The Newcastle upon Tyne Hospitals NHS Foundation Trust

Safeguards for Invasive Procedures: The Management of Risks

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1 Introduction

The Newcastle upon Tyne Hospitals NHS Foundation Trust is committed to providing high quality patient centred care and a safe environment for all patients undergoing any invasive procedures.

2 Scope

The Trust expects that all staff involved in the delivery of invasive procedures will adhere to the principles of this policy. This document provides guidance on good practice to all staff. In addition to operating theatres this will include departments such as Radiology, Endoscopy, Cardiology, Emergency Department and Oncology, as well as the many different Primary Care settings where minor invasive procedures are undertaken.

3 Aims

The aim of this document is to inform and provide guidance on good practice to all staff involved and participating in invasive procedures. It will ensure that the care administered to all patients is current and informed by evidence that is consistent with local, national and international standards and recommendations.

Much of the material for this document is based on “Standards and Recommendations for Safe Perioperative Practice” 2011 compiled by representatives of the following organisations:

- Association for Perioperative Practice A.F.P.P.
- The College of Operating Department Practitioners C.O.P.D.
- British Anaesthetic and Recovery Nurses Association B.A.R.N.A
- Medical Protection Society M.P.S
- Royal College of Nursing R.C.N

4 Duties (Roles and responsibilities)

Responsibility for ensuring the application of this policy lies with the individual Clinical Directors, supported by the Directorate Managers and Matrons.

The document is also relevant to all who undertake such procedures, including:

- Anaesthetists
• Nurses
• Operating Department Practitioners
• Operating theatre managers
• Surgeons
• Cardiologists
• Dental practitioners
• General practitioners
• Pathologists
• Physicians
• Midwives
• Podiatrists
• Radiographers
• Radiologists
• Health Care Assistants
• Any other employees involved in the care of patients undergoing invasive procedures.

5 Definitions

(N.P.S.A.) National Patient safety Agency
(N.M.C) Nursing and Midwifery Council
(N.I.C.E) National Institute for Care and Health Excellence

6 Policy

6.1 Admission and Labelling Procedure

Explanation and information should be given to all patients about their prospective procedures. This needs to be tailored to the needs of people with a disability, those with limited English and communication support needs. The learning disability liaison nurse can provide advice about supporting patients with a learning disability undergoing procedures.

All patients admitted for an invasive inpatient or day surgery procedure must have an identity bracelet or wristband that correctly identifies them to their care (NPSA 2009). As from 18th July 2009 all NHS organisations in England and wales will generate and print all patient wrist bands and this is the responsibility of the admitting nurse.

The identity bracelet should be tamper proof and conform to Trust standard. Wristbands will be produced and printed from the E Record, where possible wristbands should be printed, where this is not possible the small identification labels from the patient’s records should be used. Handwritten wristbands should only be used in cases of emergency where pre-printed labels are not available. This information should be generated from the hospital demographic system and printed at or near the bedside.

The identity bracelet should be put on the dominant arm, which is the side used for writing, as it is less likely to be removed when intravenous access is
required. If the identity bracelet is removed for any reason, special care must be taken to ensure that no mistake is made about future identification and it is replaced as soon as possible. Any member of staff that discovers a patient without an identity bracelet has to assume responsibility for correctly identifying them.

Care must be taken by medical and non-medical staff to identify patients undergoing invasive procedures in outpatient and non-hospital settings.

Measures should be in place to assess and manage the risks associated with patients who cannot wear a wristband because of their clinical condition a disability or treatment, for example latex sensitivity or multiple venous accesses. Where a bracelet cannot be used the patient’s identity should be marked on the skin with an indelible marker.

Where wristbands cannot be worn for clinical reasons other strategies must be used to match the patient to the correct care. Examples of clinical reasons which could prevent an identification band being applied include: dermatology patients or those with allergies whose skin integrity is compromise at the site where an identification band would be applied, patients without limbs or burns to their limbs, patients with multiple venous access at the site an identification band would be situated. It is NOT a recognised clinical reason to exclude neonates just because they are small all attempts must be made to apply an appropriate identification band “comfy band” for this patient group.

Checks should be made by a registered practitioner to establish that the patient’s medical history, medication, weight and allergies (drugs, skin cleansing agents, plasters, latex and food etc.) have been documented. The patient’s notes and prescription sheet must be clearly marked with the relevant details. A perioperative check list must be completed for all patients undergoing an invasive procedure (see Appendix 1). If preliminary checks are made by a non-registered practitioner, the check must be countersigned by a registered practitioner (NMC 2008).

The person in charge of the reception / procedure area, or a specifically designated person, should be responsible for sending for the patient. All patients should be sent for by name, date of birth, and hospital number using a legible record (patient collection slip). When a patient is requested verbally to walk to the department the ward should also complete a legible record of the patients name, date of birth, hospital number and destination, e.g. Theatre no 1, catheter lab and bring it to the department with the patient.

The accompanying practitioner responsible for the patient must ensure that the patient is correctly identified and escorted to the reception / procedure area with all the correct and relevant documents.

6.1.1 Patient Identification Labels
Printing several labels with patient details at one time, so they can be used as required for the patient's care, is unsafe (NPSA 2009).
Labels should be printed as and when required for the patient’s care and, where electronic systems permit, by the bedside so that the risk of the label being used for another patient is minimised.

Patient identification labels should be stored in the patient’s notes during their time in theatre. Labels should be stored in the very back of the patient case note folder. All of the details on the labels must be checked to ensure they match the details on the front sheet of the case records and on E Record / Surginet. Any old labels should be removed and destroyed. (NUTH 2014)

6.2 The Procedure List

Compilation of the procedure list in recognised Trust format is the responsibility of the clinician undertaking the procedure or a designated member of the team. The list should be agreed with the theatre manager or nominated deputy.

6.2.1 The list should include:
- Surname (underlined), forename, hospital number, date of birth and gender of the patient.
- Ward
- Procedure
- Type of anaesthetic
- Admitting Consultant
- Anaesthetist
- Theatre number (name)
- Day and Date
- List order / Start time.
- Identification of correct anatomical site\(^1\) (refer to policy)
- Equipment requirements (Comments column)
- Date / Time / Name of person printing list

Confidentiality must be maintained at all times, particularly in respect of sensitive patient details or diagnoses. Confidentiality is an especially sensitive issue for transgender individuals. No non-essential disclosure of their transgender status or history should occur. If a person holds a Gender Recognition Certificate you could be breaking the law if you unreasonably disclose their former gender to others. If required an indication of risk should be identified as “clinical or non-clinical risk” only, details are not required on the printed list.

Abbreviations must not be used when describing side or site of procedure. The side should be written “left” or “right”, not L or R. To avoid ambiguity about the digit on which the procedure is to be performed, fingers should be described as: thumb, index, middle, ring and little. Toes should be described as: hallux (or big), second, third, fourth and fifth (or little).

\(^1\) Preoperative Marking Policy
Only recognised and agreed abbreviations should be used in clinical records (refer to Use of Abbreviations in Clinical Record Keeping Policy), or to describe procedures.

Procedure lists should arrive in the operating department 16 – 24 hours in advance of the scheduled session to ensure patient safety and effective utilisation of resources. It is recommended that a member of the surgical team should check the procedure list for accuracy.

Alterations to the procedure list are not recommended.

Specialist equipment / prosthesis are required, sufficient notice must be given to the relevant personnel by the clinician planning the procedure.

All relevant staff should be informed about changes to the procedure including wards, radiological services and support services as appropriate.

6.3 Documentation

All documentation should accompany and remain with the patient at all times. The clinical records should be directed primarily at serving the interests of the patient to whom it relates, facilitating the provision of care. They should be compiled in accordance with the Clinical Record Keeping Policy.

6.3.1 Comprehensive records should be made by the person(s) responsible for:

- Administering anaesthesia or sedation
- Performing the procedure
- Providing care in all areas.

The record should document the accurate chronology of events and all assessments, investigations, decisions, interventions and outcomes. The record should be legible, unambiguous, contemporaneous, dated, signature and printed name and grade. Confidentiality must be

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observed at all times. It is emphasised that accurate recording of the
time of events is essential.

It is the responsibility of the recovery nurse to ensure filing of the
theatre / Saving Lives documentation is completed in the medical
records before discharge of the patient from the unit.

6.4 Consent and Refusal of Consent

The consent process should be managed in accordance with relevant
or treatment, Second Edition (2009). Many aspects of care involve close and
often intimate contact with the patient, and many are accompanied by
discomfort and sometimes pain. Health professionals must understand that
the potential for an accusation of trespass to a patient is very real if any of the
following occur:

- The application of any intentional or negligent force.
- Treatment and contact is threatened, implied or takes place without
the consent of the patient.
- The patient is kept in hospital without their express consent.

The patient must be competent to understand the information given to them
and can be expressed on a legal document (i.e. consent form), or implied e.g.
rolling up a sleeve in order to give a blood sample. The patient must be
conscious; no adult can consent for another. In the case of a patient who is
not able to consent it is the responsibility of the Consultant in charge of the
case, or in the case of emergency, the responsible medical officer (decision
maker, Consent form 4) and they must document their rationale. A full record
must also be maintained of the conversations held with the patient, relatives,
close friends and carers.

Consent must be obtained before starting treatment or physical examination
or providing personal care for a patient.

It is recommended that written consent is obtained for the procedure, if verbal
consent is obtained it should be clearly documented in the patient’s notes.
Consent should only be obtained from a patient following a full explanation of
the procedure, the benefits, relevant risks, expected outcomes and
alternatives. It should be obtained by the person performing the intervention
or a designated deputy who is competent and familiar with the procedure.

To be valid, consent must be given voluntarily and without pressure or undue
influence being exerted to either accept or refuse the treatment. For major
interventions, it is good practice to seek consent to the proposed procedure
well in advance, when there is time to respond to the patient’s questions and
provide adequate information.

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3 Consent to Examination or Treatment Incorporating the Mental Capacity Act 2005
The consent is an essential and integral part of the medical records. It should be appropriately dated and signed so that the health professional is identifiable the details of the proposed procedure are legible and it is clear that the benefits, risks and outcomes have been clearly explained. Consent forms that have been signed in pre-admission settings should be checked for validity of the procedure. If there have been any changes in the planned intervention the consent should be amended, re-signed and dated. Abbreviations should not be used on a consent form.

Standard consent forms and forms for adults who are unable to consent for themselves should be available wherever a relevant procedure will be undertaken. **Patients undergoing any invasive procedure in any other department should not leave the ward without a valid signed consent form.**

If consent is given over a two stage process (for example: in an outpatient department for an elective procedure and the patient is admitted at a later date), the healthcare team should reconfirm with the patient that they would like to continue with their decision for the procedure or treatment they originally gave consent for. If the patient has any concerns or would like to reconsider their decision, a new consent form must be completed and documentation should be recorded in the notes that the initial consent form is invalid and obsolete. Any misrepresentation of the decision will invalidate consent.

