

GUIDELINE *ESSENTIALS*

QUICK VIEW

Retained Surgical Items



CONSISTENT INTERDISCIPLINARY APPROACH

- Use a consistent, interdisciplinary approach for preventing retained surgical items (RSIs) during all surgical and invasive procedures.
- RN circulator:
 - Perform a room survey for open countable items from a previous procedure before conducting the initial count.
 - Verify that the count board and count sheets do not contain information from a previous procedure.
 - Initiate the count process.
 - View the surgical items being counted.
 - Record in a visible location (eg, the count board) the count of soft goods, sharps, and miscellaneous items placed in the patient.
 - Record instrument counts on preprinted count sheets.
 - If an item is passed or dropped from the sterile field, retrieve it using standard precautions, show it to the scrub person, isolate it from the field, and include it in the final count.
 - Consult with the team about whether any supplies will be needed before initiating the closing count.
 - Separate and point out items off the sterile field while audibly counting.
 - Participate in count reconciliation activities.
 - Report any count discrepancy.
 - Document count activities.
- Scrub person:
 - Maintain an organized sterile field according to the health care organization's policy.
 - Maintain awareness of the location of soft goods (eg, radiopaque sponges, towels, textiles), sharps, and instruments on the sterile field and in the patient during the procedure.
 - Know the function configuration (eg, number of parts, assembly and disassembly methods) of all medical devices used during the surgical procedure.
 - Verify the integrity and completeness of items returned from the surgical site.
 - Consult with the surgeon about whether any supplies will be needed before performing the closing count.
 - Count audibly, and separate and point out items on the sterile field in a manner that allows the RN circulator to see the items being counted.
 - Speak up when a discrepancy exists.
 - Participate in count reconciliation activities.
- Surgeon and first assistant:
 - Use radiopaque surgical items (eg, soft goods) in the wound.
 - Maintain awareness of the location of items in the surgical wound during the procedure.
 - Communicate placement of surgical items in the wound to the perioperative team for notation in a visible location.
 - Acknowledge awareness of the start of the count process.
 - Notify the team if any supplies will be needed on the sterile field before the start of the closing count.
 - Remove unneeded counted items from the surgical field before initiation of the count process.
 - Perform a methodical wound exploration before closing the patient, using both visualization and touch when feasible.
 - Notify the scrub person and RN circulator about surgical items returned to the surgical field to complete the final count.
 - Communicate and document items left intentionally as packing.
 - Participate in count reconciliation activities.
 - Document actions taken to resolve count discrepancies.
 - Verify and document results of the final count.
 - Inform the patient or patient's representative of any surgical soft goods purposely left in the wound at the end of the procedure and the plan for removing these items.

- Anesthesia professionals:
 - Plan anesthetic milestone actions (eg, emergence from anesthesia) so that these actions do not pressure the perioperative team to circumvent safe accounting practices.
 - Communicate to the perioperative team when throat packs, bite blocks, and other devices are inserted in the oropharynx, nose, or nasopharynx.
 - Verify that throat packs, bite blocks, and other devices are removed and communicate to the perioperative team when these items are removed.

★ *All perioperative team members are responsible for preventing RSIs. Professional organizations recommend engaging an interdisciplinary team as part of a systems approach to RSI prevention.*



