Perioperative – Surgical Count Procedure

1. Guiding Principles

The purpose of this procedure is to provide clear guidance to perioperative clinical staff on the management of accountable surgical items, in particular, how they are handled and documented before, during and at completion of a surgical procedure, in order to minimise the risk and event of an item being unintentionally retained within a patient.

2. Procedure

All accountable items used during a surgical procedure must be handled in a manner that reduces the risk of the item being unintentionally retained. Accountable items used within surgical procedures have inadvertently been retained within patients during surgery. Hence, it is necessary that all surgical / procedural team members collaborate and communicate to ensure that all accountable items are counted and documented within the surgical count record as part of the surgical procedure to reduce the risk of a retained item.

In the event that the surgical team decide to leave an accountable item in situ (retained intentionally), this must be accounted for and documented correctly.

2.1 Key considerations

A count will be performed and documented for all procedures where accountable items are used.

- Nursing Perioperative Pathway (refer to regional MR or TRIM links)
- Operation Count Record. (refer to regional MR or TRIM links)

To ensure accountability and prevent differing practices, the following are the only recognised surgical counts to be undertaken in the Operating Theatres (see section 2.2 for details):

- Full count
- Routine count
- No count.

All accountable items used during an operative procedure must be removed from the patient, unless retained intentionally as part of the procedure.

The Instrument and Circulating Nurse must not be hindered in the process of accounting for all items opened onto the sterile field at the beginning, during and/or on completion of the surgery/procedure.

Perioperative personnel must escalate any disruptions that prevent staff compliance with this policy and procedure (see Appendix 1 for details of the escalation process).

2.2 Full and routine counts

Full Count
A full count is to be carried out:

- prior to commencement of procedure
- at commencement of closure of each body cavity (any space in the human body that contains internal organs)
- at commencement of closure of skin.

The minimum requirement for the surgical count includes but is not limited to all accountable items as listed on the operation count record. A list of accountable items in addition to those listed on the operation count record (but not limited to) is available for staff to refer to (See Appendix 2).

Routine count

- A routine count is undertaken for procedures that do not involve a cavity but may involve layers of tissue.
- As a minimum, a routine count is carried out at the commencement of procedure and on closure of skin.
- The accountable items to be counted in the routine count are highlighted in bold print on the operation count record.

2.3 Authorised local variations

Minimally invasive procedures:

May complete a minimum of initial and final count where cavity and skin closures are concurrent.

Rationale: cavity is classed as the skin only as there is only a puncture site.

Orthopaedics grandfather clause:

Loan trays, screw and plate trays are currently exempt from the count process.

Rationale: due to the nature of the types and number of trays utilised within the Orthopaedic specialty, there is currently no process that allows timely counting of or documentation of these types of trays. The Instrument and Circulating Nurses can include site specific practices that include counting instruments only and items like pins and saw blades.

2.4 No count

In procedures where no accountable items are used, and no count is required (e.g. closed reduction of a fracture) the words '**no count required'** must be written in the operation count record and signed by the nurse(s) involved.

2.5 Responsibilities for counts

- The same two nurses must be present and responsible for all counts during an operation.
- The Instrument Nurse responsible for the count must not act in the additional role as a surgical assistant in surgery except for emergency situations: In this case they must not be performing the role of the Instrument Nurse undertaking the count.
- The decision to replace a nurse, apart from illness, must be made by the floor coordinator in consultation with the nurses involved. At no time is patient safety to be compromised by a change of nursing staff.
- Should it become necessary to relieve the Instrument or circulating nurse temporarily, the relieving circulating nurse may add items to the operation count record and initial each added item. They must sign and document the time of the relief period in the operation count record, in the additional theatre nursing notes and enter their name into the Theatre Management System (TMS).
- If the instrument nurse requires relief during a procedure and will be returning to the role (i.e. lunch relief during a long procedure) only the circulating nurse may relieve. This is to maintain accountability of the count process.
- Should it become necessary to replace the Instrument or circulating nurse permanently during a procedure, a complete count must be conducted, recorded and signed by the incoming and outgoing Nurses on the operation count record.
- Documentation of the changeover count is identified on the operation count record by drawing a line in the appropriate column, writing “changeover count” and entering the total number of each accountable item. The time of the changeover period is documented on the operation count record and a note must be made in the additional nursing notes of any items that remain inaccessible for counting purposes.

2.6 Preparation and management of accountable items

Sponges [Pack]

- Must be x-ray detectable.
- Must never be cut.
- Must not be used as dressings on surgical wounds.
- Must not be used to enclose specimens or instrumentation removed from the theatre.
- Packs with no x-ray detectable strips which are not part of the surgical count are not to be utilised.