### 6.4.1 There are three standard versions of the consent form:

- **Form 1** for adults or competent children,
- **Form 2** for parental consent for a child or young person and
- **Form 3** for cases where it is envisaged that the patient will remain alert throughout the procedure and no anaesthetist will be involved in their care.

**Form 4** should be used only when considering consent issues for patients who lack mental capacity.

### 6.4.2 The person taking consent must satisfy themselves that:

- The patient is competent to consent on their own behalf, has fully understood the nature of the proposed procedure and has been informed of the relevant benefits and risks. Working with interpreters and not family members of carers is essential in gaining informed consent for patients with limited or no English. Advocates may be needed to support people with a learning disability or dementia.
- The patient has been given the opportunity to obtain further information as required.
- Consent has been given freely.
- The patient understands what further procedures may be necessary in the event of untoward clinical findings.
- There has been no change in the patients physical or mental status since the consent was obtained which may affect the procedure that is proposed.
• If the patient is a minor and unable to give consent on their own behalf, consent has been obtained from a person able to give it. The legal age for consent is generally accepted as 18 however there is a special allowance for those aged 16 plus governed by Section 8 of the Family Law Reforms Act (HMSO 1969). This allows doctors to take consent from those who are aged 16 plus that are deemed competent, without the threat of legal action from parents.

• A child currently has no legal right to refuse surgery and the decision is that of the parents or medical staff. The courts are unwilling to allow children to die, even if the child considers it to be preferable to what lies ahead. There is a different ruling for those aged 14 – 16 known as Gillick competence named after a case which sought to change the way competency for this group of children was seen.

6.4.3 To establish Gillick competence, a child under the age of 16 can give consent if they understand the following:
• The medical advice
• Details of the medical treatment proposed.
• Any ethical questions related to the treatment.
• Any family problems.
• Any long term emotional effects.

6.4.4 Consent to Photography and Recording.
A system will be in place for managing clinical photography and video recording. Patient consent is always obtained and documented before clinical photography and video recording is authorised - refer to Trust policy for Clinical Recordings. Although certain recordings such as X-rays are implicit to the patient’s consent to treatment, perioperative staff should ensure that patients know in advance if any photographic or video recording will result from that procedure (DH2001b).

Medical staff must give patients the opportunity to give their consent for medical photography. This must be documented in order to comply with Caldicott recommendations on data protection and patient confidentiality. If consent is not obtained and confidentiality is breached, the legal charge would be trespass to the patient.

Patients must be aware that they can refuse to give consent without their care being compromised and that if required the video or photograph can be anonymous. It is a popular misconception that if a patient cannot be recognised in a photograph, then consent to take or publish the image is not required. Consent is a legal requirement for all photographic work whether video, digital or conventional images.

Photographic and video recordings made for treating or assessing a patient must not be used for any other purpose without the consent of the patient.
Patients must know that they are free to stop the recording at any time and that they are entitled to view the images if they wish. If the patient does not want the video or photographs to be used they must be destroyed.

Informed written consent must be obtained for release of photographs. If the image is to be used for a purpose that differs from that to which the patient consented, further consent must be obtained and the patient must be made fully aware of the possible uses of the material obtained.

6.4.5 Refusing to Consent
If a patient has the right to consent to treatment, then they also have the right to refuse consent. In most cases this is still true, but there are some areas where the ‘paternalistic’ view comes into play. In the past this was used to validate the overruling of a refusal, stating that “it was in the best interests of the patient because a good case could be made as to why it was appropriate for the doctor to act in this way.”

6.4.6 Withdrawal of Consent
A person with capacity is entitled to withdraw consent at any time, including during the performance of a procedure. Where a person does object during treatment, it is good practice for the practitioner, if at all possible, to stop the procedure, establish the person’s concerns and explain the consequences of not completing the procedure. If stopping the procedure at that point would genuinely put the life of the person at risk, the practitioner may be entitled to continue until that risk no longer applies.

6.5 Patient Transfer from Ward to Operating Theatre

There should be a protocol in place for the collection of patients that includes the rationale for patients walking to theatre, transfer by trolley / wheelchair or collection on their bed. All patients and children should be given the choice to walk to theatre if they are able to do so and have not been given a premedication. Parents and Carers are positively encouraged and supported to accompany children to and from theatre. (Keegan-Doody 2005).

The dignity of the patient should be maintained at all times during the transfer. There are different cultural norms relating to dignity and it is important to ask the patient about appropriate clothing when going to theatre- for example some people may need to have their arms covered. The member of staff escorting the patient to theatre should be competent to do so. The ward team leader is responsible for the appropriateness of such delegation and must ensure that the patients underlying condition and where necessary, level of consciousness has been adequately assessed. If the ward team leader does not have a suitable person to escort the patient, the theatre should be contacted as soon as possible in order for an appropriate member of the theatre team to collect the patient and reduce the potential for delay.
The reception area should be free from any unnecessary noise, personnel and equipment.

The receiving practitioner must introduce themselves to the patient and the escorting practitioner must hand over the relevant information to the receiving practitioner.

The receiving practitioner will document that the patient has been received into the department and following verification of the patients' details the theatre practitioner should countersign the pre-operative check list.

Provision should be made for any patient who cannot speak English by ensuring that there is a carer / interpreter with the patient who can facilitate communication during transfer and until induction of anaesthesia. Some patients for example those with dementia or a learning disability or with other communication needs may need other forms of communication support and family or carer support

Provision must be made for any patient wishing to retain personal effects e.g. spectacles, hearing aids, slippers etc. and these items must be documented and signed for on the patient collection slip (Appendix 2). Items of clothing are put into Trust Patient Property bag for safekeeping (see Patient’s Property Policy). The items will transfer within the department with the patient until their discharge from recovery. The patient should not be left unattended at any time.

6.6 The Correct Patient and Correct Procedure

A pre-op checklist should be completed and fixed to the patients notes in the ward and completed for each new surgical procedure. Information should be confirmed with the patients’ wristband, clinical records, radiographs and the procedure list and also with the patient where possible.

A practitioner at the reception area should identify the patient and the procedure by checking the full name, date of birth, consent form and hospital number on the patients’ wristband and the notes and check against the operating theatre list. Checks should be made with the accompanying nurse / escort one of whom must be a registered practitioner. If the initial checks are made by a non-registered practitioner the check should be countersigned by a registered practitioner (NMC 2004).

6.7 Checklist

The possibility of pregnancy should be considered in all relevant female patients before surgery which could pose risks to mother or foetus. Pregnancy status must be checked within the immediate preoperative period in accordance with NICE guidelines. (NPSA/2010/RRR011).

The check should be recorded on preoperative documentation by staff performing final clinical and identity checks before surgical intervention. An
Incident form must be completed where pregnancy checks have not happened and any associated actions that may come from this (which may include local audit).

When a patient is further transferred to a procedure area, an additional full check should be made by a registered practitioner and the consent form should be checked against the operating list to ensure consistency and confirm the presence of the right patient for the right procedure at the right time.

In the event of documentation being incomplete, an alert notice must be attached to the front of the patients’ records. Until staff are satisfied that all the details are correct and documentation is complete, a patient must not be anaesthetised. Any discrepancy or allergies should be identified using the appropriate Check list Alert / Allergy Alert signs.

For procedures where the patient is undergoing general anaesthesia or sedation, it is good practice for the person performing the procedure to see the patient or if unavailable to delegate this to a competent member of the medical team before induction takes place. The consent form and the patients’ records should be checked to ensure that they relate to the patient and that the correct procedure and operative site is identified.

The clinician is ultimately responsible for ensuring that the correct patient undergoes the correct procedure. If failure of the pre-op check occurs, the surgeon in charge should assess the situation and the patient should either be returned to the ward, or note and sign a decision to proceed at risk in the patients’ records. If the patient is returned to the ward an incident form should be completed in line with governance procedures.

6.8 Verification for Correct Site Surgery & Marking

Healthcare staff has a duty of care to prevent potential harm to the patient and with the implementation of clinical governance, also have a responsibility to ensure that adequate risk management systems are in place to prevent wrong site surgery.

6.8.1 Pre-operative marking should be undertaken in conjunction with;

- NPSA Patient safety Notice: “Standardising wristbands improves patient safety”.
- Patient Safety Alert: “WHO Surgical Checklist”.
- Correct Site Surgery Theatre Protocol (NUTH)
- Pre-operative Marking Policy (NUTH)
- WHO Surgical Safety Checklist (NUTH version)

It is the responsibility of the practitioner performing the operative procedure to ensure that where side or site could be confused, the operation site is marked with an indelible marker.

4 Protocol for use of Allergy Signs
6.8.2 There could be circumstances where marking may not be appropriate e.g.

- Emergency surgery should not be delayed due to lack of marking
- Teeth and mucous membranes
- Cases of bilateral simultaneous organ surgery such as bilateral tonsillectomy or squint surgery. Bilateral sites should be marked when there are occasions when only single sided surgery may be performed.
- Situations where the laterality needs to be confirmed following examination under anaesthesia or exploration in theatre such as squint correction.
- Where no alternatives of side exist as a result of anatomical positions such as appendectomy, cholecystectomy.
- Where the operative target is bilateral via a midline, standard or laparoscopic approach. In this instance the operation should be recorded as “bilateral”. It is also recommended that the operation list should detail “midline incision” to avoid any ambiguity.
- Angiography does not require pre-op marking.
- Skin laser procedures are excluded from the policy because of the risk of permanent tattooing associated with this procedure.

6.8.3 Pre-op Marking Recommendations

**How to mark:** An indelible skin marker must be used and allowed to dry for minimum of 30 seconds. The mark should be an arrow that extends to, or near to the incision site and remains visible after the application of skin prep. It is desirable that the mark should also remain visible after the application of drapes. If there is a risk of transfer of the mark to another part of the body before it dries, then the mark should state right or left (or capital R / L) rather than an arrow.

**Where to mark:** Surgical operations involving side (laterality) must be marked at, or near the intended incision. For digits on the hand or foot, the mark should extend to the correct specific digit and ascertained from reliable documentation and images.

**Who marks:** Marking should be undertaken by the operating surgeon or a nominated deputy who will be present in the operating theatre at the time of the patients’ procedure.

**Time and Place:** The surgical site should be marked on the ward prior to patient transfer to the operating theatre and before any pre-medication is administered.

**Verify:** The mark should subsequently be checked against reliable documentation to confirm it is (a) correctly located, and (b) still legible. This checking should occur at each transfer of the patients’ care with final verification immediately prior to commencement of surgery. All members of the surgical team should be involved in this final check.
6.9 Skin Preparation

Prepare the skin at the surgical site immediately before incision using an antiseptic preparation: chlorhexidine/alcohol is often the most suitable agent but should be used with caution if there is a risk of pooling during skin cleaning.

