mr John Lynch     | Deputy Team Leader, Theatres  |
|               | Dr Andy Hatfield  | Consultant Anaesthetist       |

The following document represents the opinions of the above group regarding the GA Spyglass/ERCP service at Bradford Teaching Hospitals NHS Foundation Trust. It is informed by an initial scoping exercise, individual's experience, communications with colleagues within their departments, meetings and a scenario run-through conducted on 9<sup>th</sup> December 2014.

It has been approved by the Gastroenterology, Radiology and Anaesthetic departments.

It was reviewed and approved by the working group May 2017

The Spyglass service exists primarily as an all-day Thursday list run on a monthly basis. The organisation and planning of the list is done within the gastroenterology department. The list consists of a mixture of planned out-patient procedures and acute in-patients. The out-patients who maybe from out of region external contracts are admitted to ward 5 and the in-patients will usually be on wards 8 & 11. The list is carried out in room 1, radiology department by a team consisting of radiology, gastroenterology, anaesthetic and theatre staffs.

The proposed SOP for this service is set out under the following headings;

#### 1. List Planning

Lists are scheduled by the gastroenterology team months in advance. However the semi-acute nature of the list means that it requires flexibility up to the last minute. In order to best communicate information to the team Karen Hopkins (secretary to Dr Sarah Jowett, [karen.hopkins@bthft.nhs.uk](mailto:karen.hopkins@bthft.nhs.uk)) will email radiology ([X-Ray.Theatrelists@bthft.nhs.uk](mailto:X-Ray.Theatrelists@bthft.nhs.uk)) and Denise Barber (anaesthetic rota co-ordinator, [Anaesthetics.Admin@bthft.nhs.uk](mailto:Anaesthetics.Admin@bthft.nhs.uk)) to confirm the planned date for the list. Lisa will forward the contact details of the covering anaesthetist when known. Once the list contains the planned out-patient activity it will be forwarded to this group including the relevant gastroenterologist and the Pre-assessment and day surgery/ward 5 manager ([Leah.callighan@bthft.nhs.uk](mailto:Leah.callighan@bthft.nhs.uk)). This allows a degree of list planning with the proviso that last minute changes should be expected. A revised list containing acute cases should be sent out by Karen the day before to radiology, anaesthetist and gastroenterologist.

#### 2. Patient Preparation

It should be re-emphasised that all patients requiring a GA should be processed through the theatres pre-assessment at SLH, this includes GA colonoscopies who may have not previously attended. Patients from outside of West Yorkshire (External contract) will struggle to achieve this and therefore they should be asked to be assessed through their local trust pre-assessment pathways with the information forwarded to the gastroenterology department. It must be remembered that these patients will still need bloods on the day (particularly G&S) so should not be first on the list. The ideal situation for these distant patients would be for them to be admitted the night before, however in the current climate this may be unachievable. Pathways will be developed to standardise pre-assessment in these patients. Any problematic patients should be referred to the anaesthetic consultant led clinics c/o Dr Sam Kritzinger. ([Samantha.Kritzinger@bthft.nhs.uk](mailto:Samantha.Kritzinger@bthft.nhs.uk) )

Ward 5 should make every effort to obtain patient notes, this is also true for external contract patients where local systems to obtain clinical information may be ineffective.

Despite its remoteness to radiology, it was felt that ward 5 still represented the best place for these patients to be admitted. The geographical distance re-emphasizes the importance of a dedicated gastroenterology porter being assigned to the list.

### 3. Radiology Room 1 preparation

It must be acknowledged that the service was set up in an environment which was not suitable for general anaesthesia cases and without funding for adequate equipment. This has been improved with the addition of piped anaesthetic gases however the running of the list can currently only be achieved by taking equipment from other theatre areas and utilising an anaesthetic machine which is currently stored in modular block and therefore must be transported the length of the hospital for every list. It is proposed that the anaesthetic machine currently stored in Modular 1&2 recovery should be housed in radiology to minimise transfer for both this service and the EVAR cases performed in room 6. This reduces the likelihood of machine damage and staff injury. The anaesthetic cart used for the list should remain in Modular 1&2 recovery as it contains anaesthetic drugs which should remain in a controlled access area. It is also less susceptible to damage while being transferred.

