Policy Title: Retained Surgical Items (RSI) Policy Counts — SPONGE, SHARP, INSTRUMENT, & MISCELLANEOUS ITEMS
Policy # (given after final approvals, during publishing of policy)
Effective Date: (6/20/2011)

Policy Statement
Patients undergoing surgical procedures will be free from unintended retained surgical items (RSI) at the conclusion of the procedures. All personnel in the operating room are responsible for maintaining an environment that allows for efficient and effective implementation of the count policy. The attending surgeon is responsible to ensure that the entire surgical team has the opportunity to complete all patient safety and count-related activities. Extreme patient emergencies and individual patient considerations may necessitate waived count activities (to include the methodical wound examination, x-ray protocol) at the discretion of attending physicians. A chain of command exists to support and assist with the implementation of this policy.

Principles
• The count process is standardized and applies to all areas where operative procedures are performed.
• All members of the operative team are responsible for practices that promote a complete and accurate count.
• Consistent multidisciplinary communication for preventing RSIs is expected throughout all surgical procedures.
• A structured handoff communication process will be used during team relief and will include details of countable items. To enhance safety, and to the extent possible, scrub and circulator will be relieved at different non-overlapping times and names of all team members (relief and primary) will be identified and documented on the “Who’s – Who” dry-erase board in the operating room.
• The primary attending surgeon may transfer the lead responsibility to another attending surgeon with notification to the entire OR team.
• Sponges, sharps, and miscellaneous items will be counted on all surgical procedures, except where noted.
• Instruments will be counted on designated procedures in which the possibility exists that any of those items could be retained.
• Distractions and interruptions will be kept to a minimum.
• When a count discrepancy is identified, the entire surgical team bears responsibility for carrying out the steps necessary to locate the missing item.
• Wound closure is not considered completed until dressings are applied.
• Non-radiopaque gauze and dressing material will be isolated and contained on the sterile field until the surgical incision is closed.
• The count procedure extends to all surgical patients, living and deceased.

Definitions
• Radiopaque items (items include but are not limited to the following):
  Sponges, cottonoids, tonsil sponges, Kittners/peanuts, radiopaque towels
• Sharps (items include but are not limited to the following):
  Scalpel blades, suture needles, hypodermic needles, electrosurgical needles and blades, safety pins
• Instruments (items include but are not limited to the following):
  All instruments in pans, packs, or peel packs
• Miscellaneous items (items include but are not limited to the following; count all parts when the item is cut):
  Ligaclip bars, vessel loops, tapes, drains, vascular inserts, cautery scratch pads, trocar sealing caps, rubber bands, throat packs, vaginal packing, rubber shods, suction tips, heifitz clips, fish hooks, weck spears, Q-tips, uterine manipulator (acorns)
• Methodical Wound Examination: A visual and/or manual exploration of a surgical wound cavity or other surgical cavity in order to verify the absence of retained surgical items. The methodical wound examination will be conducted prior to closure in every operation.
• Cavity: Refers to the defined anatomical cavities: abdominal, thoracic, and pelvic
• Cavity within a cavity: Referring to the gravid uterus (immediate, post-partum) or urinary bladder
• High Risk Conditions: All patients are at risk for RSI. Additional factors have been identified indicating an increased risk for retained surgical items. These are:
  1. Emergency operations
  2. Unexpected change in the intended procedure
  3. More than one surgical specialty team
4. More than one nursing team change
5. Patients with BMI greater than or equal to 35

- **Chain of Command:** specific individuals designated as the line of authority and responsibility for questions or issues related to practices and procedures

**Procedure**

- **What to count:** Radiopaque items, sharps, instruments, and miscellaneous items (see **Definitions**)

- **When to count:**
  1. Prior to start of surgical procedure (Baseline Count)
  2. At time of permanent relief of either the scrub person or the circulating RN
  3. Following methodical wound examination
  4. Before closure of each body cavity and/or cavity within a cavity
  5. Prior to removal of laparoscopes
  6. At closure of the first side in a bilateral procedure
  7. As wound closure begins
  8. At skin closure or end of procedure
  9. As circumstances require or as a team member requests