If diathermy is to be used, it is essential to ensure that antiseptic skin preparations are allowed time to dry by evaporation and pooling of alcohol-based preparations is avoided.

If this risk is felt to be significant, then aqueous povidone iodine should be used.

6.10 Swab Instrument and Needle Count

All swabs, needles, instruments and other items used in clinical interventions or clinical invasive procedures are accounted for at all times to prevent foreign body retention and subsequent injury to the patient.

Retained objects are considered a preventable occurrence and careful counting and documentation can significantly reduce the incidence of never events. “Never events” are defined as ‘serious, largely preventable patient safety incidents that should not occur if the available preventative measures have been implemented by healthcare providers.’

(National Patient Safety Agency NPSA 2013)

A count must be undertaken for all procedures in which swabs, instruments and sharps could be retained regardless of how minor or invasive the procedure (refer to Trust Count Procedure).

Comprehensive checking of accountable items should take place prior to, during and at the end of each procedure. The count must be audible to those counting and must be conducted by a minimum of two members of staff, one of whom must be a registered practitioner. All staff must have completed a count competency assessment (see Appendix 1)

The suitably qualified scrub practitioner is responsible for checking all items used during the procedure and a second practitioner is required to check and record accountable items. Information relating to accuracy or discrepancy of these items must also be given verbally to the person performing the procedure.

All instrument trays and any disposable / single use items must have expiry dates checked by both staff when preparing the theatre. At the time of handing over any instruments / disposable single use items a verbal statement must be made identifying the date of the expiry.

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5 Count Procedure Policy
The same two perioperative personnel should perform all counts that are done during a surgical procedure. Should it be necessary to replace the scrub practitioner during the procedure a complete count should be performed including a full instrument check, recorded and signed by the incoming and outgoing practitioners. The name of the replacement or relieving practitioner must be recorded on the intra-operative record. (AfPP 2011 Standards and Recommendations for Safe Perioperative Practice)

The operating surgeon is responsible for assessing whether a member of the scrub team can leave the operating table for a comfort break. The operating surgeon should cease all activity until the scrub practitioner has returned to the operating table and is ready to continue.

Instruments and items with removable parts should be checked initially, monitored and checked again at the end of the procedure by the scrub practitioner.

All trays / supplementary items must remain in the operating theatre until the procedure has been completed and all counts including a final / final count have been performed. This includes laundry and clinical waste containers / bags.

Swabs used during invasive procedures must be X-ray detectable and packaged in bundles of five. Any package containing fewer or more than five should be removed from the procedure area immediately. All checks should be made based on multiples of five.

Items should not be cut or altered unless specifically for the intended purpose. Swabs that are used as surface dressings must not be x ray detectable and x-ray detectable swabs should not have the raytec removed by a member of the operating team in order to use it as a surface dressing as this will compromise product liability. Non radio-opaque swabs used for wound dressings should not be added to the trolley prior to skin closure.

X-ray detectable swabs used during catheterisation procedures undertaken within theatre should remain in theatre and be part of the count.

Pharyngeal packs should contain a radio-opaque marker and will be a different colour (green). The anaesthetist is responsible for these packs placed in the patient prior to or during an operation. The insertion and removal of the pharyngeal pack should be documented on the anaesthetic record and on the theatre dry wipe count board and a swab collection system used when a pharyngeal pack is insitu a sticker will be placed on the swab collection pocket as a prompt to remind staff that the swab remains insitu. When removed the pack is inserted into the pocket.

The person performing the procedure has ultimate responsibility for ensuring that all swabs and packs are removed prior to wound closure. This does not however remove the professional responsibility from each member of the theatre team. A complete check should be made before closure of a cavity.
Instruments, needles and blades should be checked after use to ensure that they are intact. In the event of a breakage, the scrub practitioner should ensure that all the pieces are returned to them and are accounted for. Damaged instruments will compromise patient safety and must be immediately taken out of use and labelled for repair in accordance with the instrument repair cycle.

Items which are to remain in the patient’s body by intention (e.g. packing gauze, drainage tubes, catheters) must be recorded in the intra-operative record/theatre register/patients notes and/or electronic record. Their removal must also be recorded, including the date, time, name and designation of the practitioner removing the item.

The scrub practitioner must ensure that swabs, sharps and other disposable items are safely contained, easily accounted for and disposed of in accordance with Trust policy at the end of the procedure. The scrub practitioner must inform the surgeon closing the wound that the count is correct. The surgeon must then acknowledge this and is responsible for signing the designated area on the count sheet.

See Trust Count Procedure for techniques and count discrepancy information.

Failure to follow these guidelines can result in retention of swabs and other items in the patients’ body that can result in life threatening complications.

6.11 Recording of Implants / Prosthesis

Documentation of implants / prosthesis should comply with the Consumer Protection Act (HMSO 1987) and the minimum information recorded should include:

- Manufacturer
- Type of implant / prosthesis
- Code number
- Batch / Lot number
- Size
- Sterilization date / date of manufacture
- Expiry date
- Any amendments /adaptations made.
- Tracking and traceability

The Consumer Protection Act 1987 (in particular Product Liability), has implications for the reprocessing of devices used for patient care. It is essential to maintain adequate records that demonstrate how a particular device was processed and a description of the methods employed. These records must be linked to the patients’ notes.

All surgical instrument trays should be tracked through the decontamination process so that they can be traced to an individual patient in the event of an adverse incident such as sterilisation failure. The tracking system should be
part of a computerised system as manual systems have limited opportunities for data retrieval.

The tracking system should allow for details of the decontamination process for each used instrument set or medical device.

There should be evidence of an audit process to verify that systems for tracking and traceability are implemented and that records are maintained including links to the patients’ notes.

A chemical indicator should be clearly visible on the outside of all packs to be sterilised to show that items have been exposed to physical conditions during a sterilisation cycle.

6.12 Use and Handling of Instruments

Perioperative staff should not handle instruments unless they are competent to do so and they understand their use in general and specific specialities (Radford et al 2004).

New products should not be introduced into the department until staff has received training in their use, and this is particularly relevant to loan instruments. Training must take place in controlled settings and not when the instruments are in use during a procedure. In the case of loan instruments, training must take place prior to the instruments being processed for the specific case for which they have been acquired.

These training needs must be addressed to comply with the requirements of the Nursing and Midwifery Council Code of Professional Conduct for: standards for conduct, performance and ethics (NMC 2004) and the Health Professions Council Standards of Conduct, performance and ethics (HPC 2008).

Surgical instruments and powered equipment should be used and handled in accordance with manufacturer’s instructions.

In order to prevent damage, instruments must only be used for the purpose for which they are designed (e.g. Osteotomes are not levers). Proper selection requires a general understanding of surgical procedures and knowledge of anatomy.

Each tray of instruments should contain an instrument check list which incorporates information necessary for a recorded programme of its use. Instrument sets should be standardised with the minimum variety and number of instruments needed for the procedure.

Full medical device training should be achieved before new instrumentation is introduced into the department. Staff should be competent with using and handling the instrumentation in accordance with the procedure before undertaking the role of scrub practitioner. Failure to comply with this regulation
has the potential to breach professional accountability for registered practitioners.

6.13 Blood

Careful attention must be given to standard infection control precautions to minimise any risks from blood and is required in accordance with *Guidelines for Clinical Health Workers: protection against infection with blood borne viruses (DH 1998)*.

Refer to Trust documents:
- Administration of Blood Products Procedure.
- Collection and Delivery of Blood Products from Blood Transfusion Laboratory to Clinical Areas.
- Jehovah’s Witnesses (Medical Treatment of).

6.14 Blood Warming

Blood and blood products should only be warmed through an approved device which should have a visible thermometer and an audible warning device. Blood must not be warmed by putting the pack into hot water, onto a radiator, in a microwave or near any other uncontrolled heat source.

The use of blood warmers is best limited to patients’ receiving infusion of large blood volumes at high rates.

6.15 Pressure Infusers

Pressure infusers should only be used when strictly monitored and should never be used to assist the flow of partially gas filled containers to avoid air embolism.

6.16 Specimens

Specimens are regularly taken during interventional procedures and it is essential that every specimen reaches the pathology, microbiology, histology or cytology department without any undue delay and in optimum condition. Care must be taken to ensure that specimens are correctly labelled, accompanied by the appropriate forms and handled according to Trust policy. Specimens should be transferred to the appropriate laboratory as soon as practicably possible. Where temporary storage is unavoidable, specimens must be placed in a specific designated location, e.g. ward or department specimen fridge in accordance with local instructions from the labs concerned. Specimens without fixative should be stored at 4°C to minimise the potential for bacterial growth however 4°C is inappropriate for specimens in formalin as this will delay fixation of the specimen.

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6 Sample Acceptance and Rejection Policy (NUTH) and Sample Acceptance and Rejection Policy Quick Reference Guide (NUTH) Transport of Clinical Specimens Policy
For specimens requiring special consideration refer to: *Guidelines for the Safe Handling and Despatch of Specimens*.

Most specimens requiring histopathology are irreplaceable therefore a log should be kept to track the specimen from theatre to the laboratory and a signed record kept of all specimens dispatched from the perioperative setting. Names should be printed as well as signed and dated.

Specimens should be removed from the operating theatre at the end of each procedure and before the next scheduled patient arrives, as stockpiling to remove at the end of the operating list presents a risk that is not recommended.

It is also imperative that the religious, cultural and personal wishes of the patient are taken into consideration for foetus and foetal tissues.

### 6.17 Physical, Environmental and Equipment Safeguards Manual Handling

The Manual Handling Operations Regulations and subsequent guidance (Health and Safety Executive 1998a) impose specific requirements on both employers and employees, to avoid, assess and reduce manual handling in the workplace. The movement of equipment and patient transfer procedures are potentially hazardous for patients and staff and annual training in moving and handling is mandatory. During transfer special care must be taken to ensure that the patient’s head and neck are always supported. Please refer to Trust Intranet for further advice on manual handling.

### 6.18 Patient Positioning

The operating surgeon is ultimately responsible for the safe positioning of the patient and should take an active role in positioning the patient to facilitate the operation. Safe and appropriate positioning requires teamwork, effective communication and the anticipation of the patients’ needs. Co-ordinated and competent positioning will respect patient dignity, maximise the safety of the patient, allow adequate exposure of the operative site and prevent unnecessary post-operative complications.