STANDARD PROCEDURE

- Use a consistent accounting method for all surgical counts.
- When possible, conduct the initial count to establish a baseline before the patient enters the OR or procedure room.
- Collaborate with an interdisciplinary team to standardize a process for additional counts to be performed during lengthy procedures, including:
 - a method for identifying which procedures should have additional counts related to procedure duration
 - timing of the count process (eg, 3 to 4 hours into a lengthy procedure, excluding critical phases)
 - items to be counted (eg, soft goods, sharps, miscellaneous items, instruments, items in use)
 - communication between team members on counting results
 - documentation
- Establish a standardized sequence in which the counts should be conducted; the sequence should have a logical progression (eg, order of the standardized count board or sheet, proximal to distal from the patient).
- When possible, have the same two individuals, one of whom is the RN circulator, perform the counts.
- Minimize distractions, noise, and unnecessary interruptions during the surgical count.
- If the count is interrupted, restart the count for the item type that was being counted.
- During the initial count and when adding items to the sterile field, count packaged items according to the number in which the item is packaged.
 - Verify the package contains the number of items on the package label.
 - If packages contain an incorrect number of items or the items are defective:
 - » exclude them from the count
 - » remove them from the field
 - » isolate them from the rest of the countable items in the OR
- Record the count:
 - immediately after each type of item is counted
 - on a standardized template
 - in a location that is visible to the surgical team
 - in agreement with the scrub person
- For items that are added to the field after the initial count:
 - count the items immediately
 - record the item and number added on the count board in a standardized format as defined by the health care organization
 - verify the number with the scrub person
- Perform a count when any team member requests a count for any reason.
- Account for items in use and perform a structured hand-over communication of accounting procedures when there is relief of the RN circulator or scrub person for a short duration (eg, a break).
- Perform a complete count when there is a permanent relief of the RN circulator or scrub person.
- Account for all items, even if direct visualization of all items is not possible.
- Do not perform counts or actions that would require a count (eg, relief of the scrub person or RN. circulator) during critical phases of the procedure, including:
 - time-out periods
 - critical dissections
 - confirming and opening of implants
 - general anesthesia induction and emergence
 - care and handling of specimens
- Do not subtract or remove items from the count.
- Do not remove counted items from the room until the counts are completed and reconciled.

- Do not remove linen and waste containers from the room until all counts are completed and reconciled and the patient has been transported from the room.
- Do not consider the final count complete until all surgical soft goods, sharps, instruments, and miscellaneous items used in closing the incision are removed from the patient and returned to the scrub person.
- Verbally verify the final count as part of the surgical checklist.
- Remove used or open counted items from the room before another procedure begins.

★ *Use of a consistent, standardized practice has been shown to reduce the reports of incorrect counts and rates of overall serious reportable events that included RSIs. Measures that have been implemented to reduce variability and create a consistent standardized practice include new count procedures, audits, education, standardization of dry-erase boards, streamlining of instrument sets, and updating of count sheets.*

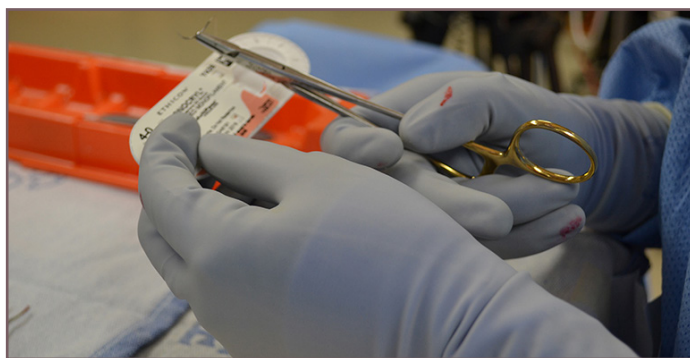


SOFT GOODS

- Use radiopaque soft goods (eg, sponges, towels) that can be easily differentiated from non-radiopaque soft goods.
- Before the procedure begins, isolate non-radiopaque gauze sponges used for skin antisepsis that have a similar appearance to counted radiopaque sponges, to avoid confusion.
- If gauze sponges are used for vaginal antisepsis, use radiopaque sponges and count them.
- Do not use radiopaque sponges as dressings except as therapeutic packing inside the surgical wound.
- Do not use non-radiopaque towels in the surgical wound.
- Withhold non-radiopaque gauze dressing materials from the field until the surgical incision is closed and the final count is complete.
- If the surgical sponge package is banded, break the band, and discard it before counting.
- Do not cut or alter radiopaque surgical soft goods in any way.
- Audibly communicate and record in a visible location all radiopaque soft goods placed or packed in the patient on placement and removal.
- If feasible, leave a portion of radiopaque surgical soft goods placed in the surgical wound or cavity outside the wound so that the item remains visible.
- For operative and other procedures in which the vagina is entered, include the vagina in post-procedure methodical wound exploration.
- For used sponges, use a pocketed sponge holder with a background color that provides contrast.
- Place used sponges in a standard location (eg, kick bucket) until they are transferred to a pocket holder system. If the sponge is dropped from the surgical field, the RN circulator should show it to the scrub person before placing it in the pocketed holder.
- Do not drape sponges over the sides of the kick bucket.
- Completely open and separate each sponge before placing it in a pocketed sponge holder system.
- Place only one sponge in each pocket of the pocketed sponge holder system.
- Avoid unintentional separation of the horizontal pocket perforation and discard the pocketed sponge holder if the pockets become separated unintentionally.
- When radiopaque surgical soft goods are intentionally used as therapeutic packing and the patient leaves the OR with this packing in place, document the number and types of items placed in the medical record:
 - as reconciled and confirmed by the surgeon when this information is known with certainty or
 - as incorrect if the number and type of sponges used for therapeutic packing is not known with certainty.
- Include the number and types of radiopaque surgical soft goods used for therapeutic packing as part of the transfer of patient care information and document it in the patient's medical record.
- When the patient is returned to the OR for a subsequent procedure or to remove therapeutic packing:
 - determine the number and type of radiopaque soft goods to be removed based on the intraoperative record of the procedure during which the packing was placed
 - document in the medical record the number and type of radiopaque soft goods removed