Swabs [Raytec©]

- Must be x-ray detectable.
- Must never be cut.
- Must not be used as dressings on surgical wounds.
- Must not be used to enclose specimens or instrumentation and removed from the theatre instead:

- Plain gauze swabs with no x-ray detectable strips which are not part of the surgical count may not be utilised.
- Green gauze swabs must only be used for anaesthetic purposes
- Dressing gauze that is non x-ray detectable must only be used for dressings.

These must not be handed to the Instrument Nurse before the conclusion of the final count

Pharyngeal packs (Throat packs)
- Must be x-ray detectable.
- Insertion and removal must be documented on the operation count record and/or TMS
- Time in and time out must also be documented on the white board and communicated to the entire surgical/procedural team.
- The entire surgical/procedural team is responsible for managing pharyngeal packs.

Packing Gauze
- Must be x-ray detectable.
- Must be documented on the operation count record when added during a procedure.
- If cut and separated into pieces, must be counted individually and documented on the operation count record.
- Where used as a dressing, must be documented in the theatre nursing notes and electronic patient record.

Small dissecting swabs and cotton wool
- If small dissecting swabs (e.g. patties; eye strolls) require division, they must be counted as individual pieces and recorded on the operation count record.
- Small segments of cotton wool used during surgery are counted as individual pieces (balls) and recorded on the operation count record.
- Cotton wool must not be used for surgical skin preparation.

Tapes and vessel loops
- When these items require division, they must be counted as individual items and recorded on the operation count record.

Instruments, needles and other accountable items:
- Accountable sharps items that break during a procedure such as blades and injection needles must be recorded on the operation count record.
- If a needle or instrument is broken, ensure all pieces are retrieved. If pieces cannot be retrieved, refer to 2.12 Procedure where count accuracy doubt exists.

2.7 Procedure at operation

- A minimum of two (2) counts will be performed and recorded on the operation count record for all procedures unless no count is recorded.
- The count must be carried out by two Nurses, one of whom will be a Registered Nurse.

- Whenever possible the allocated Circulating Nurse remains in the allocated theatre until final count is complete.
- The Instrument Nurse verbally notifies the Surgeon regarding the outcome of each closure count.
- Between patients and at the end of each procedure, used accountable items are cleared from the operating room and discarded appropriately.
- The initial count is performed immediately prior to the commencement of the operation.
- Accountable items must remain intact in their inner packaging until the initial count.
- Additional accountable instruments (steripeel™) added during the surgical count must be documented on the operation count record.
- Accountable items added during a procedure by a relieving Nurse must be counted and documented in the operation count record. The relieving nurse initials against each item added. The relieving Nurses name and relief period must be added to the count sheet and TMS.
- Additional counts may be performed and recorded at the discretion of the Nurses performing the count.
- Additional counts are recommended for long procedures. Often only selected items are counted for additional counts.
- A separate count must be performed on commencing closure of each body cavity.
- At commencement of closure of each body cavity the Instrument and Circulating Nurse must ensure all accountable items are counted as per the operation count record at first, second and final count.
- A final count must be performed and recorded in the final count column of the operation count record at the commencement of skin or equivalent closure.
- The Instrument and Circulating Nurses responsible for the count must sign the operation count record after the final count is complete.
- Written errors on the operation count record must be scored out with a single line and initialled. The Instrument Nurse is informed of written errors.

2.8 Instrument tray lists utilising Tracking and Tracing Systems

- Instrument tray lists will be utilised as part of the surgical count and added to the count sheet.
- The Instrument and Circulating Nurse must ensure an instrument tray list is present on each instrument tray and that they have been signed by the Sterilisation Technician or authorised person.
- The tray list is immediately handed to the Circulating Nurse and a patient UMRN is recorded on the list.
- The tray list assists with the tray count process and ensures that the correct instruments are returned to each individual tray at the end of the case. This list is returned to Central Services Sterile Department (CSSD) with any notations of discrepancies and the tray or instrument repairs required.
- All instrument tray lists are signed by the Circulating Nurse and the date and theatre number documented.
- One (1) copy of the list is returned to CSSD with the instrument trays.

2.9 Counting for simultaneous and sequential procedures

Simultaneous procedures (more than one surgical/procedural team undertaking a procedure at the same time).

Nursing team	Procedure Set up	Operation Count Record Requirements
One (1) instrument and Circulating Nurse		One (1) operation count record used
Multiple teams of instrument and Circulating Nurse (2 or more)		Separate operation count record used by each instrument and circulating nurse team
Multiple teams of instrument and Circulating Nurse (2 or more)	Close proximity of surgical sites makes it difficult to separate each team's accountable items.	One (1) operation count record used.

