SCPSF Collaborative Meeting
“Collaboration to Reduce Medical Errors”

• Prevention of Retained Surgical Items
• Verna C. Gibbs MD
• Director - NoThing Left Behind®

* Funded by Anthem Blue Cross
The California Story

Reports from 10/25/2007 – 2/6/2013

68 Retained Surgical Item cases

40 Soft Goods

23 laps; 12 raytex; 3 towels (1 ROT)

22 Small Miscellaneous Items

6 Instruments (50% malleable retractors)
In March 2010 pt underwent laparoscopic cholecystectomy converted to open for gangrenous cholecystitis. 2 hour operation, counts correct. Post/op pt had bleeding, hemorrhagic shock and NEXT MORNING was taken back to OR for re-exploration and hemostasis of some liver and gallbladder fossa vessels. Counts called correct. Pt had ICU stay and eventually discharged. Pt returned to hospital 5 times with c/o chest pain, headache and hematuria. Last visit admitted with chest pain and had ? type of Xray (could be chest or abdomen) showing retained lap pad in RUQ with abscess. Returned to OR for removal. Lap pad retained in second operation. No details of how “counts” are performed. No one knows when or how error in counting occurred.

Call to Action

1. CDPH citation focused on following count policy and the education of staff on AORN counting, doing audits and using “plastic bags” and observe each other counting.
2. More insightful:
3. Surgeons should perform a MWE before closing
4. Use the Sponge ACCOUNTing system rather than just counting the sponges

Pearl of Wisdom

Follow same rules every time, every case
Model for Improvement

- What are you trying to accomplish? (AIM)
- What changes will result in improvement? (INTERVENTIONS)
  - Test ideas of change in the PDSA cycle
- How will you know the change is an improvement? (MEASURE)
Small Test of Change

1) State Your AIM

2) Procure sponge holders and white board, and/or review with staff how to correctly use the system

3) Select your unit or test population
   • Small
   • Specific
   • Conducted over a short time period – preferably no more than one week
   • Using willing volunteers
3 Month Progress

- Webinars Oct – Dec; 4 segments
- 101 – introduction
- 201 – PDSA in Small Test of Change
- 301 – Video of the practice and open forum
- 401 – Surgical Towel management and Site progress reports
Accomplishments

- Hospitals registered to participate: 25
- Hospitals that participated in any sessions: 18
- Hospitals represented at all four sessions: 7
- Hospitals represented at three sessions: 4
- Hospitals represented at two sessions: 2
- Hospitals represented at only one session: 5

- Hospitals with OR staff involved: 14 of 18 (78%)
- Hospitals with more than 1 person involved: 9 of 18 (50%)

Results?
Results

ZERO

Not one OR was able to accomplish a one week trial
# Evaluations

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Did your hospital already have a reliable and standardized sponge accounting system (SAS) in place?</td>
<td>111</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>2) Have you conducted a trial of the SAS as Dr. Gibbs demonstrated it?</td>
<td></td>
<td></td>
<td>Is being planned</td>
</tr>
<tr>
<td>3) Do you plan to conduct a trial or refine your current SAS procedure?</td>
<td>111111</td>
<td></td>
<td>Planning to refine, based on trial results</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>We are looking into purchasing additional sponge holders</td>
</tr>
<tr>
<td>4) Did you download/print the materials (signs and education tools) to review?</td>
<td>111111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Did you distribute the materials for others on your team to study/evaluate?</td>
<td>111</td>
<td>111</td>
<td>Planning for 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Planning for 2013</td>
</tr>
<tr>
<td>6) If you did not set up/try out the system, please share the reason(s) why</td>
<td></td>
<td></td>
<td>The team has not been together to present the info</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Need to order the appropriate supplies and equipment</td>
</tr>
<tr>
<td>7) Was the 4-webinar series a good way to equip your team for an SAS trial?</td>
<td>111111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Was your time on the webinar(s) valuable?</td>
<td>111111</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

• Participants found it much harder than anticipated
• Large knowledge gaps
• Webinar structure good for introduction and clarification of concepts but hands on probably required for adoption
• A lot of inertia and resistance to overcome
Patient Safety First...
A California Partnership for Health

Hospitals

Why Should People Jump?

Burning Platform
The California Story

Reviewed CDPH reports from 10/25/2007 – 6/6/2013 where hospitals received administrative penalties of $25,000 - $100,000

73 Retained Surgical Item cases

42 cases involving Soft Goods

27 laps; 12 raytex; 3 towels (1 ROT)

23 cases of Small Miscellaneous Items

8 cases of a retained Instrument

(50% are visceral retractors)
In 2010 patient underwent uncomplicated C-section (e elective or emergent). Counts correct at end of case. Mother and infant went home. Seven weeks later mother returned to ED with left lower abdominal mass and wound infection. CT scan obtained which showed retained lap pad and abscess. Pt taken to OR and found to have jejunal and sigmoid colon perforation in area of lap pad adhesion. Pt underwent small bowel and sigmoid colon resection. Did well.

