Preventing retained surgical items – surgical count policy

Outlines our multi-disciplinary team approach to the prevention of retained surgical items in patients undergoing surgical procedures at SCH facilities.

Who is this policy for?

All Southern Cross Healthcare (SCH) perioperative/procedure room teams, with guidance to perioperative nurses.

Why is this important?

Risk factors that contribute to an RSI can exist even in the smallest of incisions. Compliance with this policy will ensure all items used during invasive surgical procedures are accounted for, and eliminate the risk of patient injury through inadvertent retention of a foreign object.

Contents

- Roles and responsibilities
- Standardised surgical count practices
    - Staffing
    - General principles
    - Instrument count
    - Instrument count - exceptions
- Surgical count process
- Documentation
- Incorrect surgical count
- Definitions

Roles and responsibilities

All perioperative team members are responsible for preventing RSIs.

Only SCH perioperative staff with appropriate training may participate in the surgical count - one staff member **must** be a Registered Nurse.

A preregistration nursing student (including Competency Assessment Programme student) may participate in the surgical count with a SCH trained Registered Nurse.

All Nursing Council of New Zealand direction and delegation principles shall be adhered to.

Any Agency Registered Nurses required to participate in any surgical count should be given the opportunity to be familiar with this policy and only conduct a surgical count with a Registered Nurse employed by SCH.

Role	Responsibilities
Instrument/scrub nurse	Initiates the surgical count process and communicates to the surgical team that it is about to commence: • Visually verifies and audibly counts all countable items with circulating nurse. • Maintains an organised sterile field and is aware of the location of all countable items for the duration of the procedure. • Ensures all sharps and needles are used in appropriate sharp containers and neutral zone applied where possible. • Checks integrity and completeness of all items before use and immediately after return from the surgical field. • Communicates the surgical count status to the surgeon at each stage of closing and completion. • Speaks up when a discrepancy occurs notifying the surgeon and surgical team. • Ensures that all instruments are accounted for, assisting inventory purposes, and preventing potential RSI. • Communicates any issues relating to damage/ integrity of instrumentation following hospital specific process (eg red tags for damaged to instruments).
Circulating nurse	Leads the surgical count once the instrument/scrub nurse has initiated the process: • Ensures all countable items are removed from the operating room from previous patient and count board/sheet is wiped clean. • Visually verifies and audibly counts all countable items with the instrument/scrub nurse and documents on count board/sheet.

Role	Responsibilities
	• Ensures count board/sheet is visible to the instrument/scrub nurse at all times.
	• Documents instrument counts on pre-printed instrument count sheets or count board.
	• Ensures nothing is removed from the operating room after the initial baseline surgical count has been completed (eg rubbish and linen bags).
	• Records on count board/sheet items placed in the wound/cavity with time in and time removed.
	• Retrieves items dropped from the sterile field and places in a designated area, and communicates action to surgical team.
	• Audibly communicates the count status at each stage of closing and at sign out (eg 'final count correct').
	• Documents surgical count status in the Intra Operative form.
	• Documents actions taken where there is a discrepancy in the surgical count in the Intra Operative form (eg X-ray). Includes that the event has been reported to OR Manager and event reporting form completed on SafeHub.
Anaesthetic assistants	• Verify and communicate to the circulating nurse to record on the count board/sheet the insertion **and** removal of anaesthetic devices (eg throat packs, bite blocks and other similar devices).
	• Communicates to the circulating nurse when using sutures or any countable items for anaesthetic procedures (eg sutures/blades used during central line insertion). After use the anaesthetic assistant must ensure the circulating nurse witnesses countable items being discarded into appropriate receptacles.
	• Ensures swabs used by anaesthetic team are clearly differentiated from

Role	Responsibilities
	those used by the surgical team (eg no radiopaque strip/different colour).
RN Surgical assistant	• Maintains awareness of all surgical items and their location within the wound and sterile field. • Communicates the placement of items in wound/cavity and any items dropped from the sterile field to the circulating nurse. • Speaks up when a discrepancy occurs notifying the surgeon and surgical team.
Medical specialist	• Verbally and audibly acknowledges the completed surgical count at each closure. • Communicates the placement of packed swabs in wound/cavity for circulating nurse to record on count board/sheet, including time in and time out. • Undertakes a methodical wound exploration before closing. • Participates in locating possible retained item/s following SCH policy, with timely X-ray, and ensures referral for radiologist review if required. • Undertakes open disclosure of any events involving a retained item.

Standardised surgical count practices

Safe practices are consistently applied to promote an environment that ensures surgical counts are accurate.