Sequential procedures (two [2] different procedures on the same patient, i.e. undergoing a two (2) stage procedure requiring two (2) set ups).

Theatre	Procedure Set up	Operation Count Record Requirements
Theatre cleared between each surgical procedure	New set up used	Separate operation count record used for each procedure
Theatre **not** cleared between surgical procedures	Same set up used. Final count of procedure one (1) completed prior to commencement of procedure two (2).	Separate operation count record used for each procedure. Final count of procedure one (1) carried over to become the first count of procedure two (2)
Theatre **not** cleared between surgical procedure	Same set-up used Final count of procedure one (1) **not** complete prior to procedure two (2) commencing	Separate operation count record used for each procedure.

2.10 Counting techniques

- Only open the minimum number of items required for the procedure.
- Maintain accountable items in original packaging until counted.
- Both nurses count aloud, simultaneously, watching the count process.
- Each accountable item must be completely separated during the counting procedure to ensure adequate visualisation by both nurses.

- Check the integrity of the x-ray detectable marker and make the marker visible.
- On the initial count and when added during the procedure, count sponges and swabs into separate groups of five (5).
- Do not place sponges and swabs on top of or with already counted sponges and swabs until verification of correct numbers in the packet.
- Instruments are counted as single devices or as assembled.
- If any interruption occurs during the count procedure, recommence count of that item.
- Following the initial count, all the articles must remain in the operating room until the operation is completed and all the counts have been performed and deemed correct.

In the event of faulty packaging resulting in an incorrect number of accountable items, the entire package must be removed from the operative field, bagged and marked with number of items and placed to one side in the operating room while the procedure is in progress.

- The items in the packaging are not included in the count.
- As per Infection and Prevention Control practices, do double bag contaminated items for follow up.
- Retain the original packaging (with lot number where possible). Give the packaging to the clinical nurse/Nurse Manager for follow up.
- Where possible return the item to the manufacturer to ensure the implementation of appropriate tracking processes.

2.11 Progressive counting technique

- X-ray detectable swabs and sponges must be separated and opened during progressive counting procedures to ensure adequate checking by both Nurses.
- If a discrepancy in the closure count exists all bags must be opened, and their contents recounted.
- After the initial count, accountable items must be counted in one direction beginning with items off the sterile trolley and finishing at the sterile field.
- Counting away of x-ray detectable gauze products must be performed as per infection prevention and management, and occupational health and safety principles.
- X-ray detectable swabs and packs are counted off twice, in groups of five (5) and bagged immediately from the sterile trolley by the Circulating Nurse only. The bagged item is then sealed and quantity within written on the outside of the sealed bag (quantity must be as per original packaging).

2.12 Procedure where count accuracy doubt exists

Refer to Appendix 3: for a flow chart outlining the escalation process for missing accountable items.

Immediately report any count discrepancy to the Surgeon, Anaesthetist and the Floor/Shift Coordinator and undertake a thorough visual/manual search of the perioperative environment.

If an x-ray detectable item is still missing after a thorough search an x-ray must be taken prior to the patient leaving the operating room.

- Document the x-ray results in the operation count record.
- If using an Image Intensifier and the missing x-ray detectable item is not located, consider taking a plain film x-ray.
- For missing micro needles which are not x-ray detectable it may be necessary to utilise a microscope and/or magnetic roller to locate the missing needle.

For immediately and retrospectively identified discrepancies during counts:

- report the count discrepancy, subsequent action and outcome to the Floor/Shift Coordinator/ Clinical Nurse Specialist/ Nurse Unit Manager
- document the details above and action taken on the operation count record and TMS.
- complete a Clinical Incident Management (CIMS) form including all details.

2.13 Management of issues/non-routine situations

Situations where a count is not performed (i.e. situations preventing adherence to standard procedures such as a critically ill patient, unexpected deterioration of the patient or profuse bleeding):

- notify the surgeon
- undertake a count as soon as practicable
- perform an x-ray postoperatively to ensure accuracy of the count where there is credible concern it is not correct.
- the instrument and circulating nurses ensure that the outcome is documented in the operation count record and TMS

When a second operation count record is required for the continuation of a count:

- label the second sheet with the patient's details
- write 'count continued' on the sheet
- number the pages sequentially
- staple the second record to the first one.