Counts were performed during operation. No details of how “counts” are performed. No one knew where error occurred.

**Call to Action**

1. CDPH citation and hospital focused on following count policy and the counting of sponges and how many counts to perform. Staff education, observations and audits etc., etc
2. More insightful:
3. Surgeons should perform a MWE of every wound before closing
4. Use the Sponge ACCOUNTing system rather than just counting the sponges

**Pearl of Wisdom**

Follow same rules every time, every case
So Patient Safety First
Hospitals can be FIRST to ZERO Retained Surgical Sponges

Verna C. Gibbs MD
Director, NoThing Left Behind®
Professor of Surgery UCSF; Staff Surgeon, SFVAMC
# NQF Required Reporting

## Serious Reportable Events (SRE) 2011 Update

### Event
- Unintended retention of a foreign object in a patient after surgery or other invasive procedure
- **Applicable Settings:**
  - Hospitals
  - Outpatient/Office-based Surgery Centers
  - Ambulatory Practice Settings/Office-based Practices
  - Long-term Care/Skilled Nursing Facilities

### Additional Specifications
- **Includes** medical or surgical items intentionally placed by provider(s) that are unintentionally left in place
- **Excludes:**
  a) objects present prior to surgery or other invasive procedure that are intentionally left in place;
  b) objects intentionally implanted as part of a planned intervention and;
  c) objects not present prior to surgery/procedure that are intentionally left in when the risk of removal exceeds the risk of retention (such as microneedles, broken screws)

### Implementation Guidance
- This event is intended to capture:
  - Occurrences of unintended retention of objects at any point after surgery/procedure ends regardless of setting (post anesthesia recovery unit, surgical suite, emergency department, patient bedside) and regardless of whether the object is to be removed after discovery
  - Unintentionally retained objects (including such things as wound packing material, sponges, catheter tips, trocars, guide wires) in all applicable settings
After surgery is.....

- After all incisions have been closed in their entirety
- Devices have been removed
- Final surgical counts have concluded
- Patient has been taken from the operating/procedure room

http://www.qualityforum.org/projects/hacs_and_sres.aspx
When is it Retained?

- After surgery
- After surgery is NOT wound closure
- After surgery is “out of OR”
- So everybody has to work together to make sure we get any surgical tools not intended to remain out of the patient before leaving the OR
Why do they occur?

• There have been retained sponge cases where technological adjuncts were used
• It’s not the devices, it’s the PEOPLE who are using the devices
• More insightful to look at personnel and environmental characteristics
• It’s us not the patient!
• It’s a system problem
Important Points

• It’s a Retained Surgical Item
• Which is a Surgical Patient Safety Problem
• These involve faulty Communication and OR Practices
• Multi-stakeholder involvement
• Therefore they are SYSTEM problems NOT easily remediated by individual action
Important Points

• Physicians and Nurses are the primary defenders (their practices are pre-game strategies)
• Radiologists are secondary defenders (their practices are end-game strategies)
• The safety rules and standardized practices apply to everyone
• Anybody can speak up/stop the line
Must Have

• Leadership Support
• Resource Allocation to purchase supplies
• Nursing Engagement
• MD Champion
MD: Easy as 1,2,3

1. Only use xray detectable sponges during an operation, don’t alter them.

2. In every operation you perform, before closing the wound - do a methodical wound exam.

3. Before leaving the OR say “show me” so the nurses can prove to you that all the sponges are accounted for.
Don’t Just “Swish or Sweep”, perform a Methodical Wound Examination (MWE)

The goal is to get all the sponges OUT so they can be accounted for

A methodical exploration of the operative wound must be conducted prior to closure in every operation. The space to be closed must be carefully examined. Special focus should be given to closure of a cavity within a cavity (i.e., heart, major vessel, stomach, bladder, uterus, and vagina). Surgeons should strive to SEE and TOUCH during the exploration whenever possible; reliance on only one element of sensory perception is usually insufficient. Before closing, the surgeon should first make a best effort to remove all sponges, then the nurse and scrub person will count them and feedback to the surgeon if all have been accounted for.

The general process is to look and feel in the recesses of the wound and examine under fatty protuberances and soft-tissue appendages.

Unless clinically contraindicated for a specific patient, the following steps should be taken for procedures performed in the abdomen or pelvis.