- **How to count:**
  1. All counts will begin at the surgical site and the immediate surrounding area, proceeding to the mayo stand and back table, then to items off the sterile field.
  2. When items are added to the sterile field, they will be immediately documented.
  3. Any packaged countable item that does not contain the correct quantity, as indentified on the package should be immediately removed from the room. These items and packaging will be isolated, contained, and marked to facilitate company/vendor notification. The charge nurse will be notified and a Patient Safety Net (PSN) report submitted.
  4. If the count process is interrupted, the count will restart with the type of item that was interrupted.
  5. When using any countable item laparoscopically, the surgeon and scrub person will verbally acknowledge the status of each item (e.g. entering the port, exiting the port, away from the site).
  6. When using Raney clips, a manual methodical wound examination will be done prior to closing.
  7. Count sheets will be disposed of and dry-erase board(s) erased when the patient exits the OR.
  8. Sponges:
     a. Sponges will be separated, counted audibly, and concurrently viewed by the Circulator and the Scrub.
     b. Sponges will be left in their original configuration and will not be cut.
     c. Sponge counter bag(s) will be used for all sponges that leave the sterile field. Quantities to be hung in each collection bag will correspond to the number of items in the original package. Types of sponges will be bagged with like sponges, and will never be mixed. The number of sponges in each collection bag will be verified by both the circulator and the scrub. Bags will be filled from bottom to top.
     d. The closing count must include all sponges.
     e. Only radiopaque sponges and towels are to be used as packing during a procedure. The location, type, number, and time of removal will be documented on the dry-erase board by the circulator.
  9. Sharps:
     a. Suture needles will be counted and recorded according to the number marked on the outer package and verified by the scrub and circulator when the package is opened. Empty suture packages will not be used to rectify a discrepancy in a closing needle count.
     b. The scrub person will place all used sharps in a disposable, puncture-resistant needle container on the sterile field.
     c. All pieces of broken sharp items must be accounted for.
 10. Instruments:
     a. Instrument counts will be done on any procedure involving a cavity, cavity-within-a-cavity, or any wound in which the potential exists for a surgical instrument to be retained.
     b. Instrument counts will be coordinated by the circulator.
     c. Instruments will be counted by tray.
     d. Individual pieces of assembled instruments (e.g., suction tips, wingnuts, blades, sheaths) will be accounted for separately and recorded on the instrument count sheet.
     e. If an instrument tray does not appear on a formatted count sheet, the Instacount form may be used.
f. All instruments and instrument trays included in the count will remain on the sterile field. Instrument trays may be counted off but will be immediately removed from the sterile field and contained in a designated area.

g. Any counted instrument(s) that are removed or dropped from the sterile field will be contained in the designated area and not subtracted from the instrument count.

h. Flashed items that leave the room temporarily will be noted on the dry-erase board.

i. All pieces of broken instruments should be accounted for, tagged and sent to sterile processing in their entirety.

j. The final instrument count will not be considered complete until all instruments, including those used in closing the wound, have been returned to the scrub person.

11. Procedures for which an instrument count may be omitted:
   a. When accurate accounting for instruments is not achievable (e.g., anterior spinal procedures) an intraoperative x-ray will be taken to confirm absence of RSI, to be read by an attending radiologist and/or surgeon before the patient leaves the operating room (Appendix 2).
   b. When the patient weighs less than 10kg.
   c. When incision(s) are limited to 2 inches in length.
   d. Only an initial instrument count (comprising general purpose instrumentation) is required on laparoscopic procedures that do not convert to open approach. Endoscopic instruments need not be counted.

Correct Counts
Under most circumstances, the completion of a correct count will signal the end of the counting process. Further measures to reduce RSI such as wound reopening and re-exploration or X-ray examination may be warranted if an individual on the operating team believes the correct count may be inaccurate or suspects the presence of an RSI (due, for example, to the existence of one or more high risk criteria).

