Policy Applies to:

All staff working in the Perioperative area. Credentialed Specialists, Surgical Assistants, students, and contractors will be supported to meet policy requirements.

Related Standards:

NZS 8134.3:2021– Ngā Paerewa Health and disability service standard.
NZS 4304:2002 – Management of Healthcare Waste.

Contents

Rationale:

Retention of surgical items is linked to increased patient morbidity and mortality as well as increased costs. Retained objects are considered a preventable occurrence and strict adherence to this document should significantly reduce these incidences.
A consistent approach to the practice methods and processes for undertaking a surgical count and the documentation helps promote optimal perioperative patient outcomes and demonstrates the perioperative staff member's commitment to patient safety.

Definitions:

Term	Definition
Cavity	A hollow space, or potential space, within the body or one of its organs e.g. abdominal cavity, thoracic cavity, peritoneal cavity, or any other created cavity with the potential to retain countable items, e.g. neck of femur, uterus, bladder, bowel.
Initial count	Count performed before initial incision, acts as a baseline for countable items
Cavity count	If a cavity within a cavity exists e.g. uterus, a count is completed prior to closure of this cavity.
First closing count	When sheath/facia/wound is closed
Final closing count	On closure of the skin layer or when all countable items are no longer in use.
CSSD	Central Sterile Supply Department
Visual Count Board	White Board used in theatre to visually display all consumable, sharps and miscellaneous items.
Instrument Count sheet	List used to count all instruments in a given set
Handover count	Completed when there is permanent relief of a staff member that was involved in initial count e.g. sickness or end of shift

Objectives:

To provide a systematic and standardised approach for the management of all countable items used during an invasive surgical procedure to ensure these are accounted for at all times. This system will prevent foreign body retention and subsequent injury to the patient.

Cultural Considerations

As per perioperative staff responsible authority portfolio requirements.

Implementation:

- Education of all staff, on the surgical count process as part of their orientation.
- Liaising with CSSD to ensure counts forms are aligned with instrument sets

Evaluation:

Incident reports
Audit of compliance with policy
Staff feedback
Debrief forms

Associated Documents

External
AORN
ACORN

Internal Documents

- Credentialing policy
- Staff Orientation, SharePoint

Incident notification process

Staff Responsibilities

Team member	Responsibility
Circulating Nurse	• Leads the instrument count • Survey the room before conducting the initial count to be sure that no open countable items are left from a prior procedure. • Ensure the correct laminated count sheet has been selected for the count • Ensure the visual count board has specialty specific items documented. • Document on visual count board items placed and removed in surgical site when notified by the surgeon or scrub nurse. • View the items being counted and counts audibly • Record the count values immediately after each item has been counted, this reduces errors. • Observe for items dropped from the sterile field and ensure they are displayed under the visual count board in a manner that is visible to the scrub team at all times • Consult with the team if any supplies are needed before commencing the final count • Report any count discrepancies • Ensure count documentation is complete, including team roles are recorded on Trak. • Verbally verify the final count as part of the surgical safety checklist.
Scrub Nurse	• Initiates the count and plans ahead to minimise distraction or interruptions • Maintain an organised sterile field • Maintain awareness of the location accountable items on the sterile field and in the wound during the course of the procedure. • Verbally communicate to the circulating nurse items intentionally placed in a wound cavity and ensure this is documented on the visual count board. • Verify the integrity and completeness of items when they are returned from the surgical site. • Consult with the surgeon about whether any supplies will be needed before performing a final count to avoid interruptions. • Count items audibly in a manner that allows the circulator to visually identify each individual item/s being counted • Speak up when a discrepancy becomes apparent in the count.
Surgeon and Surgical Assistant	• Only use radiopaque swabs in the wound • Maintain awareness of items placed in the wound during the procedure