Care should be taken to protect vulnerable areas such as calves, ankles, nerves and bony prominences including pressure areas. Due consideration should be given to pre-existing medical conditions that may restrict normal range of movements. All personnel involved in the positioning of patients must be familiar with established techniques to minimise risks. Refer to Trust Intranet for further advice:

- [Theatre Protocols: Moving and Handling](#)
- Perioperative management of the Morbidly Obese Patient
- [Protocol for Positioning Patients in Leg Stirrups for longer than two hours](#).

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7 Moving and Handling Policy, Moving and Handling the Bariatric Patient Policy.
Clinical evidence indicates that procedures longer than two or three hours significantly increase the risk for pressure ulcer formation. The condition of the patient’s skin should also be checked following surgery and any changes in condition documented and action taken as required.

6.19 Eye Protection

The eyes of an unconscious patient must be protected from foreign bodies and exposure. Local pressure on the globe of the eye should be avoided at all times as raised pressure or globe injury can result in retinal ischaemia or blindness. Corneas should be protected by keeping the eyelids closed using eye pads fit for purpose and lubricated as necessary. The practice of using tape is not recommended other than for securing an eye pad. Pressure to the eyes must be avoided when in the prone position.

6.20 Damage to Teeth

Refer to Trust Intranet: “Policy Regarding the Provision of Repairs to Teeth Damaged During Treatment within the Trust”.

6.21 Maintaining Patient Temperature

All patients should have had their temperature taken and recorded as part of pre-assessment. This should be done within 1 hour of the transfer of the patient from the ward to the intended operating theatre / procedure room. Preoperative management involves assessing the patient for risk factors of unplanned hypothermia. Risk factors include a temperature of lower than 36°C on admission. Body temperature should be monitored and maintained as close to normothermic as possible unless otherwise dictated by the procedure.

Special care should be taken when transferring the patient from ward to theatre reception areas and must include making sure that the patient is warm and well covered with blankets if being transferred by bed or trolley. If walking to theatre, the patient should be suitably attired and wearing a dressing gown and slippers / shoes. Care must also be taken to ensure that patients are kept warm whilst waiting in anaesthetic room / reception areas and the use of blankets should be considered, particularly in winter months or when patients are not wearing a dressing gown over their theatre gown.

Use of warming mattresses on the operating table is recommended where appropriate and should be used in accordance with manufacturers' instructions. Air warming blankets should always be used in accordance with the manufacturers’ instructions and warmed air should never be blown directly onto the patients’ skin as burns may result. The patient should be suitably covered at all times in order to reduce exposure.

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8 NICE CG65 Perioperative Hypothermia (Inadvertent) 1.2 Perioperative Phase, (p11)
6.22 Standard Precautions

Standard Precautions (previously known as Universal Precautions) are a set of risk assessed actions. They should be implemented by all healthcare workers when caring for patients to minimise the transmission of infection to staff and between patients as well as reducing healthcare workers exposure to blood and body fluids.

6.22.1 The management of these includes:
- Hand decontamination
- Decontamination of equipment and the environment.
- Safe handling and disposal of clinical waste and sharps.
- Personal and protective equipment.
- Linen management.

Standard precautions assess the activity to be completed, not the individual who is to receive care and all patients have an equal right to be treated with dignity and respect. The use of standard precautions eliminates the risk of random inappropriate practice, permits staff to deliver high standards of care at all times, and should therefore be strictly adhered to in every case.

6.23 Infection Prevention and Control

Is an issue of health and safety and comes within the remit of various legislation:

- Health and Safety at Work Act (HMSO 1974)
- Control of Substances Hazardous to Health Regulations (HMSO 2002)
- Personal and Protective Equipment Regulations (HMSO 1992a)

The basic objective is to ensure all staff is protected and that a supply of personal protective equipment is readily available. All staff must take every precaution to minimise occupational exposure to potential pathogens.

In England and Wales perioperative departments are required to comply with environmental standards issued by the Healthcare Commission, Core Standard 21 (HCC 2005), and evidence based practice. It is the responsibility of all perioperative staff to ensure that standards are monitored and maintained.

6.23.1 Please refer to the following documents on the Intranet for additional information:
- Cleaning and Disinfection Procedure
- Control of Infection in Healthcare Workers
- Dress and Appearance Policy: Appendix 3 Uniform standard – Theatre Dress
- Hand Hygiene Policy
- Healthcare Acquired Infection: Prevention and Control Strategy
6.24 Protection and Precautions

The use of personal protective equipment such as eyewear, face protection, impervious gowns, aprons and gloves can minimise the risk of wound infection and protect staff from occupational exposure. Circulating staff should wear gloves, plastic aprons and eye protection whenever there is a risk of exposure to blood or body fluids including splash and aerosol contamination.

All scrub personnel should wear eye protection\(^9\) with the exception of surgeons using microscopes / loupes who should use their own judgement to assess whether or not their visibility may be impaired.

6.25 Skin

All cuts and skin abrasions should be covered with waterproof dressings which are identified as effective viral and bacterial barriers. Personnel that have lesions such as eczema or weeping dermatitis should be reviewed by the occupational health department and should not be permitted to administer direct patient care or handle medical devices used in invasive procedures.

6.26 Gowns and Aprons

Disposable aprons must be worn by circulating staff whenever there is a risk of contamination during a procedure.

Gowns and drapes, whether single use or re-usable, must comply with European Standards on resistance to penetration by blood and other body fluids. They must be able to maintain their integrity and be durable.

6.27 Hand Hygiene

Effective hand hygiene is crucial in helping reduce and prevent the spread of healthcare associated infection. Hands must be decontaminated before and after every patient contact and immediately after direct contact with body fluids even if wearing gloves. It is always best practice to wash hands when gloves have been removed. Gloves must be changed or discarded after each procedure or patient episode or if visibly contaminated.

False fingernails and nail varnish have been shown to harbour pathogens and should not be worn by staff in the operating theatre.

\(^9\) Infection Control Practice in the Operating Department
Hands must be decontaminated in accordance with the 5 moments for hand hygiene\(^\text{10}\).

### 6.28 Waste Management

The management of waste disposal is governed by European and UK legislation, with the majority of guidance provided by HTM 07-01.

All staff have a duty of care in the management of waste and its’ segregation (see Appendix 3) and to ensure that disposal is undertaken safely with no risk to others. Refer to Trust policy: [Waste Management Policy](#) for information.

### 6.29 Sharps

Awareness and adherence to Trust policy is essential by all staff when handling and disposing of sharps. Sharps bins must be:

- Free from protruding sharps
- Stored off the floor
- Labelled correctly
- Only filled to the recommended levels.
- Sealed and locked bins should be stored in a holding area away from public access.

Load the suture directly onto the needle holder, do not pick up with your fingers and load.

Do not put used needles onto the discard a pad with your fingers use your needle holder to position needle on adhesive pad.

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\(^{10}\) Hand Hygiene Policy
Needles must never be re-sheathed. It is the responsibility of the person using the sharp to dispose of it safely.

Needles and syringes should not be disassembled prior to use or disposal and should be discarded as one complete unit.

Sharps and needles must not be passed hand to hand by the surgical team and handling should be kept to a minimum. Sharps should be placed in a receiver a (Safe Zone) for safe use and retrieval with the exception of microscopic needles that may be safer left in their needle holders and returned to the scrub practitioner.

Scrub practitioners should place their needle and holder in the same place on the back trolley each time they set up and during surgery. By placing them in the same place each time they know where they are and are less apt accidentally sustain sharps injuries. Know your needles are safe.

A disposable device (Sharps pad) should be used within the sterile field to contain needles and sharps and this should be disposed of safely at the end of the procedure.

In the event of an injury, Refer to Trust Policy

6.30 Spillages

All spillages must be dealt with as soon as is reasonably practical and any agents used to manage the spillage should be used in accordance with manufacturer’s instructions.

The procedure for dealing with spillages of blood and body fluids can be found in the Trust Policy Infection Control Practice in the Operating Department.

6.31 Environment

Environmental temperature should be maintained within the range 15 – 20ºC unless otherwise dictated by the procedure or the requirements of the patient. The optimal comfort range is 19 – 23ºC\textsuperscript{11}. The layout of the perioperative department is designed to minimise, restrict or contain bacterial and viral pathogens and in addition, theatre traffic is kept to a minimum. The national standards of cleanliness issued by NHS Estates (2007) enable Trusts to have in place a robust programme through which standards of cleanliness can be routinely and accurately measured. This will also enable performance to be assessed in relation to standards achieved by other Trusts.

Colour coding of cleaning materials and equipment as recommended by the National Patient Safety agency (NPSA 2007) should be adhered to. The operating department is categorised as ‘very high risk’ and the service level required is for consistently high standards to be maintained throughout the

\textsuperscript{11} NHS Estates 2007 Health Technical Memorandum 2025 Ventilation in Healthcare Premises (HMSO)
day. Areas adjoining very high risk areas, i.e. staff rooms, changing rooms and offices must also receive intensive levels of cleaning. See local policy / cleaning procedures for further information.

6.32 Between Case Cleaning

Surfaces that do not have direct patient contact (e.g. floor, walls and lights) do not become contaminated more by ‘dirty’ than ‘clean’ operations. Surfaces such as operating tables, other furniture and instruments that make contact with more than one patient have a greater potential for transmission of infection between dirty and subsequent cases.

The operating table and related accessories should be decontaminated between cases in accordance with local policy. Mattresses that are torn or damaged in any way should be repaired immediately (not taped) in order to prevent contamination with blood or other fluids. If this is not practical the mattress should be taken out of use and disposed of in accordance with Trust policy.

6.33 End of Day Cleaning Procedures

All equipment should be cleaned and all portable equipment removed from the theatre following cleaning.

Overhead lights, cabinets, waste receptacles, equipment and furniture should be cleaned with a combined detergent/chlorine releasing agent (1,000 ppm available chlorine) solution and a disposable cloth.

Scrub sinks should be cleaned with detergent and water applied with a disposable cloth.

Shelves should be emptied, wiped with a combined detergent / chlorine releasing agent (1,000 ppm available chlorine) solution and allowed to dry before replacing supplies.

6.34 Other Considerations

Surfaces should be kept free from visible dirt and special attention given to areas that are likely to become more heavily contaminated, e.g. upward facing surfaces.

Walls that are intact acquire very few bacteria even if left unwashed for long periods, however, they should not be allowed to become visibly dirty and washing every six months is recommended by the Hospital Infection Society (2002).

Wall washing must be undertaken:
- following annual routine theatre maintenance
- following any interference with the fabrication of the environment
- following a C Diff case, only if patient opens bowels
Please refer to:
*The Infection Prevention and Control Practice in the Operating Department policy*

For other surfaces, normal housekeeping methods are adequate, e.g. daily damp cleaning of ledges and shelves. Particular attention should be paid to Gratnall type trolleys to ensure that all drawers, handles and runners are cleaned and inspected regularly for dust and residue.