Incorrect Counts
When a discrepancy in the count occurs, procedural steps include, but are not limited to:
1. The circulator will notify and receive acknowledgement from the primary attending surgeon and surgical team immediately.
2. The methodical wound examination will be repeated.
3. The area surrounding the surgical field, including floor, kick buckets, linen and trash receptacles will be inspected. The dry-erase board will be checked for counting errors and/or notations.
4. After a thorough search of the wound and OR, a re-count will be done.
5. When an incorrect count persists, an x-ray will be done before dressings are applied. (Appendix 2)
6. The intraoperative x-ray may be waived if:
   a. the item is not radiopaque
   b. the item is a suture needle 10 mm or smaller
   c. the patient’s condition is such that the risk of obtaining the x-ray exceeds the benefit; an x-ray to rule out RSI will be performed as soon as patient condition allows.
   d. the surgeon has knowingly packed the patient with x-ray detectable sponges. (Refer to Counted Items Intentionally Retained).
7. A PSN report must be completed for all incorrect counts. The documentation of all actions taken, results of the x-ray, and the name of the physician(s) reading the report must be identified on the PSN and the Intraoperative Case Record.
8. Initiate the Chain of Command by notifying the charge nurse, and/or next level of authority.

Omitted Counts
1. If an initial count is not completed, the circulator will notify the surgeon.
2. Justification for omitted counts will be documented in the Intraoperative Case Record.
3. A Patient Safety Net (PSN) report will be completed.
4. An x-ray should be performed as per protocol (Appendix 2).

Counted Items Intentionally Retained
If the patient leaves the OR with countable items intentionally retained, the following steps must be taken:
1. Document the number and type of countable item(s) retained in the Intraoperative Case Record, surgeon’s post-op note and, where applicable, on the EGS sticker (Appendix 3).
2. A PSN is required and the count documented as incorrect; exceptions include penrose drains, cardiac buttons, cardiac tourniquets, and tracheal stents.
3. An x-ray will be deferred until the patient returns to have the countable item(s) removed and the closure completed.
Patient Return to the Operating Room for Wound Closure

When a patient returns to the OR for a wound closure, the following steps must be taken:

1. If countable items are present from a prior procedure, the count will be deemed incorrect. Document the number and type of item(s) removed in the Intraoperative Case Record, surgeon’s post-op note, and PSN.
2. Follow the x-ray protocol (Appendix 2).
3. The results of the x-ray and the name of the physician(s) reading the report must be identified on the PSN, Intraoperative Case Record, and surgeon’s post-op note.

Special Circumstances

If a Retained Surgical Item (RSI) is discovered after the original operation (i.e., unplanned discovery of RSI), the item(s) recovered will be sent to pathology.

Many ophthalmic cases involve wounds so small that there is no possibility for retention of items common to other surgeries. For these surgeries, only suture needles, parts of any cut items and items that could potentially be retained, such as scleral plugs and iris retractors, must be counted. Cases meeting this criteria are; anterior segment procedures, glaucoma procedures, retina procedures, strabismus procedures, cornea procedures and lid procedures. Oculofacial plastic procedures involving larger wounds such as orbital and facial surgeries must adhere to the general surgical guidelines for counts.