1. Examine all four quadrants of the abdomen with attention to:
   a. Lifting the transverse colon
   b. Checking above and below the liver and above and around the spleen
   c. Examining within and between loops of bowel
   d. Inspecting anywhere a retractor or retractor blades were placed

2. Examine the pelvis:
   a. Look behind the bladder, uterus (if present) and around the upper rectum
   b. The vagina should be examined if it was entered or explored as part of the procedure

Unless clinically contraindicated for a specific patient, the following general steps should be taken for procedures performed in the mediastinum or thorax.

1. In a mediastinal procedure, if the mediastinal pleura were opened, examine the ipsilateral pleural cavity.
2. In a cardiac procedure, elevate the apex of the heart and examine the retrocardiac space.
3. Examine the transverse sinuses to the right and left of the aorta and pulmonary artery.
4. In a thoracic procedure, examine the thoracic cavity with attention to the thoracic apex and base of the lungs, paravertebral sulcus, and inferior recesses of the diaphragm. Place a hand or finger behind the lung and palpate from apex to base.

FINAL COUNT SHOW ME
Before leaving the OR, say “show me”.
You aren’t being asked to count!
Ask to see the holders and look at them.
Each pocket should be full - 10 sponges per holder.
SURGEONS EASY AS 1,2,3

SPONGE ACCOUNTING PROCESS

PAUZE FOR THE GAUZE

CLOSING COUNT
Methodical Wound Examination (MWE)

Don’t just “Swish or Sweep”
The goal is to get all the sponges OUT so they can be accounted for.

A methodical exploration of the operative wound must be conducted prior to closure in every operation. The space to be closed must be carefully examined. Special focus should be given to closure of a cavity within a cavity (i.e., heart, major vessel, stomach, bladder, uterus, and vagina). Surgeons should strive to SEE and TOUCH during the exploration whenever possible. Reliance on only one element of sensory perception is usually insufficient. The surgeon should make every effort to remove all sponges so the nurses can account for them.

The general process is to look and feel in the recesses of the wound and examine under fatty protuberances and soft-tissue appendages. Unless clinically contraindicated for a specific patient, the following steps should be taken for procedures performed in the abdomen or pelvis. These steps should be performed before removing stationary or table mounted retractors.

1. Examine all four quadrants of the abdomen with attention to:
   a. Lifting the transverse colon
   b. Checking above/around the liver and above/around the spleen
   c. Examining within and between loops of bowel
   d. Inspecting anywhere a retractor or retractor blades were placed

2. Examine the pelvis:
   a. Look behind the bladder, uterus (if present) and around the upper rectum.
   b. The vagina should be examined if it was entered or explored as part of the procedure.

3. Occasionally, unless clinically contraindicated for a specific patient, the following general steps should be taken for procedures performed in the mediastinum or thorax.

   a. In a mediastinal procedure, if the mediastinal pleura were opened, examine the ipsilateral pleural cavity.
   b. In a cardiac procedure, elevate the apex of the heart and examine the retrocardiac space.
   c. Examine the transverse sinus to the right and left of the aorta and pulmonary artery.
   d. In a thoracic procedure, examine the thoracic cavity with attention to the thoracic apex and base of the lungs, paravertebral sulci, and inferior recesses of the diaphragm. Place a hand or finger behind the lung and palpate from apex to base.

IN COUNT(S)
Only use x-ray detectable sponges or towels. Don’t alter them. Avoid use of small sponges in large cavities.

SHOW ME
Before you leave the OR, look at the sponge holders to verify they are full. Then dictate in op report “a MWE was performed and sponges were accounted for.”

PAUZE FOR THE GAUZE

CLOSING GAUZE
Perform a methodical wound exam (MWE), to get all the sponges out. CALL OUT “I think all the sponges are out” THEN ask for closing suture.

FINAL COUNT
GET TO ZERO
The California Story

Reviewed CDPH reports from 10/25/2007 – 6/6/2013 where hospitals received administrative penalties of $25,000 - $100,000

73 Retained Surgical Item cases
42 cases involving Soft Goods
27 laps; 12 raytex; 3 towels (1 ROT)

23 cases of Small Miscellaneous Items
8 cases of a retained Instrument
(50% are visceral retractors)
**Story**

In 2010 patient underwent uncomplicated CABG for ? Indications. Counts called correct. Some time post/op pt underwent CXR which showed “opacities” and then underwent CT which showed retained (probable) raytex. Pt taken to OR for thoracotomy and removal of raytex in pericardial space. Did well.

No details of how “counts” are performed. No one knows when or how raytex retained.