The list should be adequately resourced with appropriate equipment to be retained in that area. (see appendix A) The locations of the arrest trolley/difficult airway trolley should be clearly indicated in rooms 1 & 6 and staff familiar with its composition.

Theatre staff and anaesthetists assigned to the list should have a record of basic competency and orientation in recognition of this remote and challenging environment. (Overseen by Mr John Lynch for theatres and Dr Rob Bowie for anaesthesia) Records of staffs that are deemed competent will be held by theatres and the anaesthetic rota office as appropriate. The anaesthetist should have 2 trained members of theatre staff in attendance throughout general anaesthetic cases in addition to recovery staff.

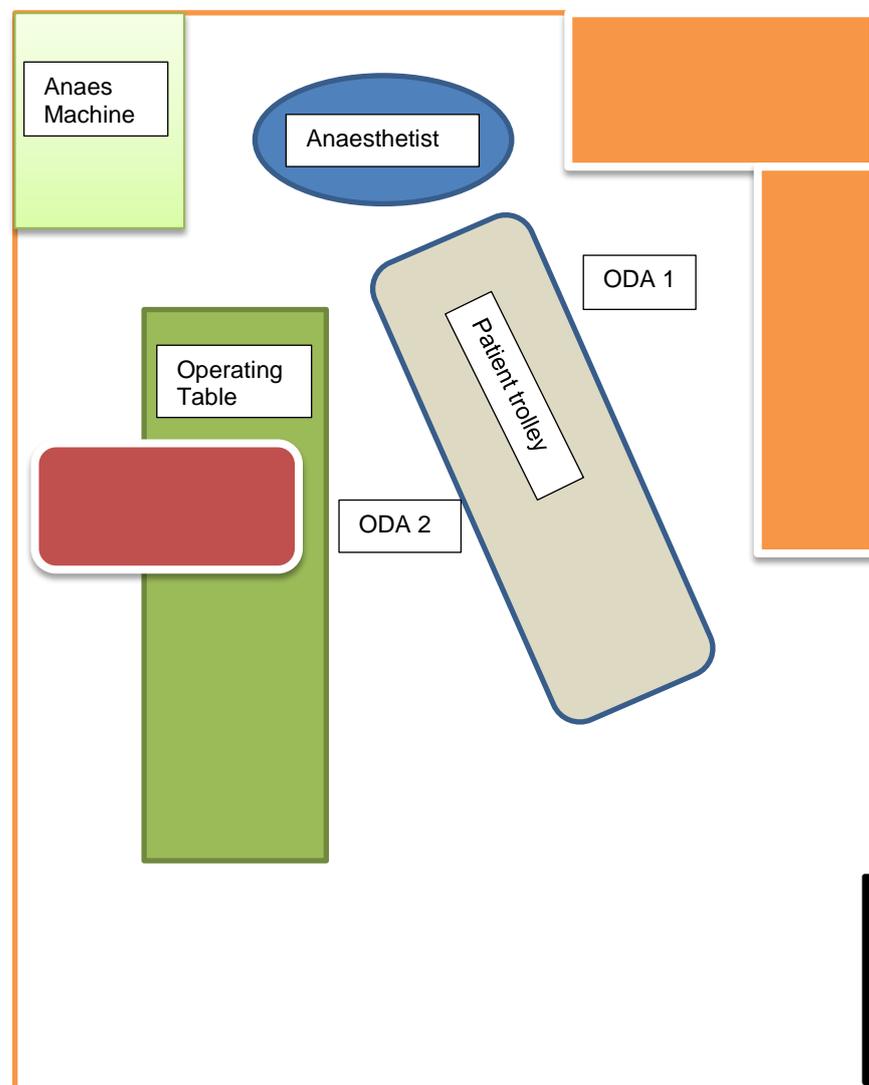
#### 4. Sending Procedure

Prior to sending a pre-list briefing should be carried out to introduce the team and confirm that patient and resource issues have been addressed. Recovery staff to collect first patient on list in conjunction with porter and facilitate with subsequent collections and return of patients when able. The default position would be for patients to be collected on a trolley unless specified otherwise in the briefing.