Appendix 1

<table>
<thead>
<tr>
<th>Roles</th>
<th>Description</th>
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<tr>
<td><strong>Primary Attending Surgeon</strong></td>
<td>The surgeon is responsible to conduct the operation and oversee safety of the patient. When there are multiple attending surgeons, one will be designated as primary. The primary surgeon will document the status of the count and the methodical wound examination in the surgeon’s post-op note.</td>
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<tr>
<td><strong>Primary Attending Anesthesiologist</strong></td>
<td>The anesthesiologist/anesthetist is responsible for cooperating with the surgical team to ensure an environment conducive to preventing RSI by minimizing noise/distractions during instrument counts and by providing anesthetic care to patients as required to facilitate procedures associated with RSI prevention (e.g., intraoperative x-ray). The anesthesiologist/anesthetist also will be responsible for notifying the surgical team if they become aware of a potential RSI or of a surgical item that is missing from the surgical field. Due to their ongoing responsibilities for the monitoring of and medical care of the patient, the anesthesiologist/anesthetist will not participate in instrument counts and will not be responsible for either incorrect counts or RSI beyond the responsibilities noted in this section.</td>
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<tr>
<td><strong>Circulator</strong></td>
<td>The registered nurse is responsible for managing safe, effective, and quality patient-family centered care within the operating room. Primary responsibilities include: patient assessment, development and implementation of an individualized perioperative plan of care which includes performing count procedures that protect the patient from RSIs, addresses relevant count information is transfer of care reports, delegates appropriate tasks STs, thorough documentation of surgical count actions, collaborate effectively with other disciplines, acts as a patient advocate. The RN will perform all actions that refer to circulator.</td>
</tr>
<tr>
<td><strong>Scrub</strong></td>
<td>The Scrub role may be performed by either a registered nurse or a surgical technologist. The surgical technologist is an unlicensed individual who, under the direct supervision of the circulating registered nurse, handles the instruments, supplies, and equipment necessary during the surgical procedure, anticipates the needs of the surgeon, and monitors the integrity of the sterile field.</td>
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<tr>
<td><strong>Manager/Charge Nurse/Team Leader</strong></td>
<td>Changes of assignments and reliefs are kept to a minimum and to the extent possible, assignments will have non-overlapping times for scrubs and circulator reliefs.</td>
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Appendix 2

X-ray Protocol

1. An x-ray or stored-image fluoroscopy will be taken to rule out the presence of a Retained Surgical Item (e.g., needle, sponge, or instrument). The x-ray/fluoroscopy must encompass the entire wound and operative field, and must include at least two views.
2. No one on the surgical team may refuse an indicated x-ray/fluoroscopy except for the attending surgeon for reasons of patient safety.
3. As patient condition permits, dressings shall not be applied until radiographic results are verified by the primary attending surgeon and/or attending radiologist. The primary attending surgeon will remain immediately available and until the x-ray is resolved. The attending radiologist will notify the attending surgeon with the final result within 20 minutes of the completion of the x-ray.
4. The patient will not be charged for either examination or interpretation of the x-ray
5. The entire x-ray process, from request to interpretation, should be complete within 40 minutes.

Appendix 3

OHSU Trauma Program: Open Body Cavity, Wound Vacuum and Intentionally Retained Surgical Items Protocol

1. Surgical team verifies number of counted items being left in patient
2. Surgeon documents number of packed items in Epic and on patient sticker
3. Upon return of patient to OR, the preoperative time-out will include sticker and Epic documentation of retained surgical items
4. Retained surgical items will be removed, counted, and bagged separately off of the sterile field
5. If the body cavity is to be closed, x-ray is obtained and interpreted prior to patient’s leaving the OR.
Education/Training Resources:

Document History
Supersedes: Surgical Count, Clin 01.36, May 4, 2006; CHH Counts, sponge, sharp and miscellaneous item/instrument counts; November 2006, August 1998, (offline copy – Formerly Surgical Counts: Needles and Miscellaneous Countable Items, 5.3; Surgical Sponge Counts)

Related Policies/Procedures/References

Applicable Regulations:
- Federal
  - CMS
- State
  - Oregon Administrative Rules
  - Oregon Revised Statutes
- The Joint Commission:
- Legal Dept. Review Required?

Policy Originator/Author:
1. Executive Management Group (EMG): John Hunter, MD; Jeffrey Kirsch, MD; Melody Montgomery, RN, MBA
2. IntraOperative Unit Educator Team

Approved By:
- Policy Committee – 6/1/2011
- EMG – Service Chiefs – 6/2/2011
- OHSU- Professional Board – 6/7/2011