Floors of the operating room should be kept free of litter, dust, marks, water or spillages and must be scrubbed daily; specific spillages should be dealt with immediately.

Mop buckets must be emptied after each use and kept dry until the next occasion when they are required. The Team Leader must complete daily / monthly checklist as per Trust Clinical Assurance Tool audit.

The team leader should undertake a visual audit of the environment for cleanliness before the start of the operating list and take action where appropriate.

Before equipment is brought into the operating theatre it should be inspected for dust and cleaned.

### 6.35 Theatre Traffic

The purpose of controlling theatre traffic is to minimise the movement of bacteria from the environment itself, theatre personnel and patients. Each perioperative environment has established traffic patterns and these should be clearly indicated:

- **Unrestricted areas** – traffic is not limited.
- **Semi-restricted areas** – traffic is limited to authorised, correctly attired personnel and patients.
- **Restricted areas** – traffic is very limited and personnel must be correctly attired. This includes the operating theatre.

Refer to local department guidelines for further information.

Only the number of personnel required to manage the case safely should be present in theatre and there should be a restriction on movement and talking within the operating theatre.

The doors to the operating theatre should remain closed to ensure effective ventilation of the area. As far as possible, all potential equipment and supplies for a case and/or list should be available in theatre prior to the case starting. This will reduce the traffic in and out of theatre and maximise the efficiency of the ventilation system / resources.
6.36 Preparation of Personnel

Personnel are able to influence the environment by maintaining personal hygiene, wearing theatre attire correctly, reporting potential health problems and monitoring visitors. Local policies also need to reflect cultural and religious beliefs in the wearing of theatre attire\textsuperscript{12}

Hands should be washed before and after donning theatre attire, clothing changed when it becomes wet or soiled and following environmental cleaning of the operating theatre and before the start of a new list.

Neither used nor clean theatre clothing should be stored in lockers for future use.

Theatre clothing should not be worn outside the clinical area or in public places.

6.37 Ventilation and Gas Scavenging

Requirements are laid down in HTM 02-01 & 03-01 (NHS Estates 2007). Air must be filtered through a series of filters in the ductwork and delivered under positive pressure to the theatres at a suitable temperature and humidity. Successful ventilation relies on having the theatre doors closed, so if the doors are left open the system cannot work efficiently. The baffles in theatre are in place to balance the air pressures and ensure correct air flows with air moving from the cleanest areas (prep room and theatre) to the outside areas. The system must conform to BS 6834 (BSI 1987) and must be in situ wherever nitrous oxide is used in anaesthetic procedures.

Relative humidity within the procedure area should be in the range 40 -60\% except where flammable anaesthetic gases are in use. In these areas, humidity should not fall below 50\%. All procedures should have a means of mechanical air change which should be in the range 20-25 air changes per hour.

6.38 Chemicals

Access to all chemicals should be controlled. Storage, use and disposal of chemical substances are regulated by the Control of Substances Hazardous to Health regulations\textsuperscript{13}. Where the use of hazardous chemicals cannot be eliminated, appropriate \textit{personal protective equipment} and techniques should be used.

All areas are required to have an COSHH Risk assessment for all hazardous substances.

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\textsuperscript{12} Dress and Appearance Policy: Appendix 3 Uniform standard – Theatre Dress

\textsuperscript{13} Refer to online COSHH file
6.39 Radiation Protection

Technological refinements have improved the safety aspects of radiation equipment, however staff must be aware that radiation exposure carries a risk and it is essential that staff adhere to the national radiation regulations and policy at all times\textsuperscript{14}. Each hospital has a radiation protection advisor and a local radiation protection officer should be appointed to take responsibility within the operating department.

All staff has a responsibility to protect themselves and others, they should not knowingly expose themselves or others to radiation more than necessary. If required, staff working routinely in controlled areas may be issued with a personal dose-meter on the advice of the protection officer. These should be monitored on regular bases and documented.

Personal Protective Equipment (PPE) garments, e.g. lead aprons, thyroid collar, should be available and used to prevent undue exposure to harmful rays. Storage facilities must be available which allow lead aprons to hang freely and singly on appropriate racking. Garments should not be folded or left on the operating room floor; lead aprons are susceptible to cracking which can reduce the effectiveness as a shielding barrier.

X-rays to the abdomen and pelvis of patients who are, or may be pregnant, should be avoided if possible. Refer to local guidelines “Procedure to determine whether women of reproductive capacity about to undergo abdominal/pelvic x-ray examinations may be pregnant”. A lead shield should be used to protect the foetus when other areas of the body are x-rayed.

6.40 Lasers\textsuperscript{14}

Any staff member that will be involved in surgical procedures involving a laser must have undertaken a training programme and been assessed as having knowledge and skills to participate in the use of the equipment. This should be recorded in their personal portfolio/personnel file.

For each specific laser in the department, authorised operators and safety officers must be clearly identified. These individuals will carry responsibility for security of the laser keys and safe practice for the area of care.

When the laser is in use it is essential to:

- Restrict access to the laser theatre.
- Minimise the number of people present in theatre.
- Use warning signs and lights as indications of the laser in use. (These should be used at all entrances to laser treatment areas when in use).
- Window coverings must be non-flammable and when class 3B and 4 lasers are in use a remote interlock facility (BS EN 60825 1) should be incorporated (BSI 1994a). When not in active use lasers should be placed in standby mode.

\textsuperscript{14} Radiation Protection for Staff in the Medical Use of Ionising Radiation and Lasers
6.41 Eye Hazards

Laser light can strike the cornea or pass through it causing vaporisation and possible destruction to the outer layer. When lasers are in use it is essential that the correct laser safety eye protection is worn by staff and patient.

- Surgical instruments should have a non-reflective surface and should be inspected regularly to ensure the integrity of the coating.
- PPE regulations state that the correct goggles / glasses must be used and state which type of wavelength and optical density they are designed to filter.
- No single type of goggles can be used for all lasers; they are specific to each type of laser.
- During local anaesthesia a patient’s eyes and eyelids must be protected from the laser beam by goggles designated for the laser being used. During general anaesthesia wet eye pads or laser specific corneal shields should be used. (BS EN 207 & 208 – BSI 1994b)

6.42 Chemical Hazards

Chemical hazards from lasers include infective agents in laser plume (smoke) and these may present a potential risk to staff.

- Dedicated smoke evacuation machines must be used to remove the smoke and filters should be checked and changed as per manufacturers’ instructions.
- Piped hospital suction apparatus must not be used for smoke evacuation and portable suction units are not suitable.
- High filtration surgical masks for laser use should be worn during procedures that produce plume to minimise the inhalation of particles.

6.43 Electro surgery (Diathermy)

A high frequency alternating current for coagulation and cutting is passed through the patient’s body from a live electrode (e.g. forceps, pencil) to the return electrode (patient plate). They are the main potential ignition source for a fire and therefore specific precautions must be taken.

6.43.1 Equipment

- All cables and electrodes must be checked prior to use to ensure all insulation is intact.
- Alarm systems must be checked following manufacturers guidelines.
- Ensure all connections are secure before commencement of surgery.
- The active electrode should be stored securely in a non-conductive container when not in use.
- The active electrode should be activated only by the person holding the device.
● The active electrode should not be used in the presence of intestinal gases as these contain hydrogen and methane which are highly flammable.

● Active electrodes must not be used in the presence of flammable substances including anti-microbial skin preparations and tinctures.

6.43.2 Patient Safeguards

● Mega Soft is used directly on the operating room table, virtually eliminating the small disposable sticky pad that can damage the patient's skin. Mega Soft can be used in a variety of surgical procedures and positions, providing a safe and easy-to-use return electrode combined with an effective table pressure reduction pad. These are currently available at the RVI

● The return electrode site must be free from hair, skin blemishes or scars and be as close to the operative site as is practical.

● The electrode should be applied over a vascular, muscular area.

● The return electrode must be in direct contact with the patients' skin. If the patient is moved during surgery it is necessary to re-check the electrode site.

● The electrode should remain dry during surgery and precautions should be taken to prevent pooling of flammable liquids in any cavity, under the body or on the electrode itself.

● The patient should not come into contact with 'grounded' metal objects.

● Skin condition should be checked before application and after removal of the electrode.

● The patient must not come into contact with any metal part of the operating table in order to reduce the risk of diathermy burns.

6.44 Tourniquets

A tourniquet is a mechanical device used for the temporary restriction of the blood supply to a limb during a surgical procedure, to assist surgery by ensuring a blood free operating field. It is essential that all staff are aware of potential dangers to the patient and should therefore have received specific training prior to the use of a tourniquet.

The tourniquet machine and cuffs should be checked daily and should include observations for leaking cuff, worn tubing, loose connections and faulty gauge.

The widest cuff possible, based on appropriate tourniquet length should be selected. The cuff should overlap at least three inches but not more than six inches as too much overlap causes increased pressure or wrinkling of underlying tissue. Care should be taken when applying the cuffs to prevent damage to the skin. Suitable soft padding such as orthopaedic wool, may be used under the cuff and should be applied firmly and with even pressure following manufacturer's guidelines. Care should also be taken not to have

15 Policy for Tourniquet Use
the cuff sited over bony prominences to avoid nerve compression whilst inflated or to rotate or reposition the cuff after application.

The inflation pressure required should be confirmed by the operating surgeon and it is important that they should be informed when 1 hour has passed and then every 30 minutes until the surgery is completed. These communications should be recorded in the intra-operative notes.

Pressures will be lower for paediatric patients and it is the responsibility of the surgeon to verify and approve the operating pressure of the cuff.

Inter-operative maintenance pressures should be recorded in the patients’ case notes and on the count board for easy visibility during the procedure.

Tourniquets may be applied to two limbs simultaneously and prior to use should be tested and calibrated for accuracy. A pressure of 200mm Hg is used for this test.

Care should be taken to prevent chemical burns beneath the cuff. Skin preparation fluids must not be allowed to go under the cuff or pool beneath the limb. This can be prevented by the use of a plastic cuff/steridrape applied around the cuff, or careful preparation and drying of the limb.

In the unlikely event of a tourniquet cuff being found to be still inflated sometime after surgery, e.g. in recovery, the pressure must not be released until the surgeon has been informed. He/she must decide on the correct course of action to be taken and a record of the incident should be completed. Digit Tourniquets are brightly coloured silicone strips for additional safety and enhanced visibility.

6.44.1 Digital Tourniquets
- Tourniquets are commonly used to provide a bloodless field in hand and toe surgery and when a digital tourniquet is opened this must be recorded as part of the Count Procedure.
- Documentation of the removal of digital tourniquets is required as part of the Count. Procedure and must include the length of time a tourniquet is in place (i.e. time on and time off).
- This must be recorded upon the WHO check list and Surginet system. CE marked digital tourniquets that are labelled and/or brightly coloured should be used in accordance with manufacturer’s instructions.
- Surgical gloves must not be used as tourniquets.