#### 5. Anaesthetic Induction

The cramped environment and remote location mean that 2 trained members of theatre staff are required during anaesthesia to maintain safety (one being the ODA). Two critical incidents have occurred (anaphylaxis & airway) which have re-enforced this minimum standard. This means that 3 theatre staff should be allocated to the list if GA's are to run sequentially. One to cover recovery, one to cover anaesthesia and one to provide assistance to either of these distinctly remote areas.

A new arrangement has been successfully trialled which allows scope to move freely around the patient during induction. The anaesthetic machine and anaesthetist can now remain in proximity to the head of the patient during the case. (see figures below). Only once the patient has been anaesthetised and safely positioned can the gastro equipment be brought into the room.





## 6. Positioning of Patient

The extended left lateral recovery position has been agreed as the appropriate position for all GA cases. The correct equipment has been agreed with theatre specialists (see appendix A) and should be available for all lists. This patient group are often elderly and frail with increased skin fragility. Care with positioning and the use of appropriate pressure relieving supports/padding to safely achieve this must be emphasised as procedures can take over 2 hours. The use of the “intraprone transfer sheet” greatly facilitates achieving this position and protects members of staff from lifting injuries.

The use of the right arm for cannulation provides optimal drip access and observation. Assessment of patients should include an appropriate ROM in shoulders and neck to comfortably achieve the position below.





#### 7. Completion of procedure and extubation

The Gastro team communicate in advance when the case is approaching conclusion. A discussion within the team will decide when to send for the next patient. When surgery is complete the gastroenterology nurses will remove their equipment as soon as practically possible then all staff will facilitate transfer of patient onto trolley for extubation and to check before leaving the vicinity. When the patient is suitably awake they will be moved through to recovery and room wiped down prior to next patient.

#### 8. Recovery

The recovery area adjacent to room 1 requires a bed space to be reserved for the sole use of the list with monitoring, oxygen and suction. It is suggested that the current monitor is fixed to the wall to demark this bay and prevent it going astray. The recovery staff must confirm availability of the monitor prior to GA cases being sent for. The allocated space needs to be quiet and offer the patient privacy from the general public at all times and other patients when required.

The staffing levels need to be consistent with other recovery areas and recognise that radiology staffs are neither trained nor experienced in recovery care. It would not be appropriate to proceed with a GA case in room 1 while the previous patient was still in recovery if only 2 members of theatre staff were allocated to the list.

Recommendations from;  
Association of Anaesthetists of Great Britain and Ireland. Immediate Post-anaesthesia Recovery 2013. Anaesthesia 2013; 68: pages 288-97.

“No fewer than two staff (of whom at least one must be a registered

practitioner) should be present when there is a patient in a PACU (post anaesthetic care unit) who does not fulfil the criteria for discharge to the ward.”

#### 9. Post recovery care

Post procedure instructions to be formalised (appendix 2) and pathway for admitting patients when too late in the day or patient not suitable to be discharged.

#### 10. Critical incident planning

There have been two critical incidents in Room 1 within the last 12 months. An anaphylaxis and management of an unexpected difficult airway. On both occasions all staff present were extremely helpful and professional.

Clear signage should ensure locations of arrest and difficult airways trolleys are known. The arrest trolley has not been updated to contain the standard trust anaphylaxis pack. Locally held radiology anaphylaxis packs will remain in each procedure room.

#### 11. Alternative setting for the service?

There was a consensus that a hybrid theatre contained within fully resourced theatre environment would provide the optimal setting for this service and we urge the trust to move towards this solution. In the interim we feel the above measures constitute an acceptable standard operating procedure for this service.

