Department of Veterans Affairs **VHA DIRECTIVE 2010-017**
Veterans Health Administration
Washington, DC 20420 **April 12, 2010**

PREVENTION OF RETAINED SURGICAL ITEMS

1. PURPOSE: This Veterans Health Administration (VHA) Directive provides policy to prevent incidents of surgical items being retained in a patient following surgery.

2. BACKGROUND

a. Surgical items are defined as instruments, sharps, sponges, or any materials used by the surgical team to perform an operative procedure. Sharps are surgical needles, aspirating needles, blunt needles, scalpel blades, or any items with a sharp or pointed edge that pose a risk for skin puncture by members of the surgical team. Surgical sponges include cotton gauze sponges of various sizes, laparotomy pads, surgical towels, or any absorbent materials not intended to remain in the patient's body after the surgical procedure is completed. ***NOTE:*** *A surgical item is considered to be retained if it is an item not intended to remain and found in any part of the patient's body after the patient has been taken from the operating or procedure room.*

b. The estimated rate of retained surgical items is reported to range from 1 in 18,000 to 1 in 1,500 operations. In 2008, data collected by the Department of Veterans Affairs Surgical Quality Improvement Program (VASQIP) and the National Center for Patient Safety (NCPS) identified the rate in VA to be about 1 in 12,500 operations.

c. The occurrence of a retained surgical item is considered a sentinel event, requires Root Cause Analysis (RCA), and must be reported to the NCPS. The NCPS aggregates RCA data and reports annually to the National Director of Surgery. ***NOTE:*** *VHA Handbook 1050.01, VHA National Patient Safety Improvement provides further guidance regarding sentinel event reporting and requirements for patient disclosure.*

3. POLICY: It is VHA policy that the surgical team must apply a standard approach to the prevention of retained surgical items when the operative procedure being performed is one in which there is any possibility for retention of a surgical item.

4. ACTION

a. **Facility Director.** The facility Director is responsible for ensuring compliance with this Directive at the local level.

b. **Facility Chief of Surgery.** The Chief of Surgery is responsible for ensuring that the surgical team performing an operative procedure in which there is any possibility for retention of a surgical item adheres to the following standards:

(1) **Sponges.** All surgical sponges, that are placed in the surgical field must be left in their original configuration and must not be cut or used for dressings.

(2) **Radiopaque Surgical Items.** Surgical items placed into, or peripheral to, an operating field must be radiopaque (detectable by a radiograph).

(3) **Non-Radiopaque Surgical Items.** Non-radiopaque surgical items that are used in the operating room (OR), for example, sponges used during IV line insertion, must be disposed of in a separate waste receptacle so designated for that purpose and never in the same space with counted surgical items.

(4) **Methodical Wound Exploration.** A methodical wound exploration must be performed before closing the surgical wound in every case to ensure that all surgical items are accounted for and extracted.

(a) The space to be closed must be carefully examined. Special focus must be given to closure of a cavity within a cavity (e.g., heart, major vessel, stomach, bladder, uterus, and vagina).

(b) A methodical wound exploration must be performed before removing stationary or table mounted retractors.

(c) If at any time during wound closure, the surgeon is informed of an inaccurate count of surgical items; the surgeon must stop closing the wound and proceed with a methodical wound examination while the OR staff continues to look for the missing surgical item.

(d) The surgeon must visually and manually explore the operative field; making every effort to remove any and all surgical items left within a body cavity.

(5) **Count of Surgical Items.** All surgical items must be counted in every case.

(a) A count of surgical items must occur:

1. Before the procedure has begun to establish a baseline count;

2. Before the closure of a cavity within a cavity;

3. Before wound closure begins;

4. At skin closure or end of procedure; and

5. At the time of permanent relief of either the scrub person or the circulating nurse.

(b) OR nursing and technician staff must be allowed sufficient time for a count of surgical items to be performed.

1. All surgical counts are performed using a two person practice; the items are counted audibly and viewed concurrently by the scrub technician or nurse and the circulating nurse.

2. When additional items are added to the field, they are to be counted when added and recorded as part of the count documentation.

3. Any time there is a question by any member of the surgical team regarding the count, an additional count must be requested.

4. Perioperative personnel must never assume that the count on prepackaged sterilized items is accurate. The contents of each package must be counted individually by the scrub tech or nurse and circulating nurse using the standard two person practice. If the package has an incorrect number of items, and the procedure has not begun, the entire pack must be removed from the OR. If the procedure has begun, the pack must be bagged, properly labeled, and isolated from the other counted items.

5. Counts must be performed in the same sequence each time. The count needs to begin at the surgical site and the immediate surrounding area, proceed to the instrument stand and back table, and finally to the counted items (sponges, sharps, or instruments) that have been discarded from the field.