6.45 Body Piercing

Theatre practitioners and medical staff are increasingly faced with various types of body piercing. Because every piece of jewellery is different in construction and content, each case must be dealt with individually and with sensitivity. The patient must be assessed accordingly, with reference to the type of anaesthetic to be administered and the type of surgery to be
performed. It is recommended that all facial jewellery be removed prior to General Anaesthesia. (Refer to guidelines for further information).

Naval piercing should be removed for laparoscopic surgery.

The site and type of piercing should be documented on the preoperative check list by the ward staff and the theatre care plan / WHO record by the theatre practitioner. A check should be made post operatively to ensure that the body piercing is still in situ, and documented as such on the anaesthetic chart or theatre care plan / WHO record, depending on its location.

6.46 Endoscopes

6.46.1 Rigid
In accordance with manufacturer’s instructions, rigid endoscopes should be cleaned, disinfected, inspected, packaged and sterilised using validated automated processes in a sterile services department. Rigid scopes should be stored sealed in the container or packaging in which they were sterilised.

6.46.2 Flexible
In accordance with manufacturers’ instructions, channels of flexible endoscopes should be flushed immediately after use. Cleaning brushes and valves should be single use only.

In accordance with manufacturers’ instructions, flexible endoscopes that cannot be autoclaved should be cleaned and subjected to high level disinfection using a suitable and compatible chemical disinfectant in an automated endoscope reprocessor (AER)

Single use accessories should never be reprocessed. Refer to policy for single use items

6.46.3 Flexible endoscope Storage
Flexible endoscopes must be stored in an approved endoscope storage cabinet, and can be stored for up to 5 days, depending upon the type of storage cabinet used. If the cabinet has not been designed / configured for 5 day storage, the storage time is limited to 72 hours. Endoscopes which have been in the storage cabinets for less than 5 days (or 72 hours) may be used for procedures directly from the cabinet without further processing. When an endoscope is removed from a storage cabinet it must be used within 3 hours and cannot, under any circumstances, be returned into a storage cabinet without being processed in an AER, even if it has not been used. The contents of each cabinet, the date and time the endoscope was put in, and the expiry date and time must be recorded (i.e. clearly marked on the front of each cabinet where a manual process is required or using the automated electronic system in more advanced cabinets). All other endoscopes, not taken from a storage cabinet, must be cleaned and
disinfected prior to use. It is the responsibility of the nurse in charge to report any breaches of this process to the matron.

**6.46.4 CJD / v CJD**

Current methods of endoscope disinfection are unable to destroy the abnormal prions that are the causative agents of transmissible spongiform encephalopathy (TSE) commonly known as CJD or vCJD.

Risk assessment and identification of those at risk is essential prior to the endoscopy procedure being undertaken. A single question of “have you ever been notified that you are at risk of CJD/ vCJD?” should have been asked of all those undergoing endoscopic procedures.

Additionally, all at risk plasma recipient cases known to the Newcastle Hospitals Trust have been identified as at risk within the Trust e Record documentation.

In order to decrease the risk of transmission of TSEs through endoscopic procedures, additional precautions for the decontamination of flexible endoscopes used in all patients with definite, probable or possible CJD/vCJD and in those identified as at risk of developing CJD/vCJD is required. Prior to proceeding with a procedure in these circumstances reference must be made to the Policy for the Control of Transmissible Spongiform Encephalopathies (TSEs), including Creutzfeldt-Jacob Disease (CJD), in the hospital and community and the departmental SOP for reprocessing of these scopes. The Infection Prevention and Control Team and Endoscopy Matron should be contacted prior to a procedure being undertaken wherever possible. Refer to the policy for **Control of Transmissible Spongiform Encephalopathies (TSE’s), including Creutzfeldt-Jacob Disease (CJD)**.

**6.47 Laryngoscopes**

Blades and handles for single patient use and then sent for reprocessing to Sterile Services Department.

Refer to Trust guidelines for further information[^16]

**6.48 Fire Prevention**

A surgical fire has the potential to occur in any setting where clinically invasive procedures are performed due to the abundance of the three elements – heat, fuel and oxygen that are required for fire or explosion to occur. Heat sources include high speed drills, defibrillators, lasers and electro surgery devices, fibre-optic light sources and cables. Alcoholic skin preparations provide a fuel source if not applied correctly and oxygen concentration administered under surgical drapes can also be a risk.

[^16]: Cleaning and Disinfection of Endoscopes Policy
A risk assessment should be undertaken for head and neck operations where there may be an oxygen enriched atmosphere underneath the drapes.

The use of diathermy in tracheostomy may cause a fire hazard and is best avoided. Theatre staff should be aware that an airway fire may occur during tracheostomy / airway procedures and it is recommended that a bowl of saline is kept on the surgical instrument trolley at all times and a carbon dioxide fire extinguisher is available.

Anaesthetic gases will support combustion therefore an effective anaesthetic scavenging system must be in place and non-flammable endotracheal tubes must be used where there is a risk of damage from laser radiation.

- Management of an airway fire requires the following actions:
  - Disconnect the circuit
  - Flood the oropharynx with saline or water
  - Consider flushing saline down the endotracheal tube to extinguish an intraluminal fire.
  - Consider removing the endotracheal tube as it may be a source of continued thermal injury and toxic products.
  - Re-intubate and ventilate; intubation may be difficult due to airway swelling.
  - Perform bronchoscopy to assess the damage and look for foreign bodies e.g. pieces of tube.

Light sources can generate sufficient energy to melt, scorch or become an ignition source, especially when placed on patient drapes. Surgical drapes and swabs will burn and although fire retardants are used in some of these products this will not remove the risk of ignition. Light cables should be contained securely, away from the patient’s drapes whenever possible and the light source should be placed in standby mode when not in use.

Risk management requires commitment from all staff that must be aware of the necessity to keep fire doors closed, fire exits clear, flammable products stored safely and a nominated person should be responsible for checking alarms and fire appliances. A fire policy must be available in the department that is understood by all staff and there must be a nominated fire officer within the department each day. There should also be a fire evacuation policy and procedure that is readily accessible to staff.

**In the event of a fire:**
- If the fire alarm is activated, the person in charge must locate the fire.
- Safety of staff and patients is paramount
- All work should stop as far as reasonably practical and non-essential staff should be evacuated.
- All doors should remain closed and gas and electrical supplies should be shut down in order to contain the fire.
- If evacuation is needed, staff and equipment required should be identified to move patients to the pre-planned area.
6.49 Care of the Deceased

There is relatively little information available regarding care of the deceased patient in the perioperative environment however the following Trust policies / protocols will provide further information;

- Cadaver Bags Policy
- Care After Death Policy
- Jehovah’s Witness (Medical Treatment of)
- Organ Corneal and Tissue Donation for Transplantation Policy
- Patients Property Policy
- Religion Belief and Cultural Practices Policy

The Chaplaincy Team will be able to provide guidance about specific religious practices.

If a death occurs within the perioperative environment the person in charge must ensure that the following personnel are informed as soon as it is practicably possible, to comply with legal requirements;

- Ward and/or Critical Care staff
- Theatre Matron / deputy
- Directorate Manager

If a death occurs within the perioperative environment and it needs to be referred to the coroner,

- All drains must be left in position
- Catheters or cannulae should be closed off with a spigot
- Wounds should be covered by a dressing
- Refer to Trust policy re: use of cadaver bags, i.e. instances of infection / leakage of fluids.

It is advisable to seek advice that permission has been granted prior to removing either an endotracheal tube or tracheostomy tube if the family wish to view the body. If in doubt these should be left in situ.

Staff should ensure that all documents are complete at the time of death; this includes clear identification of the patient.

Theatre staff must be aware of and adhere to, the personal and cultural wishes of relatives as to jewellery or other artefacts remaining on the patient. These must be identified and clearly documented. The requirements of differing faiths must be taken into consideration.

Relatives should be given the opportunity to pay their last respects if this is their preference. The provision of a private waiting area for relatives in the vicinity of the operating theatre is recommended where possible. A quiet area should be made available to allow them to be alone with the deceased.

The person in charge should ensure that the deceased patient is transferred to the appropriate ward / mortuary as soon as possible following death. As a mark of respect, a nurse should escort the deceased to the theatre (suite) exit.
In the event of intraoperative death of a patient with probable, definite or possible case of CJD/v CJD, the removal of the body should follow standard infection control procedures. The deceased patient should be placed in a cadaver bag in line with Trust guidelines. An infection control notification sheet (Appendix 1 of Cadaver Bag Policy), should be completed and kept with the deceased so that it is available when required.

In situations where a critical incident occurs such as an unexpected patient death, all anaesthetic equipment, drug syringes and ampoules should be kept and moved to a secure location in case they are required for inspection. All disposable equipment including syringes and ampoules, airway devices etc should be kept in a secure box as further investigation may be required by medical equipment maintenance personnel, manufacturers and toxicologists.

6.50 Organ Donation

Organ donation is recognised as an emotive subject for perioperative staff and the transplant co-ordinator is a key figure in the organisation of organ donation and will advise on the necessary procedure at the time. The overall aim is to minimise any difficulties in the procedure so that it may be viewed as a positive experience for the families and personnel involved in the process.

Although retrieval teams are largely self-sufficient the donor theatre will need to provide certain items and equipment. This may include but is not limited to:

- Trolleys, bowls and stands
- Basic general instruments
- Gowns, drapes, swabs and sutures
- Suction and diathermy
- Large quantities of crushed ice
- Perioperative personnel.

All procedures must adhere to hospital policies and procedures as well as recognised national standards. It is important that all procedures are offered the same professionalism as any other surgical procedures. Effective communication and feedback is important to ensure that perioperative staff can identify with the positive aspects of transplantation surgery.

6.51 Tissue Donation

There are occasions when other tissue will be donated, including heart valves, bone samples and skin. In these situations the transplant co-ordinator will advise on the process of retrieval. Samples of tissue may also be taken for research but relatives consent must be obtained in accordance with legislation. This consent must be clearly recorded in the patients' notes.
6.52 Tissue Storage

Any tissue taken for storage must be stored and documented in compliance with the Human Tissue Authority according to Trust licence.

6.53 Last Offices

Once the retrieval is complete and the surgeons have closed the abdomen and chest appropriately, last offices can be performed in accordance with local policy found in The Royal Marsden Manual, Procedure Guidelines: Last Offices, on the Intranet.

The deceased patient should be prepared for a dignified transfer to the hospital mortuary with due regard to religious and cultural needs (refer to ‘Religion Belief and Cultural Practices Policy’). The wishes of the next of kin should be sought in regard to the removal of jewellery, e.g. wedding rings, rosary beads, etc. If the next of kin requests that jewellery is not removed, this should be documented in the patient valuables book and the three-part form attached to the body.