When there is a dispute over what is required to be counted, the default should always be to count, therefore reducing the risk to the patient of a RSI and ensuring the ability for any perioperative team member to provide safe, high quality care.

Staffing

Staffing levels are planned to minimise the requirement for personnel changes for the duration of a case:

- The same two staff should perform all surgical counts during a procedure.
- Where this is unavoidable, eg staff illness, changeover must not occur at critical stages in the surgical procedure and a full handover surgical count undertaken as soon as practicable.
- Temporary circulating relief staff may add countable items to the count board/sheet, but must initial every item they have added on the count board/sheet.

General principles

Always report and review RSI events in the same way as SAC 1 & 2 events irrespective of whether there was harm to the patient.

- Surgical counts are conducted in English.
- All countable items are visualised by both parties and documented immediately on the count board/sheet.
- Distractions and interruptions should be minimised.
- Where a surgical count is interrupted, it must be re-commenced.
- Counting should not occur during critical phases of a procedure (eg difficult dissections).
- Items should be separated and pointed to by the staff member as they are counted.
- Pre-packaged items should be counted in accordance with the number they are supplied (eg lahey swabs are in lots of five).
- Ideally all countable soft goods should be X-ray detectable. **However,** where a non X-ray detectable item is required due to no alternative (eg Penrose drain) this is managed using the same procedure as for 'packed' swabs (see Documentation).
- Non X-ray detectable dressing items should only be added to the sterile field after the final count is reconciled.
- Small and large sponges/swabs must never be cut or used as wound dressings/packing.
- Where an item is intentionally cut, all portions must be retrieved and accounted for.
- Where any item is broken all portions must be retrieved and accounted for. If a broken portion is irretrievable (eg broken drill tip embedded in bone) see Documentation for action to take.
- For multiple surgical procedures on the same patient, each set up will be counted separately and also documented separately on the count board/sheet.
- All rubbish and linen bags should be changed between patients including anaesthetic.

Instrument count

- All instruments should be counted for procedures where a body cavity is entered or has the potential of being entered (ie thorax, abdomen, pelvis).
- Every instrument tray should have a standardised layout and corresponding instrument list to assist with the concurrent counting and documentation.
- Instruments should remain on the pin for the initial baseline surgical count.

- When an additional sterile instrument is urgently required but is only available from another instrument tray, only the required instrument is removed and documented on the count board/sheet. Other instruments in the tray are not counted.

Instrument count - exceptions

Procedures where accurate instrument surgical counts may not be achievable or practicable include:

- Complex procedures involving large numbers of instruments (eg anterior – posterior spinal procedures).
- Emergency conversion from a laparoscopic procedure to an open procedure.
- Emergency return to theatre where there is a risk to life or limb.
- Procedures that require complex instruments with numerous small parts.
- Procedures for which width and depth of the incision is too small to retain an instrument.

Surgical count process

Surgical counts are performed in a set order and occur at the following points:

- Before the procedure begins (initial baseline count when setting up).
- Additional items are counted when added to the sterile field after the baseline count.
- Before cavity closure / or closure of a cavity within a cavity (eg bladder).
- When wound fascia closure commences.
- At skin closure.
- When a vaginal pack is inserted - **NB** the final count must occur **after** insertion of the vaginal pack.
- When unexpected complications or need arises (eg wound re-opening).
- When the instrument nurse is permanently relieved during a procedure.
- At any time count personnel may request an interim or partial count.
- If a discrepancy is suspected.

Countable items	General Principles	When to count
Sponges/swabs		Always counted
Sharps	• Any item capable of cutting/puncturing • Suture needles • Scalpel blades • Hypodermic/injection needles • K-wires, pins, trocars Note: Hypodermic needle covers should be discarded before initial surgical count	Always counted

Countable items	General Principles	When to count
	or counted if they remain on the scrub table.	
Packs	• Any pack inserted as part of the surgical procedure or anaesthetic (eg vaginal pack, throat pack).	Always counted
Surgical instruments	• A full surgical instrument count is to be performed for every procedure in which the abdomen, pelvis or thorax is entered (see Instrument count - exceptions).	Procedure dependent
Instrument components	• Where instruments have multiple components, all instrument components must be counted. • Where a likelihood exists that other miscellaneous instrument components could be retained, they must also be counted (eg removable bolts).	Procedure dependent
Laparoscopic/ thoracoscopic surgery	• Surgical instruments are counted for laparoscopic procedures including bungs, taps and seals for the initial baseline count. • If the procedure remains laparoscopic, surgical instruments will not be required to be counted on closing of the procedure. • If the laparoscopic procedure proceeds to open surgery, all additional instruments and items must be counted.	Always count when potential of laparoscopic procedures can convert to open surgery