6. All relief personnel must be documented in the VistA Surgery Package and will appear in the Nurse Intra-operative Record.

(c) The surgeon must be informed by the OR staff (nurse or technician) at the time a discrepancy in a count of surgical items is discovered. It is imperative that a reasonable and appropriate search of the operative field and surrounding area be undertaken to recover the item in question and resolve the discrepancy.

(6) **Use of Intraoperative Radiograph**

(a) An intraoperative radiograph of the surgical field is not required if a methodical wound exploration is performed and a count of all surgical items is correct at the completion of the procedure.

(b) A radiograph of the entire surgical field to rule out a retained surgical item must be performed and interpreted by a physician at the completion of the surgical procedure, prior to the patient's transfer from the OR, in the following circumstances:

1. When the surgical count is "incorrect" (i.e., the preoperative surgical item count plus surgical items added during the procedure is greater or less than the postoperative surgical item count) and the surgical item in question is not recovered.

a. A radiologist must interpret the radiograph and notify the surgical team by verbal or written communication when the missing surgical item is not found. The radiologist's report must be made available to the surgical team in a timely fashion recommended to be less than

30 minutes from the time the radiograph is requested. Consideration should be given to obtaining additional views, for example, an oblique view of the operative site when initial radiographs do not reveal the missing item and the item still has not been found. ***NOTE:*** *The surgeon has the discretion to close the surgical wound prior to receiving a report from the radiologist regarding a missing surgical item if delaying wound closure would substantially increase risk for the patient.*

b. There is no requirement for a radiologist to interpret the radiograph if the surgical team subsequently finds the missing object thereby establishing the surgical count as correct.

2. When the surgeon, scrub technician or nurse, and circulating nurse unanimously agree that the number of surgical instruments utilized during the operative procedure prohibits an expeditious and timely count. This situation is typically encountered with major joint replacements. ***NOTE:*** *A methodical wound exploration and count of all sharps and sponges must still be performed even though a radiograph is substituted for the surgical instrument count in such circumstances.*

3. When the clinical circumstances dictate the patient requires emergency care and the counting of surgical items may not be in the best interest of the patient. This divergence or omission from standard protocol (i.e., methodical wound exploration and complete surgical item count) must be documented in the OR record in the following manner:

a. The surgeon must include a statement in the operative report describing the emergent nature of the procedure, the clinical condition of the patient, and the reasons for divergence or omission of standard protocol.

b. The circulating nurse must enter a statement in the "Nursing Care Comments" section of the computerized Surgery Package, which will appear in the Nurse Intra-Operative Report describing the emergent nature of the surgical procedure, the clinical condition of the patient, and the aspects in which standard protocol was omitted or modified.

c. In such cases, a radiograph must be obtained in the Post-Anesthesia Recovery Unit or Intensive Care Unit and interpreted by a radiologist to rule out a retained surgical item unless contraindicated by the patient's clinical condition.

4. When the operative procedure being performed is one determined by any member of the surgical team to be at high risk for retained surgical items, even though a methodical wound exploration has been performed and the surgical item count is correct. ***NOTE:*** *The following operative procedures should be considered at high risk for retained surgical items: emergency procedures involving a body cavity; unexpected change in the conduct or scope of the operative procedure; operative procedures involving more than one surgical team, operative procedures of considerable duration particularly those that require a nursing staff shift change, unexpected transfusions defined as greater than four units of packed red blood cells, and morbidly obese patients.*

5. REFERENCES

a. "Recommended Practices for Sponge, Sharp and Instrument Counts," Association of Perioperative Registered Nurses (AORN) Standards, Recommended Practices and Guidelines. 2009.

b. Gibbs, V.C., Coakley, F.D., Reimes, H.D., "Preventable Errors in the Operating Room: Retained Foreign Bodies after Surgery," Current Problems in Surgery, May; 44: 281-337, 2007.

c. Cima, R.R., Kollengode, A., Garnatz, J., Storsveen, A., Weisbrod, C., Deschamps, C., "Incidence and Characteristics of Potential and Actual Retained Foreign Object Events in Surgical Patients," Journal of the American College of Surgeons, July; 207 (1): 80-87, 2008.

d. VHA Handbook 1050.01, VHA National Patient Safety Improvement Handbook. May 23, 2008.

6. FOLLOW-UP RESPONSIBILITY: The National Surgery Office (10NC2), is responsible for the contents of this Directive. Questions may be referred to the National Director of Surgery at 202-461-7148.

7. RECISSIONS: VHA Directive 2006-030 is rescinded. This VHA Directive expires April 30, 2015.

Robert A. Petzel, M.D.
Under Secretary for Health

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