	• Communicate placement of surgical item in the wound to the perioperative team for notation in a visible location e.g. Visual count board • Acknowledge awareness of the start of the count process • Communicate any requirements of supplies on the sterile field before commencement of final count • Remove unneeded items from the surgical field when the first count has been initiated • Perform a methodical wound exploration before closing the wound. • Communicate and document retained surgical items left intentionally behind e.g. packing • Acknowledges the completed count at each closure • Participates in count reconciliation procedures
Anaesthesia team	• Plan anaesthetic milestones actions (e.g. emergence from anaesthesia) so that these actions do not pressure the perioperative team to circumvent safe accounting practices. • Not use counted items • Keep anaesthetic instrument packs separate from the surgical site/ scrub trolleys • Communicate to the perioperative team when throat packs, bite blocks and other similar devices are added and removed from the oropharynx. • When using sutures/sharps, communicates the use and witnessed discarding of these items into a sharps receptacle
All team members	• Ensures minimal noise and helps to plan to prevent interruptions during the count process. • Shall immediately inform the Circulating nurse if they observe an item drop from the surgical field so it can be contained and visually displayed until the final count is completed.

General Principals

Step	Clinical practice	Rationale
Count timing	The surgical count should be carried out in a focused and unhurried manner. Distractions, noise and interruptions should be minimised and if any interruptions occur during the counting of a group of items, the counting for that group MUST be recommenced. Below 10,000 communication tool may be utilised for this purpose.	Creates a safe environment for staff and patients in order to minimise confusion and errors.
	Counting of surgical items should be performed: • Prior to Knife to skin • When new items are added to the sterile field. • Before closure with of a cavity within a cavity e.g. uterus, bowel. • When deep wound closure begins • When skin closure begins. • At the time of permanent relief of either the scrub or circulating nurse who completed the initial count • If any member of the scrub team requests a count to be completed.	Items that are being used in or near the surgical field require counting because of the risk they could be retained.
Count Process	A surgical count is performed audibly by two registered health professionals, using the appropriate Instrument count sheet and the visual count board. Each item must be visualised by both participants prior to the initial skin incision, one of whom MUST be a Registered Nurse.	
	Once the count has been initiated, items shall not be removed from the theatre including rubbish, crates, trolleys and laundry until the final count is complete.	

	Items removed from the sterile field must be contained and visibly displayed under the visual count board. Items must never be subtracted or removed from the count.	
	Any additions of accountable items during surgery must be added to surgical count and initialled by the staff member who added it.	To help identify potential errors in an incorrect count
	Where possible, the same two perioperative staff members should perform all counts that take place during a surgical procedure to ensure continuity of care.	Having one consistent team reduces the risk of retaining an item or count discrepancies. Increased turnover of staff increases the risk of count discrepancy and possibility of retained items.
Relief Counts	Should it become necessary to relieve a circulating nurse temporarily, the names and relief times of all relieving nurses shall be documented in the count record in TRAK	
	Should it become necessary to relieve any scrub nurse or circulating nurse permanently, a complete count is conducted and the names and times of all relieving nurses shall be documented in the count record in TRAK. A note should be made on the visual count board of any items that are inaccessible for counting purposes e.g. inside the wound. Staff involved in this cross over count should be the original scrub and circulator and the relief scrub and circulating nurses.	
	On the occasion where it is known that the circulating nurse will need to be relieved e.g. at the end of shift, every effort shall be made to ensure relief circulating nurse is present at the initial count.	

	Cross over counts should be avoided during critical phases of the procedure including: • Any part of the surgical safety checklist • Critical dissections • Induction and emergence of anaesthesia • Care and handling of specimens • At opening or insertion of implants	
Countable items	Items which must be counted for all procedures: • Swabs/ sponges • Sharps • Miscellaneous items	If no incision, there is still a risk of these items remaining in the theatre unnoticed. This creates a discrepancy for future counts. An item transferred to the surgical site has an increased risk of being retained e.g. ligaclips, tie reels etc.
Count order	Items to be counted and to be recorded in this order (may include but not limited to): Swabs/ Sponges: • Chex 5s • Tonsil swabs • Mediums • Abdominals • Peanuts/ pledgets • Patties • Vaginal packs • Fusion rolls • Tapes Sharps: • Blades • Suture needles • Hypodermic needles • Mayo needles • Beaver blades	A standardised count procedure, following the same sequence assists in achieving accuracy, efficiency and continuity among perioperative teams This list is not exhaustive and any item that has the risk of retention must be counted and added to the surgical count.