Patient identification labels must be attached around one wrist and one ankle. This must be legible and contain details of name, address, date of birth, religion and hospital number. The three-part death notification book must be completed and the relevant sections attached to the deceased and the medical notes.

7 Training

Regular training of staff is vital and a record of training and competencies should be kept for audit and compliance purposes. The staff training programme and competency must be conducted at induction and in accordance with Trust policy. Written training records must be maintained by the department.

Managers need to ensure staff are aware of and have access to policy guidelines and that the appropriate education, supervision and personal development reviews are in place to ensure safe practice.

8 Equality and Diversity

The Trust is committed to ensuring that, as far as reasonably practicable, the way we provide services to the public and the way we treat our staff reflects their individual needs and does not discriminate against individuals or groups on any grounds. This document has been appropriately assessed.

9 Monitoring

Monitoring Compliance with this policy will be monitored by the Theatre Matrons supported by the speciality Sisters / Charge Nurses and reported to the Directorate Manager who from analysis of Datix incident reports relating to safeguarding invasive procedures will provide a report to the Clinical Governance and Quality
The report will identify any areas for improvement in the form of actions and these will be monitored by the committee until all actions are completed.

<table>
<thead>
<tr>
<th>Standard / process / issue</th>
<th>Monitoring and audit</th>
<th>Committee</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Scrub and count practitioners are competent as per this policy</td>
<td>Audit</td>
<td>Theatre sisters</td>
<td>Matrons and Clinical Educators</td>
</tr>
<tr>
<td>ANTTT is undertaken as per this policy</td>
<td>Audit</td>
<td>Infection control nurses</td>
<td>IPCC</td>
</tr>
<tr>
<td>No swabs, instruments or needles are unintentionally retained</td>
<td>Serious Incident Review of incident reports (Datix)</td>
<td>Departmental Heads</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>All intentionally retained swabs, instruments or needles follow the intentionally retained procedure</td>
<td>Datix Incident Reporting &amp; Review</td>
<td>Departmental Heads</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>Digital Tourniquets are used as per policy</td>
<td>Audit</td>
<td>Theatre Sisters</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>Count Procedure is undertaken as per policy</td>
<td>Audit</td>
<td>Theatre Sisters</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>W.H.O. checklist is completed as per policy</td>
<td>Audit</td>
<td>Theatre Sisters</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>Sterility of Trays and containers are checked and maintained as per the policy</td>
<td>Audit</td>
<td>Theatre Sisters</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>Any deviations from procedure are reported and reviewed as per policy</td>
<td>Datix Report</td>
<td>Theatre Matron</td>
<td>Theatre User Group</td>
</tr>
<tr>
<td>Missing Instruments are followed up as per the policy</td>
<td>Review Datix Report</td>
<td>Theatre Matron</td>
<td>Theatre User Group</td>
</tr>
</tbody>
</table>

10 Consultation and review

This policy has been reviewed in consultation with the Theatre User Group, Perioperative Matrons and Clinical Educators and will be reviewed on a three yearly basis, unless evidence is presented that requires review sooner.

11 Implementation and Review (including raising awareness)

This policy is a revision of a previous safeguarding Invasive Procedures; this revised policy will be introduced and awareness raised through the Theatre User Group, Directorate Communication meetings, Senior staff and Departmental staff meetings.
References

- AfPP 20011 Standards and Recommendations for Safe Perioperative Practice
- British Thoracic Society Guidelines on Diagnostic Flexible Bronchoscopy. Thorax 2001; 56 (Suppl1) i1-i21
- British Standards Institute 1990 Specifications for sharps Containers BS 7320 London BSI
- British Standards Institute 1987 Specification for Active anaesthetic Gas Scavenging Systems BS 6834 London BSI
- British Standards Institute 1994a Radiation safety of Laser Products: equipment classification, requirements and user’s guide. EN 60825-1 London, BSI
- British Standards Institute 1994b Specifications for Filters and Equipment used for Personal Eye Protection Against Laser Systems BS EN 207 London, BSI
- Control of Substances Hazardous to Health Regulations (HMSO 2002)
- Department of Health 2009 reference Guide to consent to examination or treatment London, DH
- Department of Health 2001b Reference Guide to Consent for Examination, Treatment or Care London, DH
- Department of Health 1998 Guidelines for Clinical Health Workers: protection against infection with blood borne viruses London, DH.
- Health and Safety Executive 1997 The Health and Safety (Young Persons) Regulations London, HSE Books
- Health Professions Council (HPC) 2003 Standards of conduct, performance and ethics (Revised 2008)
• Health Technical Memorandum 2025 (replaced by HTM 03-01) Specialised ventilation for healthcare premises Part B: Operational management and performance verification (DH 2007a)
• Hospital Infection Society 2002 Behaviors and Rituals in the Operating Theatre
• HMSO 1987 Consumer Protection Act Norwich, the Stationery Office
• HMSO 1990b Environment Protection Act Norwich, the Stationery Office
• HMSO 1992b Controlled Waste Regulations S1 1992/588 Norwich, the Stationery Office
• HMSO 1998c Human Rights Act London, the Stationery Office
• Keegan-Doody M 2005 Walk or Be Driven? A study on walking patients to the operating theatre British Journal of Perioperative Nursing 15 (12) 529-536
• Needle-stick Injuries and Blood Borne Virus Exposure: Code of Practice
• NMC 2004 The Code “Standards of conduct, performance and ethics for nurses and midwives”. (Revised 2008)
• NPSA 2007 “Standardising wristbands improves patient safety”
• NPSA/2010/RRR011 “Checking pregnancy before surgery”
• NUTH (2014): Preparation of Medical Records for an Outpatient Clinic. Available at: http://nuth-vintranet1/cms/Portals/0/Applications%20eRecord/SOP's/SOP000005%20Preparation%20of%20Medical%20Records%20for%20an%20Outpatient%20Clinic.doc.

13 Associated documentation
• Administration of Blood Products Procedure
• Cadaver (Body) Bags for the Deceased Patient Policy
• Care After Death Policy
• Check List Alert Signs
• Cleaning and Disinfection Procedure
• Cleaning and Disinfection of Endoscopes Policy
• Clinical Record Keeping Policy
• Clinical Recordings of Patients: Policy on Confidentiality, Consent, Copyright and Storage
• Collection and Delivery of Blood Products from Blood Transfusion Laboratory to Clinical Areas.
• Consent to Examination or Treatment Incorporating the Mental Capacity Act 2005
• Control of Infection in Healthcare Workers
• Control of Transmissible Spongiform Encephalopathies (TSE’s), including Creutzfeldt-Jacob Disease (CJD)
• Correct Site Surgery Theatre Protocol
• Count Procedure
• Dress and Appearance Policy: Appendix 3 Uniform standard – Theatre Dress
• Guidelines for Principles of Safe Practice with Reference to Surgical Patients with Body Piercing
• Hand Hygiene Policy
• Healthcare Acquired Infection: Prevention and Control Strategy
• Infection Control Practice in the Operating Department
• Jehovah’s Witnesses (Medical Treatment of)
• Medical Device Management Policy
• Moving and Handling Policy
• Moving and Handling the Bariatric Patient Policy
• Organ Corneal and Tissue Donation for Transplantation Policy
• Patient Identification Policy
• Patient’s Property Policy
• Personal Protective Equipment Policy
• Pre-operative Marking Policy
• Policy Regarding the Provision of Repairs to Teeth Damaged During Treatment within the Trust
• Protocol for Positioning Patients Legs in Stirrups for Longer than two hours
• Religious, Belief and Cultural Practice Policy: Meeting the Needs of patients and Carers
• Reporting Deaths to the Coroner
• Sample Acceptance and Rejection Policy
• Sample Acceptance and Rejection Policy Quick Reference Guide
• Standard Precautions
• Surgical Scrub, Gown and Glove Procedures
• Theatre Protocols: Moving and Handling
• Transport of Clinical Specimens Policy
• Waste Management Policy
• WHO Surgical Safety Checklist (NUTH version)
Appendix 1

The Newcastle Upon Tyne Hospitals NHS Foundation Trust

Count Competency Assessment Tool

Staff member: ___________________________  Designation: ___________________________

Assessor: ___________________________  Designation: ___________________________

<table>
<thead>
<tr>
<th>Performance</th>
<th>Date achieved</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify appropriate times for the surgical count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Performs an audible count of instruments and single use items with the scrub practitioner as per Trust Count Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Demonstrate correct recording of counted items on count board, written documents and computer data systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Demonstrate correct procedure for adding supplementary items to the surgical count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Demonstrate correct handling of contaminated items in line with Trust standard precautions for infection control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Demonstrate correct use of count bags</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Demonstrate the procedure for recording a correct count, an incorrect count and an intentionally incorrect count (e.g. swabs/packs/gauze roll as packing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Can explain the procedure and the rationale for weighing contaminated swabs and packs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Date achieved</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Has read and understood the Trust Count Procedure Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Understands and applies the Trust Standard Precautions for Infection Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Can identify procedures that may require the weighing of contaminated swabs and packs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Understands the consequences of incorrect counting procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Can explain how the integrity of the instruments are checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Can describe the process for documenting retained items / swabs post procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Describe the appropriate action to take in the event of a miss count?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Approach</th>
<th>Date achieved</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Maintains a professional approach and attitude throughout the whole procedure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Ensures the theatre team is quiet all music is turned down to facilitate the count process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Action agreed:</td>
<td>Review date:</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>--------------</td>
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<td></td>
</tr>
</tbody>
</table>

**Referral to manager - to be used when an action plan has not resulted in competence being achieved and further action is necessary.**

**Reason for referral:**

________________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Signatures to confirm that full competence is achieved:

Staff member: ___________________________ Date: ___________________________

Assessor: ___________________________ Date: ___________________________
### Operating Theatres

**PATIENT COLLECTION SLIP**

<table>
<thead>
<tr>
<th>Theatre Number</th>
<th>Date</th>
<th>Session Number</th>
</tr>
</thead>
</table>

#### PATIENT DETAILS / Addressograph Label

| NAME | | |
| PATIENT I.D NUMBER | | |
| WARD | | |
| AGE / D OB | | |

#### COLLECTION DETAILS

| PERSON SENDING | | |
| ORDERLY | | |

Please circle method of transport as appropriate:

- WALK
- TROLLEY
- WHEELCHAIR
- BED

#### TIMES

<table>
<thead>
<tr>
<th>TIMES : PLEASE USE 24 HOUR CLOCK</th>
<th>13.1.1.1.1 TIME</th>
<th>NAME (PRINT)</th>
<th>SIGNATURE</th>
</tr>
</thead>
</table>