**Call to Action**

1. CDPH citation focused on hospital plans to use dry erase board to record counts, plastic hanging pocketed panels, RF sponges and crew resource management training.
2. Alternative:
3. Surgeons should perform a MWE of every wound before closing incision
4. Use Sponge ACCOUNTing system with a hard stop at show me step if there are empty pockets

**Pearl of Wisdom**

Follow same rules every time, every case
Nursing Problems

• Variable counting practices exist throughout an OR – no standardization, little transparency, counting in unit of issue, bagging sponges in bundles
• Frequent confirmation bias between scrub and circulator, no independent verification, trust alone
• Loss of situational awareness and missing events that occur outside the scrub or circulators locus of control
• Normalization of deviance, miscounts “happen all the time”
• Retained sponge cases occur when low number of sponges (< 20 sponges) have been used, any size incision, any type of case, no predictable risk
Who’s on First?

- Final count “correct”
- That’s 8 + 2 in the vagina
- Is that correct?
- Yes, there are two
- No, 8+2 that’s 10, the count is 10
- Oh, yes, count correct

But there were two sponges left in the vagina!
Method of Counting Sponges

- Use the hanging counter bags for raytex and count in 10’s
- Use the hanging counter bags for laps by breaking center divider and...
- Collect in kick bucket and count 10 by hanging blue tags over edge of...
- All sponges only in multiples of 10
- In the unit of issue
- Use the RFID system (Clearcount)
- Collect sponges in groups of 5 and secure in clear plastic bag and put...
- Collect sponges in groups of 10 and secure in clear plastic bag and put...
- Lay sponges out on drape or flat surface and count with scrub
- Collect in kick bucket and count 10 by pointing with ring forceps
- Collect in kick bucket and count 5 by hanging blue tags over edge of...
- Collect in kick bucket and count 5 by hanging over fingers
- Use the RFID system (Clearcount) with counter bags
- Use the wand system (RF Surgical) only on selected cases.
- Use the wand system (RF Surgical) with a manual count on every case
- Use the wand system (RF Surgical) with one of the manual count...
- Use the bar code device (Surgicount) with kick buckets and counter bags
- Use the bar code device (Surgicount) with kick buckets
- Collect sponges and put some in hanging counter bags
PDSA Project
Test of Change within a defined scope e.g.
All cases within specific room(s) in OR
or
All cases of specific surgeon  or
All cases of specific nurse or
All cases of specific specialty

Retained Surgical Sponges
Sponge Management

Policy

Process

Practice

Safe Care

Standardized Care

Computer Assisted Sponge Counting
- 2D matrix labeled sponges
- handheld bar code reader

Incorrect Count
- XRAY

Sponge ACCOUNTing System
- plastic hanging sponge holders
- wall mounted dry erase boards

Incorrect Count
- XRAY

RF System
- RF tagged sponges
- detector plastic wand

Incorrect Count

WAND
- patient + room

Customized Care
Nurses use a standardized process to put sponges in hanging plastic holders and document the counts on a wall-mounted dry erase board in every OR.

Surgeons perform a methodical wound exam in every case and before leaving the OR - verify with the nurses that all the sponges (used and unused) are in the holders.
The one minute brief

All free sponges are managed in multiples of 10. The RN and ST “see, SEPARATE & say” for all IN counts. The counts are written using a running total format on a white board which is outlined the same way in all rooms. Sponge are placed in hanging blue-backed plastic sponge holders starting with the bottom pocket and moving horizontally up. At the CLOSING count there is a “pauze for the gauze” where the surgeon does a methodical wound exam before asking for closing suture and the RN and ST count. At the FINAL COUNT all the used and unused sponges must be in the holders and there is a “show me” step where the RN and surgeon look at the hanging holders to VERIFY there are NO EMPTY POCKETS.
Trust but Verify

In Count

3 S’s:
See, Separate, and Say

Operation

Closing Count

Kick Bucket Ring Stand

Final Count

Verify

Correct: Found the Sponge

Correct

Missing Sponge

Incorrect: Didn’t Find the Sponge

Alert

Administration

RN

MD

Patient

X-Rays

AP

Oblique

Radiologist Verify

Surgeon

Look in Trash

RN

MD

Zero Left Behind
Structural Elements

• Dry Erase Board
• Format on board is the same in all ORs
• Standardize how info will be written
• Rack, Sponge Holders
• Signage is IMPORTANT (acts as memory joggers to help people do the right thing)
Dry Erase Board Format

- Communication tool
- Standardized format throughout all ORs
- Upper left for sponge count
- Lower left for needle count
- Across the top for patient information
Dry Erase Board Format

**PATIENT SAFETY AND ACCOUNTING BOARD**

<table>
<thead>
<tr>
<th>Item</th>
<th>100</th>
<th>250</th>
<th>500</th>
<th>750</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAYTEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEANUTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEEDLES, SUTURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEEDLES, HYPO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLADES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAUTERY TIPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DATE:**