	Miscellaneous: • Needle caps • Ligaclip packets • Vessel loops • Tie reels • Shods • Connectors • Laparoscopic sack • Alexis wound retractor • Bull dogs • Cotton wool • Tinfoil • Irrigation tip/s • Diathermy tip/s • Marking pen, cap & ruler Instruments: • Instrument set/s as per the set list • Extra instruments opened separately • Small endoscopic parts including: rubber caps and seals. • Screws • Heads and necks	
	Once the count has been initiated, items shall not be removed from the theatre including rubbish and laundry until the final count is complete.	
	Following the initial count, all countable items must be counted in the same order each time as written on the count sheet and visual count board Consumables should be counted in this order (proximal to distal) 1. Surgical field 2. Mayo stand 3. Back table 4. Off the sterile field	Standardised count procedure achieves consistency, continuity, efficiency and safety amongst teams, including times of stress. Human error occurs when there is deviation from routine practices

Simultaneous procedures	Where simultaneous procedures are undertaken and more than one surgical team is involved but only one scrub nurse, one surgical count documentation shall be used.	To avoid confusion over what items were used in each procedure. All count timing will be followed for each procedure e.g., initial, first and closing counts
	Where there is more than one scrub nurse, separate count sheets & or count boards shall be used for each procedure.	
Sequential procedures	When sequential procedures are undertaken on the same patient, or when a two stage procedure is performed which requires two set-ups, a separate count is used for each procedure if the room is being cleared in between procedures.	Each procedure has the potential for a retained item.
	If the room is not cleared between procedures and there are two separate setups. The first set up is isolated after the completion of the correct final count. Each procedure will have its own surgical count. If the room is not cleared between procedures and the same set up is being used, the final count of the first procedure is carried over to be the initial count of the second procedure and so on. Accountable items should not be removed from the operating theatre until all procedures have been completed. E.g. bilateral hip replacement with the same trolley set up.	Containment of items assists with count resolution if subsequent counts are incorrect.
Count Documentation	The scrub nurse initiates the count and the circulating nurse leads the count with the correct count sheet for instrumentation and the visual count board for consumables and miscellaneous items.	This ensures there is one process for conducting a surgical count

	Documentation must be legible and visualised by the scrub nurse	
	Items must never be removed or subtracted from the count	
	The Circulating nurse should record the count: • Immediately after each type of item is counted • In agreement with the scrub nurse • Items should be documented in the groups in which they were packaged TrakCare Documentation • Ensure all staff (care providers) involved in the count are accurately recorded including each individual role • Documenting the outcome of the surgical count • Ensuring the surgical safety checklist has been completed (surgeon has acknowledged count outcome) • Attach a photo of the completed visual count board after final count is complete	To provide data for surgical count audits

<u>Swab count – tonsil swabs, chex fives, mediums, abdominal, peanuts, patties, vaginal packs, tapes</u>

Swabs	All swabs must be counted in units of issue with the radiopaque strip viewed e.g. chex fives in multiples of five.	Separating swabs helps determine accuracy of count
	Must not remove band or packaging until ready to count	To avoid mistaking counted swabs from uncounted swabs
	Once counted keep all like sponges together i.e. do not mix Chex 5's with Mediums	Reduces the risk of a smaller swab being introduced into the wound unintentionally