- TIME PATIENT SENT FOR:
- TIME ARRIVED IN Pre-Op
  - **HANDED OVER BY** (Ward Escort)
  - **RECEIVED BY** (Reception staff)
- **TIME TAKEN TO ANAES. ROOM**
  - (Anaesthetic Assistant)

#### Patient Property Record

Tick ✓ appropriate box(s) to indicate property that is accompanying patient through theatre, sign and then staple this form onto the checklist. Property should be placed in a clear plastic bag and tied securely before accompanying patient to theatre areas.

| DRESSING GOWN | Pre-Op / Reception | Anaes. Theatre | Recovery | Ward |
| SLIPPERS / SHOES | | | | |
| DENTURES | | | | |
| SPECTACLES | | | | |
| UNDERWEAR | | | | |
| OTHER (PLEASE LIST) | | | | |

Name of Person Receiving Property

**PLEASE PRINT**
# WASTE SEGREGATION AND DISPOSAL CHART

## Clinical Waste Management Schematic

### Appendix 3

**The Newcastle upon Tyne Hospitals NHS Foundation Trust**

---

### Table: Waste Segregation and Disposal

<table>
<thead>
<tr>
<th>#</th>
<th>WASTE TYPE</th>
<th>ILLUSTRATION</th>
<th>PACKAGING</th>
<th>COLLECTION CONTAINER</th>
<th>DISPOSAL</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RECYCLABLE WASTE</td>
<td></td>
<td>Clear bag, tied when full and adhesive audit label attached</td>
<td>Cart or Cage used for domestic waste disposal</td>
<td>Recycling</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CARDBOARD</td>
<td></td>
<td>Loose flattened cardboard</td>
<td>Cart or Cage used for domestic waste disposal</td>
<td>Recycling</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DOMESTIC GLASS</td>
<td></td>
<td>Place into a sturdy cardboard box; then tape down and write on DOMESTIC GLASS before wrapping in a clear plastic bag</td>
<td>Cart or Cage used for domestic waste disposal</td>
<td>Recycling</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CONFIDENTIAL WASTE</td>
<td></td>
<td>White confidential waste sack taped down &amp; labeled once full, or Use shredder (if available) lined with a clear plastic bag to destroy the waste before recyling</td>
<td>Dedicated Collection</td>
<td>On-site Shredding</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DOMESTIC WASTE</td>
<td></td>
<td>Black bag, tied and adhesive audit label attached</td>
<td>Cart or Cage used for domestic waste disposal</td>
<td>Energy from Waste (no longer sent to landfill)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>OFFENSIVE WASTE</td>
<td></td>
<td>Tape strip bag, seal, marked, tied with black cable tie and adhesive audit label</td>
<td>4 wheeled yellow cart tagged with TRIER STRIKE (HT) BioTrack label on the cart handle.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CONTAMINATED METAL</td>
<td></td>
<td>Grey Sharps Box all locks closed and label on lid completed.</td>
<td>Dedicated Collection</td>
<td>Contents autoclaved and metal recovered &amp; recycled.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>INFECTIONAL WASTE</td>
<td></td>
<td>Orange bag, swan necked, tied with an orange cable tie &amp; adhesive audit label, or Rigid container with orange label, peell proof lid and adhesive audit label for contained liquid waste</td>
<td>4 wheeled yellow cart tagged with OMARINE (HT) BioTrack label on the cart handle.</td>
<td>Heat Treatment</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>INFECTIONAL SHARPS</td>
<td></td>
<td>Sharps box with orange lid all locks closed and label on lid completed.</td>
<td>Dedicated Collection</td>
<td>Heat Treatment</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>MEDICINAL WASTE</td>
<td></td>
<td>Rigid container with blue leak proof lid and adhesive audit label</td>
<td>4 wheeled yellow cart tagged with RED (HT) BioTrack label on the cart handle.</td>
<td>Inincineration</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>MEDICINAL SHARPS</td>
<td></td>
<td>Sharps box with yellow lid all locks closed and label on lid completed.</td>
<td>Dedicated Collection</td>
<td>Inincineration</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>HIGHLY INFECTIONAL WASTE</td>
<td></td>
<td>Yellow bag swan necked with a yellow cable tie &amp; adhesive audit label, or Rigid container with yellow label, peel proof lid and adhesive audit label for contained liquid waste</td>
<td>4 wheeled yellow cart tagged with YELLOW (HT) BioTrack label on the cart handle.</td>
<td>Inincineration</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>ANATOMICAL WASTE</td>
<td></td>
<td>Rigid container with red leak proof lid and adhesive audit label</td>
<td>4 wheeled yellow cart tagged with RED (HT) BioTrack label on the cart handle.</td>
<td>Fast Track Incineration</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CYTOTOXIC/MICROSURGICAL WASTE</td>
<td></td>
<td>Yellow bag with purple stripe, swan necked, black cable tie &amp; adhesive audit label, or Rigid container with purple label, peel proof lid and adhesive audit label</td>
<td>4 wheeled yellow cart tagged with PURPLE (HT) BioTrack label on the cart handle.</td>
<td>High Temperature Incineration</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>CYTOTOXIC/MICROSURGICAL SHARPS</td>
<td></td>
<td>Sharps box with purple lid all locks closed and label on lid completed.</td>
<td>Dedicated Collection</td>
<td>High Temperature Incineration</td>
<td></td>
</tr>
</tbody>
</table>

---

*NOT INCLUDED: RADIOACTIVE WASTE, GM WASTE, WASTE ELECTRICALS AND OTHER ESTATES WASTE (SEE WASTE POLICY FOR DETAILS)*

---

**2013 Edition**
The Newcastle upon Tyne Hospitals NHS Foundation Trust

Equality Analysis Form A

This form must be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

PART 1

1. **Assessment Date:** 30/12/2014

2. **Name of policy / strategy / service:**
   - Safeguards for invasive Procedures: The Management of Risks Policy

3. **Name and designation of Author:**
   - Claire Winter & Sheina Baldwin

4. **Names & Designations of those involved in the impact analysis screening process:**
   - Claire Winter, Sheina Baldwin & Lucy Hall

5. **Is this a:**
   - Policy X
   - Strategy □
   - Service □

   **Is this:**
   - New □
   - Revised X

   **Who is affected:**
   - Employees X
   - Service Users □
   - Wider Community □

6. **What are the main aims, objectives of the policy, strategy, or service and the intended outcomes? (These can be cut and pasted from your policy)**

   The aim of this document is to inform and provide guidance on good practice to all staff involved and participate in invasive procedures. It will ensure that the care administered to all patients is current and informed by evidence that is consistent with local, national and international standards and recommendations.

7. **Does this policy, strategy, or service have any equality implications? Yes**

   These have been taken into consideration in the final policy document.

   **If No, state reasons and the information used to make this decision, please refer to paragraph 2.3 of the Equality Analysis Guidance before providing reasons:**


### 8. Summary of evidence related to protected characteristics

<table>
<thead>
<tr>
<th>Protected Characteristic</th>
<th>Evidence i.e. What evidence do you have that the Trust is meeting the needs of people in various protected Groups related to this policy/service/strategy – please refer to the Equality fact files available via the link below (add link)</th>
<th>Does evidence/engagement highlight areas of direct or indirect discrimination? If yes describe steps to be taken to address <em>(by whom, completion date and review date)</em></th>
<th>Does the evidence highlight any areas to advance opportunities or foster good relations. If yes what steps will be taken? <em>(by whom, completion date and review date)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Race / Ethnic origin (including gypsies and travellers)</td>
<td>Interpreting service and policy E&amp;D Training</td>
<td>Communication errors are more likely when communicating with people with limited English. Errors and misinformation can occur when working with family members. Make it explicit that interpreters should be used when gaining consent. <strong>Action</strong> Add this to the policy in 6.4.2 CW Jan 2015</td>
<td>No</td>
</tr>
<tr>
<td>Sex (male/ female)</td>
<td>Male and female practitioners are available when a practitioner of the same sex is required to promote the dignity of patients</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Religion and Belief</td>
<td>Care of the deceased is incorporated into the policy Chaplaincy service provided with links to leaders of major faiths.</td>
<td>Dignity may have religious and cultural norms. Refer to this in the policy 6.5 It is difficult for staff to be familiar with care of the deceased for all religions. <strong>Action</strong> Add contact with the Chaplaincy Team to the policy in 6.49 and amend name of religious belief policy CW Jan 2015</td>
<td>No</td>
</tr>
<tr>
<td>Sexual orientation including lesbian,</td>
<td>Evidence files used to raise awareness of the impact of discrimination on the</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>gay and bisexual people</strong></td>
<td>mental health of LGB people through</td>
<td></td>
<td></td>
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<td>---</td>
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<td></td>
</tr>
</tbody>
</table>
| **Age** | Dementia friendly wards  
‘You’re Welcome Accreditation’ in  
children and young people’s services | Older people with dementia and  
children and young people may  
need additional support.  
**Action** Add this to the policy in 6.1  
CW Jan 2015 | No |
| **Disability – learning difficulties, physical disability, sensory impairment and mental health. Consider the needs of carers in this section** | BSL Signers and Deaf Blind Guides are provided in the Trust  
LD Liason Nurse | People with a disability particularly sensory and learning disability may need information in other formats and additional support.  
Carers and advocates may also need to be involved  
People with a physical disability may not be able to wear a wrist band  
**Action** Add a discussion and explanation to patients and carers the policy in 6.1 and parents  
carers accompanying patients in 6.5  
CW Jan 2015 | No |
| **Gender Re-assignment** | Gender Identity sub group to identify and address needs in relation to Gender Identity | People who have undergone gender reassignment surgery or  
are living in the gender opposite to  
their birth gender may be  
particularly sensitive about privacy and dignity in relation to exposure of their body. They may also have additional notes referring to them as their birth gender.  
**Action** Add section to the policy in 6.2.1  
CW Jan 2015 | No |
| **Marriage and Civil Partnership** | N/A | No | No |
9. Are there any gaps in the evidence outlined above. If ‘yes’ how will these be rectified?

No

10. Engagement has taken place with people who have protected characteristics and will continue through the Equality Delivery System and the Equality Diversity and Human Rights Group. Please note you may require further engagement in respect of any significant changes to policies, new developments and or changes to service delivery. In such circumstances please contact the Equality and Diversity Lead or the Involvement and Equalities Officer.

Do you require further engagement  Yes  No X

11. Could the policy, strategy or service have a negative impact on human rights? (E.g. the right to respect for private and family life, the right to a fair hearing and the right to education?)

No

PART 2

Signature of Author
Claire Winter & Sheina Baldwin

Print name

Date of completion
30/12/2014
(If any reader of this procedural document identifies a potential discriminatory impact that has not been identified, please refer to the Policy Author identified above, together with any suggestions for action required to avoid/reduce the impact.)