When accountable items are deliberately left in a patient under the direction of the Surgeon or Anaesthetist, e.g. packs for haemostasis, vaginal packs:

- record items and their location on the operation count record and TMS.
- ensure totals in the final count column are minus the amount left in the patient
- clear document this in the patient record and ensure it forms part of the post-operative orders (removal).

When accountable items deliberately left in a patient are later removed in a separate procedure:

- record the items' removal on the new operation count record only
- ensure totals in the final column include the number of items removed.

If packets of swabs or packs are dropped or contaminated after completion of the first count:

- count these items and include them in the count.

When drains are shortened before insertion or after insertion this needs to be recorded and documented into the Theatre Management System (TMS).

3. Definitions

Accountable Items	Accountable items are instruments and other consumable items, which by their nature are at risk of being retained in the patient and require mandatory documentation. • Absorbent items including: – packs, raytec dabs, swabs, sponges, patties, peanuts, cotton wool balls, gauze strip, ribbon gauze, cotton wool balls, eye swabs, spears and pharyngeal packs. • Sharps items including: – needles (eyed, atraumatic, injection, blades, diathermy tips) drill bits. • Vascular items: – loops, clamps, snares /snuggers, tapes, ligaboots (rubber shods), bulldogs, background. • Retraction devices: – rubber bands, retraction blades, hooks. • Instruments: – Reusable Medical Devices, screws, detachable instrument parts, connectors. • Dental adjuncts including: – bite blocks, dental rolls, wedges, burs, pledgets, wedges, cotton balls. • Tourni-Cots / digit tourniquets.
Body Cavity	Any space in the human body that contains internal organs.
Instrument nurse	The nurse who must assume primary responsibility and accountability for all items used during the surgical procedure. The instrument nurse may be either an enrolled or registered nurse. In the event that the instrument nurse is an enrolled nurse, the circulating nurse must be a registered nurse. (Sometimes referred to as the scrub nurse).
Circulating Nurse	The nurse that prepares for, oversees and documents a surgical procedure from outside the surgical fields. The circulating nurse monitors the perioperative environment and manages associated risks. (Sometimes referred to as the scout nurse).
Pharyngeal Pack	A length of rolled gauze, which must contain an x-ray detectable marker, and is inserted into the pharyngeal area of the oral cavity (also commonly known as a throat pack).

Surgical count	The process of counting all accountable items prior to, during and at the completion of surgery or procedures that have the potential to be retained in a patient.

4. Roles and Responsibilities

All Staff are required to work within policies and guidelines to make sure that WACHS is a safe, equitable and positive place to be.

5. Compliance

Failure to comply with this policy may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the Integrity Policy Framework issued pursuant to section 26 of the *Health Services Act 2016* and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

6. Records Management

All WACHS clinical records must be managed in accordance with Health Record Management Policy.

7. Evaluation

Compliance with the policy and procedure will be monitored via routine clinical incident review processes (also see Appendix 1).

Performance monitoring:

- On commencing employment in the Operating Theatres nursing staff will complete a Surgical Count Skill assessment.
- Clinical practice will be audited using the ACORN PATS Audit.

Monitoring of compliance with this document is to be carried out by Theatre Management Committee and onto Perioperative Nursing Advisory Committee with review of the ACORN PAT audits.

Review of incidences of unintentional retained surgical items will be carried out regularly by Safety and Quality committees.

8. Standards

National Safety and Quality Health Service Standards – 5.06, 5.07

9. Legislation

Health Services Act 2016 (WA)

10. References

- ACORN Standards for Perioperative Nursing in Australia Ed16 2020 Accountable Items.
- National Safety and Quality Health Service Standards- Preventing and controlling healthcare associated infections October 2012.

11. Related Forms

Nursing Perioperative Pathway (refer to regional MR or TRIM links)
Operation Count Record. (refer to regional MR or TRIM links)

12. Related Policy Documents

WACHS Surgical Safety Checklist Policy

13. Related WA Health System Policies

MP 0134/20 - National Safety and Quality Health Service Standards Accreditation Policy

14. Policy Framework

Clinical Governance, Safety and Quality

This document can be made available in alternative formats on request for a person with a disability