	All swabs and packs must have a x-ray detectable marker strip for all invasive procedures	Radiopaque strips allow for visual location under x-ray.
	Swabs must not be cut or altered in size in any circumstance	To prevent a partial swab without a x-ray detectable strip being introduced into the wound
	All swabs that go into the wound should be documented on whiteboard by number and location	So the surgical team know where to locate swabs if a subsequent error occurs in a count.
	Dressing gauzes included in customised packs should remain sealed and isolated on the field until the surgical wound is closed.	To prevent being introduced into the wound unintentionally, reducing the risk of a count discrepancy.
Division of Gauze rolls	Gauze rolls shall be x-ray detectable and if cut, will be recorded on the visual count board.	To ensure complete gauze rolls are accounted for at the end of the procedure.
Counting items off surgical field	Swabs must be counted off the sterile field in the number they were counted in originally. This must be done by opening out all items completely and counting in unison with the circulating nurse. The counted swabs then will be placed into a non-sterile clear plastic bag that is held open by the circulating nurse using aseptic technique and in line with infection control guidelines with appropriate PPE. The bag will be sealed and labelled with the type and number of swabs inside. This will be placed in the designated area below the visual count board so they can be seen at all times by the Surgical team.	Ensures standardised practice. Verification by two nurses assists in ensuring correct counts. Swabs are kept visible to refer to for subsequent counts To protect staff from blood and fluid exposure The scrub nurse should be able to view all items off sterile field to prevent confusion
Pledgets	Shall be mounted on instruments if a cavity is entered	Because of their size, these items could be difficult to locate inside a wound.
Vaginal Packs	For gynaecology procedures requiring vaginal packs, the final count for consumables must occur after the insertion of the vaginal pack.	To reduce the risk of swabs, used to clean the surgical area, being unintentionally retained.

Sharp counts – scalpel blades, suture needles, injection needles, mayo needles

Sharps	Sharps should be confined, contained and accounted for at all times on the surgical field	To minimise risk of needle stick injury and unintentional loss e.g. into the incision or dropped on the floor.
	Use a puncture resistant container to house unsheathed sharps e.g. blade server and needle mat	To prevent needle stick injury to themselves and the surgical team
	If a sharp is dropped on the floor the circulating nurse should be immediately notified, the suture retrieved in a safe manner and placed in a secure area in the theatre to be included in all counts.	No items should be removed from the surgical count to prevent confusion.
	The scrub and circulating nurses should never assume a manufacturer's pre-packaged suture packet is correct. A suture packet containing an incorrect number of needles should be recounted, and if still incorrect removed from the sterile field, bagged, labelled as incorrect, and either • Removed from theatre before the initial incision • Put in a secure place in theatre if the procedure has commenced • These items are NOT included in the surgical count	All counted items shall be visualised by both the circulating and scrub nurses to prevent incorrect counts
Broken sharps	If at any point during the surgery a sharp breaks, the scrub nurse must be made aware and have all pieces returned for correct disposal into the sharps pad. If a sharp is incomplete and parts are missing, follow incorrect count procedure.	To prevent unintentional retained items in the surgical site.

Miscellaneous items

Any items not covered by swabs and sharps that still pose a risk of being retained in the surgical wound		
	Include but not limited to: • Vessel clip dispensers • Tie Reels • Vessel loops • Shods • Connectors • Murray cod • Lap sacs • Alexis wound Retractor • Bull dogs • Cotton wool ball • Tinfoil • Irrigation tip • Diathermy tip • Marking Pen and ruler • Small endoscopic parts (rubber caps including caps reducer, rubber seals) • Heads and necks	

Instrument Counts

Timing	Instrument counts should be performed: • Before the initial incision • Before wound closure begins • At the time of permanent relief of either scrub or circulating nurse as part of the cross over relief count.	To establish a baseline