Miscellaneous items to be counted where a likelihood exists that they could be retained (not limited to)	
• Diathermy tips • Scratch pads • Suction tips/screws	• Guidewires / pins • Silicone discs (ear surgery) • Camera adaptors

Countable items	General Principles	When to count
• Lahey swabs ('peanuts') • Mercocel microspheres • Slings / tapes / vessel loops • Neuropatties • Ligature wheels • Vascular tips / inserts / shods • Vessel clips (microvascular bulldogs) • Trocar seal /taps / bungs • Ligaclips (hemoclip bar)	• Cervical cups / Rumi tips • Bulb syringes • Mouth guards / props • Lina wipes • Marking pens • Specimen bags • Wound protectors • Staplers and all their parts	

Surgical count order and process

- A standardised surgical count must follow the same sequence as items listed on the count board/sheet.
- Sponges/swabs must be separated and checked for the presence and integrity of radiopaque thread. Bonds are not to be removed until point of counting.
- Different sized sponges/swabs are to be kept separately on the sterile field.
- Where there is a quantity discrepancy (eg not the standard quantity supplied) the items must be isolated immediately.
  - If this occurs before the baseline count, remove items from theatre.
  - If this happens during the procedure, items should be removed from the sterile field, bagged, labelled clearly with the number of items and isolated from the other countable items. Do not remove these bags from theatre or include in surgical count.
- Closing count sequence should be established between instrument/scrub nurse and circulating nurse prior to commencing surgical count either proximal to distal or distal to proximal from patient.
  - *Surgical field → Mayo stand → back table → sponge/swab receptacle*
- Sponges/swabs should be counted off in groups in which items are supplied, ie **10 + 10.**
  - They should be placed in dedicated, clear plastic bags with the denomination marked and will remain in theatre until the final count is completed and correct.
  - A strike (/) can be placed through the number on the count board/sheet to determine counted off groups as required.
  - If a nominated reliever counts off items they need to initial the clear plastic bag and the count board/sheet.
  - Bags must only be re-opened if there is a discrepancy in the surgical count.

Documentation
Count board/sheet

- Must be a single standardised, visible location to all surgical team members at all times.
- The patient's name, NHI, allergies/alerts and procedure must be documented on the count board/sheet.
- Keeping the surgical count board/sheet in one location decreases risk of errors. Depending on the configuration of the room and ability to see the count board, a count sheet may need to be used instead.
- Countable items must be recorded immediately after they have been added to the sterile field and counted.
- Packed swabs/items must have the time inserted and time removed documented.
- The format for recording countable items is to be in accordance to the quantity supplied, ie 10 + 10.
- Sutures can be totalled each time they are added to the sterile field as follows: 1 + 1 + 1 = 3 + 3 = 6

Clinical workstation Intra operative form

The following details are to be recorded:

- Names and designation of all team members (including relieving staff).
- Where there is a permanent change in count personnel document:
    - Name
    - Designation
    - Time of change over
    - Correct count
- Implanted devices that are to remain in the patient must be clearly documented with the following information:
    - Lot number
    - Product number
    - Expiry date
    - Location of the device
- Tech 1 records implants for inventory and billing only. Therefore the implant placement must be documented in the Intra operative form (eg x 2 2.5mm screws left thumb).
- Any count discrepancies and actions taken to address them.
- Countable items left intentionally inside the patient (eg packing, device fragment) must include a description of the item and its location. If the item is irretrievable, this must be reported with an event reporting form in SafeHub and follow up open disclosure by the surgeon. It should also be documented in the nursing notes of the Intra operative form.
- Document when final count is complete and correct.
- Justification for waivered surgical counts in an emergency are documented and an event reporting form on SafeHub is completed.

Incorrect surgical count

If there is a discrepancy in the surgical count:

- Communicate the discrepancy to the surgeon and anaesthetist immediately – the type and number of items missing.
- Receive verbal acknowledgement from the surgeon and suspension of closure.
- Commence a methodical search of the wound, and repeat the surgical count.

If the item remains unaccounted for:

- Alert the surgical team and search the surrounding area, all linen, rubbish and bagged sponges/swabs.
  - Empty suture packets must not be used to reconcile discrepancies as there is no assurance they are accurate, ie they may have inadvertently been discarded.
- Circulating nurse to contact theatre coordinator or manager for support.