#### Identified Areas for Improvement

1. A specialist hybrid theatre would provide the optimum environment for this work.
2. Lists should be adequately resourced for equipment. Dedicated warmer, anaesthetic pumps, flowtrons and appropriate positioning equipment. Currently this is obtained from other theatre areas.
3. Ideally there should be a dedicated anaesthetic machine to save transferring the current machine the length of the hospital.
4. Theatres to establish a formal programme to ensure only staff competent in this area to be rostered. This is currently achieved but not formalised

## Appendix A

### Designated equipment for GA spyglass lists:

| <u>Product</u>                    | <u>No</u> | <u>Order No</u>   | <u>Price PP</u>  | <u>Company</u>   |
|-----------------------------------|-----------|-------------------|------------------|--|
| <u>Contoured Chest Roll</u>       | <u>1</u>  | <u>40624</u>      | <u>£312.60</u>   | <u><a href="http://www.actionproducts.com/">http://www.actionproducts.com/</a></u> |
| <u>Horseshoe Head Pad (Adult)</u> | <u>1</u>  | <u>40205</u>      | <u>£53.80</u>    | <u><a href="http://www.actionproducts.com/">http://www.actionproducts.com/</a></u> |
| <u>Oasis elite Heel Gels</u>      | <u>2</u>  | <u>10875</u>      | <u>£114.00</u>   | <u>Anetic Aid</u>  |
| <u>Heel Protectors</u>            | <u>2</u>  | <u>10891</u>      | <u>£118.00</u>   | <u>Anetic Aid</u>  |
| <u>Gel Arm gutter</u>             | <u>1</u>  | <u>10833</u>      | <u>£82.00</u>    | <u>Anetic Aid</u>  |
| <u>PK Anaesthetic Pumps</u>       | <u>2</u>  | <u>80053U N01</u> | <u>£7,320.00</u> | <u>Care Fusion uk</u>  |
| <u>total</u>                      |           |                   | <u>£8,000.40</u> |  |
| <u>Not Inc</u>                    |           |                   |                  |  |
| <u>Baer hugger blankets</u>       |           |                   |                  |  |
| <u>Flowtron Boots</u>             |           |                   |                  |  |
| <u>Ranger IV warmer</u>           |           |                   |                  |  |
|                                   |           |                   |                  |  |
|                                   |           |                   |                  |  |

## Appendix B

### Post ERCP discharge assessment

This assessment is also found on the ERCP pathway.

Patients who have had sedation and live alone who cannot arrange appropriate adult supervision will be required to stay overnight.

| <b>Post ERCP Day 1/Discharge Assessment</b> <sup>(7,12,13)</sup>  |         |   |    |              |
|---|---------|---|----|--------------|
| <b>Patient Name:</b>  |         | <b>Hospital ID:</b>   |    | <b>Date:</b> |
| No problems identified during 6 hour observation  | Initial | Mobilising with no problems   |    | Initial      |
| Blood taken & sent for amylase levels <b>if complaining of abdominal pain</b>   |         | Patient & nurse agree ready for discharge<br>(if not, document care on variance/ progress sheet until ready for discharge)  |    |              |
| Today's Amylase Blood Result available & within normal limits   |         | IV cannula removed  |    |              |
| Reviewed by Medical Staff if appropriate. Comments  |         |   |    |              |
| Patient is fit for discharge: <ul style="list-style-type: none"> <li>• Alert &amp; oriented</li> <li>• Able to mobilise independently</li> <li>• No problems relating to procedure [V12]</li> <li>• Apyrexial</li> <li>• Has tolerated diet &amp; fluids</li> <li>• Pain &amp; nausea acceptable to patient &amp; appropriate to procedure</li> </ul> |         | Discharge information reinforced <ul style="list-style-type: none"> <li>• Written Information provided</li> <li>• Health Promotion advice as appropriate</li> <li>• Discharge medication supplied and explained</li> <li>• Hospital contact no. provided</li> </ul> |    |              |
|   |         | Observations within normal limits   |    |              |
|   |         | Time  | BP |              |
| Patient encouraged to ask questions   |         | Follow up (detail):   |    |              |
| Time of discharge:  |         |   |    |              |

Author: Sarah Jowett (based on ERCP pathway) April 2015