Instrument Counts	Should be conducted for all procedures in which the likelihood exists that an instrument could be retained e.g. entering the abdominal cavity, thoracic cavity, a cavity within a cavity e.g. uterus, bowel. This decision is made with the case in mind considering the potential of what it may become e.g. laparoscopic converting to an open procedure	
	If there is no requirement to count the full set of instruments, then individual groups e.g. retractors that may be left behind in the drapes or instrument pouches can be added to the visual count board.	
Count forms	Pre-printed, laminated instrument count sheets that are identical to the standardised sets must be used to count the instrument tray and any other relevant count sheet for additional trays e.g. including but not limited to, vascular tray, long intra-abdominal instruments. Sets should never be counted from memory	Provides efficiency and consistency. Ensures accuracy in standardised process and verification.
	If changes are made to instrument sets, this change must be reflected in the pre-printed, laminated count sheets.	
	The circulating and scrub nurses are responsible for ensuring all items in the instrument crate are present at the beginning at the end of the case.	

Contamination	Instruments found to be contaminated with dried blood, bone, tissue or any other substance prior to surgery must be discarded. If any such items are found on a tray of instruments, the whole tray must be discarded, sent for reprocessing and the surgical table reset. The incident must be reported to the Theatre Clinical Leader and an incident form completed if appropriate e.g. delay to surgery or case started before contamination found. If no incident form is required, document on the surgical debrief form.	To maintain surgical asepsis. To provide feedback to CSSD staff about problem areas
	All instrument tips e.g. arteries should be viewed and counted by the scrub and circulating nurse concurrently individually or in twos.	
	If an instrument is on a safety pin, the pin must be included in the count.	Assists in reducing the risk of retained instruments.
Tip protectors	Must be removed and discarded from all instruments in sets and steripeel before being counted	Reduces the risk of accidental retained item.
Defects and broken instruments	Instruments should be inspected before use to identify any defects. Defective instruments should not be used. Items used in the surgical wound should be accounted for in their entirety by inspection for breakage or fragmentation after use. If a broken item is returned from the surgical site, the scrub nurse will immediately notify the surgeon.	Defects may increase the likelihood of fragmentation in the surgical wound
	Additional individual instruments should be added to the count as they are added to the surgical field.	

	Instrument counts should occur in the same order each time following the order of the count sheet.	
	All counted instruments must remain in the theatre during the procedure. If an instrument falls from the sterile field it is isolated and contained in view of the scrub nurse.	
	All instruments should be accounted for and removed from the room at the end of the procedure.	To ensure accuracy of counts in subsequent procedures.
Laparoscopic and thoracoscopic surgery Count	Conduct an initial instrument count (including bungs, taps and seals, but not laparoscopic instrumentation) plus all other countable items.	
	All disposable items which may go into the cavity through a port and have the potential for retention e.g. catch bags must be added to the visual count board.	
	All sutures and needles entering a cavity through a laparoscopic port must be visualised to be intact and verbally acknowledged by both the surgeon & scrub nurse upon removal.	Sutures and needles passing through laparoscopic ports may become damaged on removal from the cavity via a port e.g. the suture may break off at the swage end of the needle. This may increase likelihood of the item being unintentionally retained.
Instrument count exceptions	All scoping procedures (both rigid and flexible), except for laparoscopic and thoracoscopic procedures.	It is not necessary to count instruments in procedures that do not create a cavity for the purpose of patient safety, however the scrub nurse and circulating nurse are responsible for ensuring all instruments are accounted for at the end of the procedure for inventory purposes.
	Neurosurgery	
	Operations where a cavity is not created e.g. skin grafts, percutaneous procedures	

	Orthopaedic surgery (unless entering the abdominal or thoracic cavities). Only need to count items that pose a risk of being unintentionally retained including and/or not limited to heads, necks, screws, hip measuring device.	