- isolate the radiopaque sponges removed and do not include them in the counts for the removal procedure
- the surgeon should perform a methodical wound exploration and order an intraoperative radiograph
- note the count for the removal procedure as reconciled if all radiopaque soft goods have been accounted for
- Remove radiopaque surgical soft goods used as therapeutic packing in the surgical wound before final closure.

★ *Accounting for surgical soft goods is important because they can be retained in the smallest of incisions, including natural orifices, such as the vagina, eye, or nose, or incisions made during minimally invasive surgeries. The American College of Surgeons recommends communicating and documenting the location of intentionally retained items used as therapeutic packing, to facilitate the eventual removal of these items.*



SHARPS AND MISCELLANEOUS ITEMS

- Count all suture needles, regardless of size, for all surgical procedures.
- In collaboration with an interdisciplinary team, determine which miscellaneous items should be counted.
- Account for and confine all sharps on the sterile field until the final count is reconciled.
- Confine and contain sharps in specified areas of the sterile field or inside a sharps containment device.
- When a sharps container on a sterile field is full, include it in the count and do not remove it from the room until the final count reconciliation is complete.
- Use a read-back method for communicating the number of needles added to the sterile field and the number of needles recorded on the count board during the procedure.
- Account for sharps and miscellaneous items used in the surgical wound in their entirety immediately on removal from the surgical site.

- Notify the perioperative team if a broken or separated item is returned from the surgical site.
- Immediately attempt to locate and retrieve the item.
- Remove free clips (eg, open staples) from the abdominal cavity when possible.
- Establish and implement a standardized procedure to communicate the location and the plan for eventual removal of the item when miscellaneous surgical items (eg, a pacing wire, a drain) are intentionally left in the surgical wound for postoperative removal.
- Account for preparation sticks used in vaginal antisepsis.

★ *Professional organizations recommend accounting for sharps and miscellaneous items used in the surgical wound for prevention of RSIs in all procedures, including vaginal deliveries. Sharps and miscellaneous items have been miscounted and retained in patients. Needles are the surgical item most likely to be miscounted.*



INSTRUMENTS AND DEVICE FRAGMENTS

- Count instruments for all procedures involving an open body cavity (eg, thorax, abdomen).
- Count instruments when sets are assembled for sterilization.
- Do not consider the final instrument count complete until the instruments used in closing the wound (eg, malleable retractors, needle holders, scissors) are removed from the wound and returned to the scrub person.
- Account for individual pieces of assembled instruments and record these on the count sheet.
- Inspect instruments for all removable parts, breakage, or fragmentation immediately on the instrument's removal from the surgical site.

- Keep all counted instruments inside the room during the procedure until all counts are completed and reconciled.
- Standardize instruments sets and count sheets with the minimum number and variety of instruments needed for the procedure.