**PHYSICIAN:**

**PATIENT NAME:**

**PROCEDURE:**

---

**PATIENT SAFETY AND ACCOUNTING BOARD**

<table>
<thead>
<tr>
<th>Item</th>
<th>100</th>
<th>250</th>
<th>500</th>
<th>750</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAYTEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEANUTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEEDLES, SUTURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEEDLES, HYPO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLADES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAUTERY TIPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DATE:**

**PHYSICIAN:**

**PATIENT NAME:**

**PROCEDURE:**
Dry Erase Boards

- Standardized format is the same in all ORs
- Format to record counts is the same for soft goods and needles
- No extraneous marks e.g. + x / ☒
Dry Erase Board

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>DOB:</th>
<th>Surgeon:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure:</td>
<td>MR #:</td>
<td>Anes:</td>
</tr>
<tr>
<td>Allergy:</td>
<td>In Time:</td>
<td>Circ:</td>
</tr>
<tr>
<td>Antibiotic/Time:</td>
<td>Cut Time:</td>
<td>Scrub:</td>
</tr>
<tr>
<td>Laps:</td>
<td>Blades:</td>
<td>Specialty Items:</td>
</tr>
<tr>
<td></td>
<td>Bovie Tip:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypo Needles:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Needles:</td>
<td></td>
</tr>
<tr>
<td>R.O.:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peanuts:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dry Erase Board

• HORIZONTAL
  ➤ 10^10 20^10 30^10 40

• VERTICAL
  ➤ 10
  10
  20
  10
  30

5+5+5+5+5

This is “unit of issue” but how many sponges are out? How many full holders should there be? Can you tell quickly?

running total

YES!!!
Rack, Board and Signs

Rack attaches to pole at 4 points - 2 hooks across the top and 2 clamps to pole
Two-Prong IV pole
Wrong rack mounts
Don’t Go Here Please
Plastic Hanging Holders

- Cheap ~ 30 cents each
- One sponge per pocket, Two sponges per pouch, Ten sponges per holder
- Blue radio-opaque marker visible
- One holder for each type of “free” sponge
- ALL sponges in the holder at final count
- MUST take final count from holders
NURSES

USE PLASTIC HANGING SPONGE-HOLDERS FOR LAPS AND RAYTEX

This process involves the use of plastic hanging blue-backed sponge-holders which each contain 5 pouches. Each pouch has a thin center-divider which separates each pouch into 2 pockets. One sponge per pocket means that each holder can accommodate 10 sponges. We recommend that each holder always be set up to hold 10 sponges be they laparotomy pads or raytex and different types of sponges should not be mixed within one holder. The sponge holders are held on racks mounted to IV poles. A wall-mounted dry erase board to record operative information and the IN counts should be easily visible in each room. This process should be standardized for use throughout all operating rooms to provide consistency in all types of operative cases.

The **single most important element** in the use of the hanging sponge-holders is to make sure that "the final count" is taken when ALL the sponges that have been opened during the case (used and unused) have been placed in the holders. The surgeon and nurse can then visually verify that all sponges have been accounted for and none remain in the patient.

1. Use blue-backed sponge holders on all cases that use surgical sponges. Add laps and raytex in groups of 10. At the IN count "see, SEPARATE and say "individual sponges within each pack.
2. Hang the holders on the special racks attached to designated IV poles. Use a separate holder for each sponge type e.g. one for laps, one for raytex.
3. Used sponges coming from the operative field should be placed into a CLEAR plastic bag lined receptacle (e.g. kick buckets or ring stand).
4. Take each used sponge from the receptacle. Make sure you have only one sponge. Open it up to its full length and then fold it up into an oval. Place one (1) sponge per pockets; two (2) sponges per pouch; ten (10) sponges per holder.
5. Put the first sponge in the LAST pocket in the bottom of the holder. Load the holder horizontally from the bottom row to the top row, filling from the bottom to the top. This process (going from the bottom to the top) will make visual determination of the filled holder easier to see from the OR table. Once a holder is full with 10 sponges, visual confirmation with the scrub person should occur before hanging the next empty holder.
6. Place the folded sponge inside the pocket with the blue tag or stripe visible but not dangling out. The blue stripe must be visible because this is what differentiates a sponge with a radiographic marker from a gauze swabbing. Place another sponge in the other pocket in the other side of the pouch. Periodically throughout the case put the used sponges in the holder. Keep the kick buckets empty.
7. At the time of the final count ALL sponges MUST be in the sponge holders and the final verification must be taken by two people viewing the sponge holders. There should be NO EMPTY POCKETS.
8. Keep a running total of the sponges added to the surgical field on the dry erase board using the same format that is used to count needles. The last number should always be the total number of sponges opened during the case.
9. At a permanent change of relief, the number of sponges in the holders should be physically reviewed using visual and audible communication between the circulating nurses changing positions before the relieved nurse departs the OR.
10. Sponge holders should remain hanging in their racks from the IV poles. At the completion of the case the holders can be disposed of in a red biohazard bag thus removing all the sponges from the case so there will be "nothing left behind" to confound the counts on a subsequent case.