Count discrepancies

Incorrect count procedure	If a count is incorrect, the following steps must be taken All team members must remain in the room until the item is found. If the missing item is found, the item type e.g. chex fives, should be counted again.	
	Nonessential personnel changes e.g. break relief should not occur until the count is resolved.	
Circulating nurse	• Notify the surgeon immediately • Call for assistance • Search the room, including the area near the sterile field, floor, and linen and rubbish bins • Recount with Scrub nurse	Each bag should be emptied out into a separate area.
Scrub Nurse	• Notify the surgeon immediately • Organise the sterile field • Search the sterile field including drapes and tables • Recount with the circulating nurse	Do not count any packets as a method to rectify count discrepancy. The count is still considered incorrect. This practice is not recommended as there is no reassurance the number of packets is accurate and the number on the pre-printed package also may not be accurate i.e. they may have inadvertently been discarded

Surgeon and surgical assistant	• Stop closure of the wound if patients condition permits • Perform a methodical wound examination while actively looking for the missing item • Participate in attaining intraoperative x-rays to find the missing item • Remain in the theatre until the item is found or it is determined not to be in the patient	
Anaesthetic team	The anaesthetist should delay emergence from anaesthesia until the item has been found.	These actions should not pressure the perioperative team to perform an insufficient final count
Imaging	If the search is unsuccessful, x-rays should be taken whilst the patient is still in the operating theatre and on the operative bed.	A delay in x-ray may result in a return to theatre for the patient
	If the item is not found on x-ray it is strongly recommended the image be reviewed by a radiologist.	Accurate assessment and documentation of risk is vital for monitoring and follow-up.
	It may be beneficial to take a sample image of an item similar to the missing object.	Provides a visual reference of the missing item can help the radiologist and surgeon in locating the item radiographically.
Documentation	An incident report must be completed and the Theatre co-ordinator/Theatre Manager notified. All actions or decisions must be documented in the operation complication section on TRAK and the intraoperative record (with the incident number if possible)	
	If the count is incorrect and unresolved the patient must be informed as part of the incident reporting process.	

	Un-retrieved fragments must be documented in the patients record and should include the composition of the fragment, size, location, measure taken to recover fragment and patient notification e.g. broken drill bit in bone	
	Notify the theatre suite assistants (TSA's) and any subsequent surgical teams of an unresolved count discrepancy. As this may affect the validity of subsequent counts in the room.	It is important to alert the theatre suite team to a potential risk of a sharps injury in the case of a missing sharp. TSA's may find missing object during a clean.
Count discrepancy in manufacturing packaging resolution	In the event there is an incorrect number of items in a newly opened packet, ensure the entire packet is recounted, and if still incorrect removed from the sterile field, bagged, labelled as incorrect, and either • Removed from theatre before the initial incision • Put in a secure place in theatre if the procedure has commenced • These items are NOT included in the surgical count	Never assume a manufacturer's packaging is correct, always separate each item and count individually as this will increase the risk of an unintentional retained item.
Intentionally retained items	When the decision to intentionally use radiopaque soft goods (e.g. swabs/packs) as therapeutic packing and the patient leaves the operating theatre with them still in place, the number and types of items placed should be documented in the medical record, the intraoperative comment section in TRAK and the Perioperative form. Document as: • Correct and confirmed by the surgeon when this information is known with certainty, or	The count is documented as being correct as although not all sponges have been retrieved they have been accounted for and is reflected in the documentation

	• Incorrect if the number and type of sponges used for therapeutic packing is not known with certainty e.g. an emergency procedure. An incident report must be generated if swabs/ packs are placed in an emergency situation.	
	The number and types of radiopaque packing should be communicated as part of transitions of care and documented in the intraoperative record.	
	When the patient is returned to the operating theatre for a subsequent procedure or to remove therapeutic packing, • The number and type of radiopaque items to be removed should be determined from the documentation of the surgery where the items were placed • The number and type of radiopaque items should be documented • Items removed should be isolated and not included in the counts for the removal procedure • The surgeon should perform a methodical wound examination and order a intraoperative radiograph • Count on the removal procedure should be noted as correct if all goods are accounted for.	When sponges are retained intentionally they must be accurately documented and reconciled when retrieved during a subsequent procedure to avoid and unintentionally retained object. To not confuse with soft goods opened for the removal procedure.