If the item is found:

- Re-count item type, resume wound closure and document the count as 'correct'.

If the item remains unaccounted for:

- An X-ray of the patient shall be ordered and taken prior to the anaesthetic being reversed, and before the patient leaves the operating room. This is a requirement of Southern Cross Healthcare.
- Surgeon to view X-ray and complete open disclosure to the patient.
- Any post-surgery X-ray must be followed up by a radiologist report with the surgeon to communicate findings to the patient.
- In the event the surgeon is offsite, clinical teams to document the post-operative plan and actions required by the patient in the patient's discharge summary.
- Where an instrument fragment or other item is intentionally left inside the patient (eg broken instrument tip) open disclosure including potential risks is undertaken by the surgeon and documented in the patient clinical records and intra operative form nursing notes record. Adverse event management processes are completed. The medical supplier is notified of any instrument failures (contact procurement).
- Events and incidents are managed in line with SCH event reporting and management processes. All details are to be documented on the Intra operative form 'nursing notes' section by the circulating nurse.

Definitions

Term	Definition
Appropriately trained SCH staff	Refers to SCH employees who are fully orientated to this policy and assessed as competent to participate in surgical counts.
Cavity	A hollow space, or potential space within the body or one of its organs (eg abdominal, thoracic, peritoneal cavity, or

Term	Definition
	any other created cavity with the potential to retain items, eg uterus, bladder).
Count board/sheet	A dry board or paper record in the operating room that is used to record all counted items.
Count record	Section of the electronic Intraoperative form designated for recording confirmation of, and variances to surgical count processes.
Countable items	All items that are defined in this document are accounted for by counting and recording.
Device fragment	A fragment of a medical device that has separated and unintentionally remains in the patient after a procedure.
Implanted medical devices	Medical implants are *devices or tissues that are placed inside or on the surface of the body*. Many implants are prosthetics, intended to replace missing body parts. Other implants deliver medication, monitor body functions, or provide support to organs and tissues
Instruments	Surgical tools or devices used to facilitate surgery.
Miscellaneous items	Other items that have the potential to be retained in the surgical wound (eg vessel loops and clips, trocar sealing caps).
Packed swabs/item	Swabs and other soft surgical items that are temporarily placed in the cavity or wound during surgery often for the purpose of enhancing retraction, visibility or to create a dry operating field. The intention is that these will be removed. Only items that are x-ray detectable should be used.
Sharps	Items with sharp edges or points capable of puncturing (eg needles, scalpel blades, syringe needles, K-wires, trocars).

Term	Definition
Sterile field	An operative field that is an isolated area where surgery is performed, which must be kept sterile by aseptic techniques.
Surgical count procedure	The formal process of visualising, separating and counting items, audibly and concurrently, that have the potential to be retained in the patient.
Waived count	Surgical procedures in situations in which the time required to perform the count may present an unacceptable delay in patient care (eg emergency). Note: a count **must** be undertaken as soon as practically possible.
Initial baseline surgical count	Occurs before the procedure commences, including all countable items that have the potential to be retained in the patient.

📄 **Credentialling and Practice Guide – Access privileges for health practitioners**

Sets out the rules for access to and ongoing practice at Southern Cross Healthcare hospitals.

📄 **CWS -Intraoperative Quick Guide**

📄 **Guidelines for continuous open communication/disclosure to patients**

Find out how you can engage in open communication to ensure better patient outcomes after an unplanned or adverse event.

📄 **HQSC Always report and review list**

This Health Quality and Safety Commission (HQSC) Always Report and Review List is a subset of adverse events that must be reported and reviewed in the same way as SAC 1 & 2 events, irrespective of whether or not there was harm to the consumer / patient

📄 **Safe staffing policy and guidelines**

This document provides direction and guidance to ensure the safe staffing of clinical areas

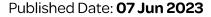📄 **Surgical safety checklist policy**

📄 **Theatre nursing roles and responsibilities**

Role and responsibilities descriptions for operating theatre staff in Southern Cross Hospitals.

References

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- Department of Veterans Affairs, VHA Directive 2010-017 Prevention of retained surgical items
- Health Quality Safety Commission (HQSC) Always report and review list 2018-19
- Health Quality Safety Commission Open Book: Preventing retained items – gynaecology surgery March 2015 Accessed August 2015
- Health Quality Safety Commission Open Book: Preventing retained items – laparoscopic surgery January 2015
- Prevention of Retained Surgical Items Policy v8 (2015) No Thing Left Behind®

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