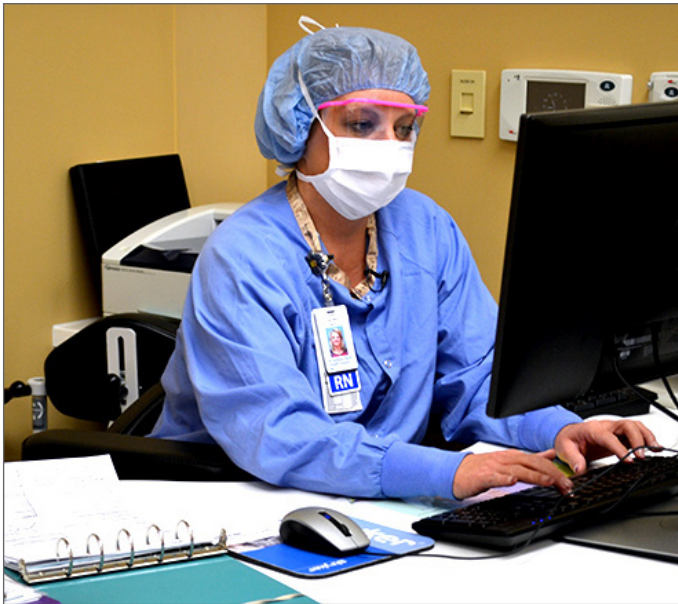
★ *The patient's outcome from a retained instrument depends on the biocompatibility of the item's materials, the location or potential migration of the item, and the patient's anatomy. Outcomes may include infection, local tissue reaction, perforation or obstruction of blood vessels, and death.*



RECONCILING COUNT DISCREPANCIES

- Inform the team and receive verbal acknowledgment from the surgeon of the type and number of items missing, as soon as a discrepancy in a surgical count is identified.
- RN circulator:
 - Call for assistance.
 - Search the room, including the area near the sterile field, floor, kick buckets, and linen and waste receptacles.
 - Recount with the scrub person.
- Scrub person:
 - Organize the sterile field.
 - Search the sterile field, including drapes and tables.
 - Recount with the RN circulator.
- Surgeon and first assistant:
 - Suspend closure of the wound if the patient's condition permits.
 - Perform a methodical wound examination while actively looking for the missing item.
 - Participate in attaining intraoperative radiographs or other imaging modalities as indicated to find the missing item.
 - Remain in the OR until the item is found or it is determined not to be in the patient.
- Do not allow nonessential personnel changes (eg, break, relief) until the count is resolved.
- Do not use empty packages to reconcile count discrepancies.
- When the missing item is found, recount the item type (eg, laparotomy sponges, suture needles).
- If a missing item is not recovered, request intraoperative imaging to rule out a retained item before final closure of the wound if the patient's condition permits. If the patient is unstable, have a radiograph taken as soon as possible in the next phase of care.
- Include in the radiology request:
 - the room in which the procedure is being performed or the patient is located
 - the patient's status
 - the type of radiograph and views needed
 - a description of the missing surgical item
 - the procedure performed
 - the surgical site, including involvement of any body cavities
- Define the needle size limits for which radiographs will be used to assist in identifying retained needles.
- Document unresolved count discrepancies in the patient record, including:
 - a description and the location of the item if known
 - all measures taken to recover the missing item
 - patient notification and consultation
 - the plan for follow-up care
- Notify environmental services personnel and the next perioperative team in the room about items reported missing in an unresolved count discrepancy.

★ *Professional organizations recommend accounting for surgical items used in the wound for prevention of RSI in all procedures, including vaginal deliveries. Accounting for surgical items encompasses reconciling count discrepancies.*



DOCUMENTATION

- Include the following in documentation of measures taken for the prevention of RSIs:
 - types of counts (eg, radiopaque sponges, sharps, miscellaneous items, instruments)
 - number of counts
 - names and titles of personnel performing the counts

- results of surgical items counts (ie, correct or incorrect)
- verification of removal and integrity of objects
- surgeon notification of count results
- an explanation for any waived counts
- number and location of any instruments intentionally remaining with the patient or radiopaque sponges intentionally retained as therapeutic packing
- actions take if count discrepancies occurred, including all measures taken to recover the missing item or device fragment and any patient communication regarding the outcome
- the rationale if counts were not performed or completed as prescribed by policy
- the outcomes of actions taken

★ *Documentation of nursing activities related to the patient's perioperative care provides an account of the nursing care administered and a mechanism for comparing actual versus expected outcomes. Such documentation is considered sound professional practice and demonstrates that all reasonable efforts were made to protect the patient's safety by preventing an RSI.*