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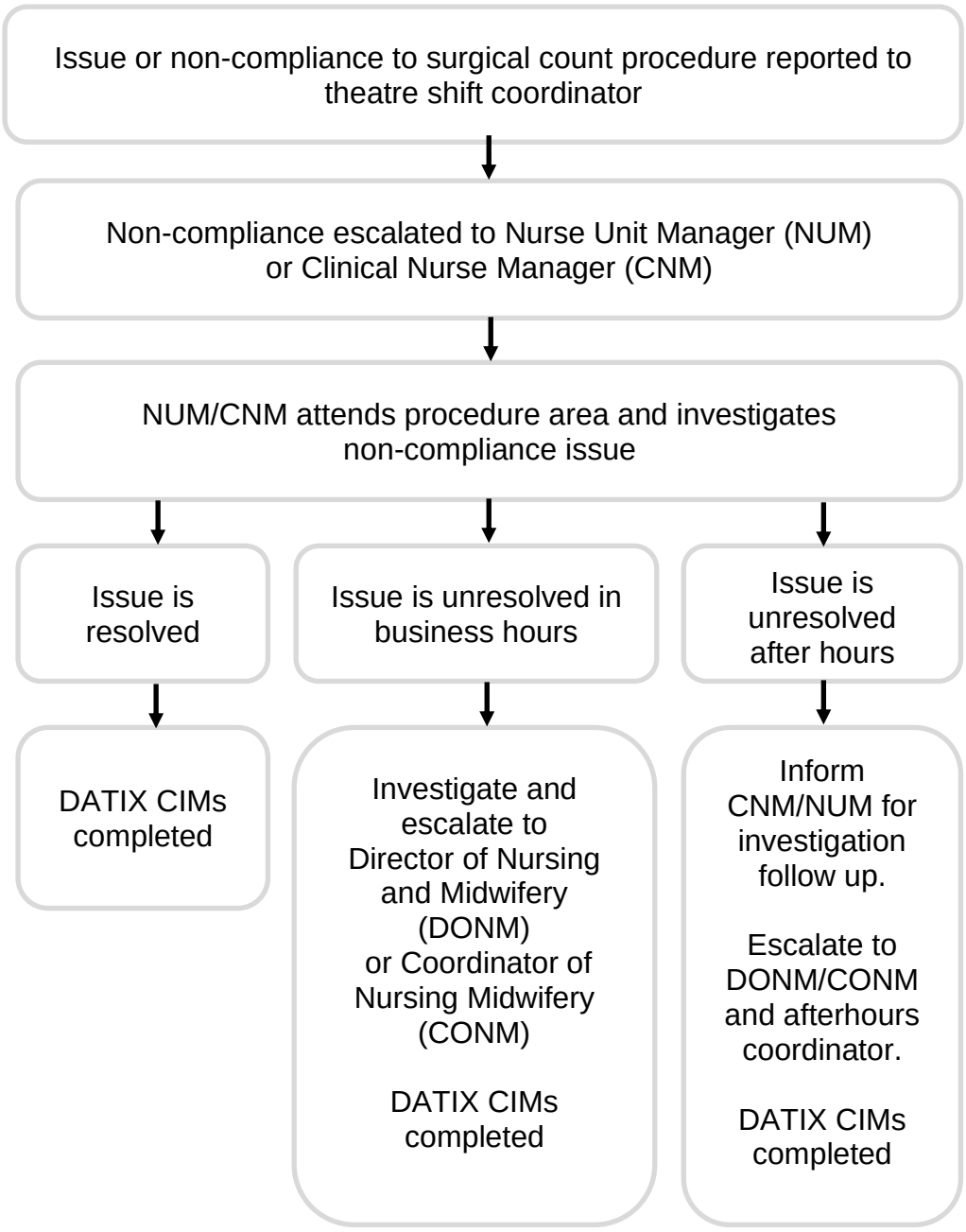
Appendix 1: Escalation process for non-compliance with surgical count procedure



Appendix 2: List of Additional Accountable Items

- Alexis Retractor – add as retractor.
- Applicators.
- Bypass bundle & Valve sutures.
- Bulldogs.
- Bite liners for tonsil gags.
- Bite blocks.
- Bodkin Pins.
- Cotton wool balls.
- Dilators.
- Drill bits.
- Eyed (Ordinary) Needles.
- Hemolok applicators.
- Jumbo swabs.
- Laparoscopic diathermy tip and contact pin.
- Ligaclip applicators.
- Lonestar hooks.
- Mouthguard.
- Neuro patties.
- Neuro gauze.
- Pins.
- Probes.
- Penrose Drain - add as “Tape” if used as sling.
- Raney clips.
- Reels.
- Retractors with blades/multiple parts to be added separately (Omnitract, Thompson, Balfour Doyen, Bookwalter, Lonestar, Finechetto).
- Ribbon gauze.
- Rubber bands.
- Rubber bungs.
- Shunts.
- Scratch pad.
- Shods.
- Spigot.
- Spears.
- Snuggers.
- Tourni-Cots (all sizes).

Appendix 3: Escalation process for missing accountable items