10 LAPS / 10 RAYTEX / 10 POCKETS / 10 STEPS...
Plastic Hanging Holders

BLUE BACKED

WHITE BACKED
Unsafe
Peanut Holder
Safety Rule Signs

WHERE ARE THE SPONGES?

ALL SPONGES (used and unused) ARE HERE

SPONGE ACCOUNTING

1. WHERE ARE THE SPONGES?

EASY AS

1. @ IN COUNT(S) ALWAYS
   - CHECK SPOONGES
   - ...for packaging errors.

2. @ CLOSING COUNT TAKE A
   - PAUZE FOR THE GAUGE
   - ...to perform the Methodical Wound Exam.

3. @ FINAL COUNT SAY
   - SHOW ME
   - ...that ALL sponges are in the holders.

WHERE ARE THE SPONGES?

1. WHERE ARE THE SPONGES?

EASY AS

1. @ IN COUNT(S) ALWAYS
   - CHECK SPOONGES
   - ...for packaging errors.

2. @ CLOSING COUNT TAKE A
   - PAUZE FOR THE GAUGE
   - ...to perform the Methodical Wound Exam.

3. @ FINAL COUNT SAY
   - SHOW ME
   - ...that ALL sponges are in the holders.

WHERE ARE THE SPONGES?

EASY AS

1. @ IN COUNT(S) ALWAYS
   - CHECK SPOONGES
   - ...for packaging errors.

2. @ CLOSING COUNT TAKE A
   - PAUZE FOR THE GAUGE
   - ...to perform the Methodical Wound Exam.

3. @ FINAL COUNT SAY
   - SHOW ME
   - ...that ALL sponges are in the holders.

YIELD AND TAKE TIME TO RECONCILE AN INCORRECT COUNT

© CLOSING COUNT TAKE A

SURGEONS

✓ STOP CLOSING THE WOUND!
   - Remove fascial sutures and place retractor

☐ Repeat the methodical wound examination

☐ Actively look and feel for missing sponge

ADDITIONAL HELP

☐ Consider getting "another set of hands" to feel

☐ Cover the wound with towels or plastic drapes

☐ Call for Keys, get an AP and oblique view

☐ Tell radiologist what type of sponge is missing

☐ A radiologist should review the Film before it is called negative especially if sponge not found

NURSES

✓ Tell surgeon what type of sponge is missing

☐ Ask surgeon to repeat methodical wound exam

☐ Repeat count

☐ Check holders to make sure only one sponge per pocket

☐ Search trash, linen

☐ Call for personnel to search, call nurse manager

☐ Scrubperson search field and drapes

☐ Check sponge "departure" opportunities (e.g., went with newborn, around a specimen, anesthesi a trash)

☐ Contact visitors who may have left the room

IF SPONGE NOT FOUND:

☐ RECORD COUNT AS INCORRECT

☐ NOTIFY ADMINISTRATION

☐ DISCLOSE TO THE PATIENT
Line buckets with clear bags

UNUSED SPONGE IN WHITE BAG

CLEAR PLASTIC BAG

BLOODY SPONGE IN RED BAG
Nursing Essence

• Work with free sponges ONLY in multiples of TEN
• At the IN count the most important element is to SEPARATE the sponges
• At the FINAL count all the sponges (used and unused) must be in the sponge holders
Sponge Accounting Process

Use plastic hanging sponge holders for laps and raytex

This process involves the use of plastic hanging blue-backed sponge holders which each contain 5 pouches. Each pouch has a thin center divider which separates each pouch into 2 pockets. One sponge should be placed in each pocket. One sponge per pocket, 2 pockets per pouch and 5 pouches per holder means that each holder can accommodate 10 sponges. We recommend that each holder always be set up to hold 10 sponges be their lapartomy pads or raytex and different types of sponge should not be mixed within one holder. A wall-mounted dry erase board to record operative information and the IV counts should be easily visible in each room. This process should be standardized for use throughout all operating rooms to provide consistency in all types of operative cases.

The single most important element in the use of the hanging sponge holders is to make sure that “the final count” is taken when all the sponges that have been opened during the case (used and unused) have been placed in the holders. The surgeon and nurse can then visually verify that all sponges have been accounted for and none remain in the patient.

1. Check sponges.
   - Separate sponges to confirm the number in each pack. Use audible and visible 2 person review. Record counts on dry erase board.

2. Pause for the gauze.
   - Closing count: 2 person review between surgical field and sponge holders. Blue stripe is visible for each sponge in holder. CHECK BACK to surgeon, “I think we have all sponges out.”

3. Show me.
   - Final count: All sponges (used and unused) in the sponge holders before the patient leaves the OR. Show the surgeon they all have been accounted for. Document count in operative record as correct.

4. Use sponge holders on all cases that require a sponge count. Add Laps and Raytex in groups of 10.

5. Hang the holders on the special racks attached to designated IV poles. Use a separate holder for each sponge type e.g., one for laps, one for raytex.

6. Used sponges coming from the operative field should be placed in a clear plastic bag lined receptacle (e.g., lap bucket or ring stand).

7. Take each used sponge from the receptacle. Make sure you have only one sponge. Open it up to its full length and then fold it up into an oval. Place one (10) sponge per pocket; two (2) sponges per pouch; ten (10) sponges per counts.

8. Put the first sponge in the last pouch in the bottom of the holder. Load the holder horizontally from the bottom row to the top row filling first the bottom two pockets and continuing upwards. This process (going from the bottom to the top) will make visual determination of the filled holder easier to see from the OR table.

9. Place the folded sponge inside the pocket with the blue tag or blue stripe visible. The blue stripe must be visible because this is what differentiates a sponge with a radiographic marker from a dressing sponge. When viewing the holder note the blue stripe not the white stripe. Place another sponge in the other pocket in the other side of the pouch. Periodically throughout the case put the used sponges in the holder.

10. At the time of the final count, all sponges MUST be in the sponge holders and the final verification must be taken by two people viewing the sponge holders.

11. Keep a running total of the sponges added to the surgical field on the dry erase board using the same format that is used to count needles. The count should be a multiple of 10. The last number should always be the total number of sponges currently on the field.

12. At a permanent change of relief, the number of sponges in the holders should be physically reviewed using visual and audible communication between the circulating nurses changing positions before the relief of nurse departs to the OR.

13. Sponge holders should remain hanging in their racks from the IV poles or may be placed in clear plastic bags if the IV poles become overloaded. However, the final count must have visual confirmation of all sponges in the holders to ensure that each holder is fully loaded with 10 sponges.

10 Laps / 10 Raytex / 10 Pockets / 10 Steps...
WHERE ARE THE SPONGES?

EASY AS

1 @ IN COUNT(S) ALWAYS
   CHECK SPONGES
   ...for packaging errors.

2 @ CLOSING COUNT TAKE A
   PAUZE FOR THE GAUZE
   ...to perform the Methodical Wound Exam.

3 @ FINAL COUNT SAY
   SHOW ME
   ...that ALL sponges are in the holders.

Three Operational Phases
Terminology

1. **IN COUNT(S)** a continuous process. Moment to discover packaging errors. Data is documented on the dry-erase board so everyone in the OR can see them.

2. **CLOSING COUNT** take a “pauze for the gauze”, information exchange between surgeon and nurse, critical phase to prevent retention, cooperative team opportunity.

3. **FINAL COUNT** - “show me” verification step, ideally between surgeon and nurse. Last chance to get it right before patient leaves the OR.
At the IN Count:

- Did you know that the sponges have never been counted?
- They are WEIGHED before packaging
- SEPARATE the sponges
  - Confirm how many
  - Look for tag or marker
  - r/o manufacturing errors
- Use audible and visual 2 person review, “see, separate and say”

EACH UNOPENED PACK IS A BLACK BOX
Separate the sponges!
NURSES

USE PLASTIC HANGING SPONGE-HOLDERS FOR LAPS AND RAYTEX

This process involves the use of plastic hanging blue-backed sponge-holders which each contain 5 pouches. Each pouch has a thin center-divider which separates each pouch into 2 pockets. One sponge per pocket means that each holder can accommodate 10 sponges. We recommend that each holder always be set up to hold 10 sponges being laparotomy pads or raytex and different types of sponges should not be mixed within one holder. The sponge holders are held on racks mounted to IV poles. A wall-mounted dry erase board to record operative information and the IN counts should be easily visible in each room. This process should be standardized for use throughout all operating rooms to provide consistency in all types of operative cases.

The single most important element in the use of the hanging sponge-holders is to make sure that “the final count” is taken when ALL the sponges that have been opened during the case (used and unused) have been placed in the holders. The surgeon and nurse can then visually verify that all sponges have been accounted for and none remain in the patient.

1. Use blue-backed sponge holders on all cases that use surgical sponges. Add laps and raytex in groups of 10. At the IN count “see, SEPARATE and say” individual sponges within each pack.
2. Hang the holders on the special racks attached to designated IV poles. Use a separate holder for each sponge type e.g., one for laps, one for raytex.
3. Used sponges coming from the operative field should be placed into a CLEAR plastic bag lined receptacle (e.g., kick buckets or ring stands).
4. Take each used sponge from the receptacle. Make sure you have only one sponge. Open it up to its full length and then fold it up into an oval. Place one (1) sponge per pocket: two (2) sponges per pouch/ten (10) sponges per holder.
5. Put the first sponge in the LAST pocket in the bottom of the holder. Load the holder horizontally from the bottom row to the top row, filling first the bottom two pockets and continuing upwards. This process going from the bottom to the top will make visual determination of the filled holder easier to see from the OR table. Once the holder is full with 10 sponges, visual confirmation with the scrub person should occur before hanging the next empty holder.
6. Place the folded sponge inside the pocket with the blue tag or stripe visible but not dangling out. The blue stripe must be visible because this is what differentiates a sponge with a radiographic marker from a gauze scrubber. Place another sponge in the other pocket in the other side of the pouch. Periodically throughout the case put the used sponges in the holder. Keep the kick buckets empty.
7. At the time of the final count, ALL sponges MUST be in the sponge holders and the final verification must be taken by two people viewing the sponge holders. There should be NO EMPTY POCKETS.
8. Keep a running total of the sponges added to the surgical field on the dry erase board using the same format that is used to count needles. The last number should always be the total number of sponges opened during the case.
9. At a permanent change of relief, the number of sponges in the holders should be physically reviewed using visual and audible communication between the circulating nurses changing positions before the relieved nurse departs the OR.
10. Sponge holders should remain hanging in their racks from the IV poles. At the completion of the case the holders can be disposed of in a red biohazard bag thus removing all the sponges from the case so there will be “nothing left behind” to confound the counts on a subsequent case.

10 LAPS / 10 RAYTEX / 10 POCKETS / 10 STEPS...
No Dangling Tags!
Don’t Go Here Please
Always Multiples of 10

- Ten pockets in holder will always have one sponge/pocket
- What does 5 empty pockets mean?
  - Forgot to add one pack of laps to count?
  - Really had 15 out?
  - Or.....
The California Story

Reports from 10/25/2007 – 2/6/2013

68 Retained Surgical Item cases

40 Soft Goods

23 laps; 12 raytex; ALL CCRC

2 cases 5 retained sponges
Always Multiples of 10

• Only one system for staff to manage
• Ten sponges no matter if laps or raytex
• Running total count on board; easy math; easily see how many are out
• Ten pockets in holder means only one sponge per pocket
• Final count has no empty pockets, easy visual
• Show me step proves no sponges are in the patient!
Yes, Always in Tens

- This is the most important and difficult concept for nurses to wrap their heads around.
- Reduces the complexity of counting practice.
- Reduces opportunity for error.
- May reduce sponge usage over time.
- Because we haven’t yet seen a case of 10 retained sponges.
Closing Count

- Surgeon performs a methodical wound exam to get all the sponges out
- Nurses perform two person accounting practice between field, table and holders
  - Give surgeon closing suture while you continue count
  - Respond back to surgeon “We think the count is correct; We think we’ve got all the sponges” (or NOT!)
- Keep on the field some sponges to use for closing. How many?
Incorrect Count CheckList

- Visible in every OR
- Levels the playing field
- Knowledge and Communication so all team members can do the right thing
- It’s **what** is right not who is right… remember?
At the FINAL Count:

- Before MD leaves the OR say “show me”; or you say “let me show you”
- You aren’t being asked to count!
- Ask to see the holders and look at them.
- Each pocket should be full - 10 sponges per holder.
“Let Me Show You”

• Anytime after the skin is closed the final count can be performed
• Who shows who doesn’t matter, it’s that it gets done
• “Here, let me show you that we have all the sponges, here in the holder”
• And the nurse and the surgeon can prove/verify that all the sponges are there and not in the patient
At the FINAL Count:

- The count is correct
- Look there are 10 laps
- versus...
Is this a problem?

40 LAPS
You bet it is!

This patient shouldn’t leave the OR

40 LAPS

EMPTY POCKET
No Empty Pockets?
Don’t Go Here Please

Wrong Way
No Empty Pockets!

20 raytex

70 laps
Biohazard Waste Disposal

- Hanging sponge holder full of bloody sponges can be disposed of in RED biohazard bags
- This removes sponges from the room so they can’t confound subsequent cases
Case
“Because I Didn’t Have To”

- As in – no one made me do it

- As in – I know how to count 10 raytex and I don’t need to use the “counters” to do it
Yes you do! ...

- Even if there are only 10 sponges
- We know you know how to count...
- You are using the holders to PROVE where the sponges are, not to count them!
Retained Surgical Sponges

PDSA Project
Test of Change within a defined scope e.g.
All cases within specific room(s) in OR
or
All cases of specific surgeon or
All cases of specific nurse or
All cases of specific specialty