The High Cost of Inaction

How Retained Surgical Sponges Quietly Drain Hospital Finances and Not-so-quietly Harm Organizational Reputations

By Todd Sloane
Executive Summary

A gathering storm of rising malpractice costs, payment penalties, new quality frameworks, patient safety report cards and media attention may be leaving healthcare providers with little choice but to act to prevent the medical error known as a retained surgical sponge. An overwhelming amount of clinical evidence shows that manual counting of sponges – even when carried out under evidence-based guidelines – often fails due to human error and other factors.

Medical malpractice insurers, payers, accreditation agencies and associations are now turning up the heat on the medical establishment to adopt retained sponge prevention technology to eliminate this “never event.”

This paper reports on new research that shows an average malpractice case involving a retained surgical item such as a sponge costs a hospital and physician well over half a million dollars in indemnity payouts and defense expenses. These data underscore the significant cost avoidance/risk mitigation benefits associated with an investment in assistive technology.

Though there is considerable debate about the effect of government and commercial insurer “no-pay rules” for the added cost of repairing the damage wreaked by gauze, laps and towels inadvertently left inside of patients, it seems likely that some hospitals simply absorb those costs. An inflation-adjusted 2007 estimate from the Centers for Medicare and Medicaid Services (CMS) finds the added cost of a second surgery and follow-up care for a retained surgical item is $77,512.

State Medicaid payment is also withheld for the added care of a second surgery. More states are publicizing hospitals’ track records on medical errors. California has taken the next step: Since 2010 the state has fined hospitals a total of $1.8 million over 30 cases of retained sponges.

Meanwhile, the Joint Commission is planning to publish a Sentinel Event Alert on retained surgical items, which for three years have been the most reported adverse event to the commission.

A Retained Surgical Sponge …

- Costs hospitals an average of $77,512 to repair, as public and private payers refuse to pay for the second surgery
- Results in an average indemnity payout of $473,022 and legal costs of nearly $50,000 – nearly half of all litigation results in a payment to a plaintiff
- Has resulted in $1.8 million in fines in California over three years
- Is now the no. 1 reported sentinel event to the Joint Commission
- In an era of accountable care and shared risk, is no longer an acceptable outcome

The damage to a hospital’s reputation from publicity surrounding a retained sponge is harder to calculate in dollar figures, but it is surely considerable. USA Today in March 2013 published a lengthy investigative report on retained sponges. The Leapfrog Group’s Hospital Safety Score, which awards grades to hospitals based in part on number of retained surgical items, has received major attention in national and local media.

With health reform’s focus on high-quality, safe and patient-centered care – as well as new healthcare delivery models such as accountable care organizations that put providers at risk for both cost and quality – an easily preventable medical error such as a retained sponge is harder to justify than ever before.

This paper lays out the full business and clinical case for positive action to prevent retained surgical items through assistive technology. It is also a call to action for hospital leaders and clinicians to work together to consign this particular medical error to the history books.
The Nature of the Problem

The clinical term for a retained surgical sponge is *gossypiboma*, which comes from the Latin for cotton, *gossypium*, combined with the Swahili for place of concealment, *boma*. It’s an appropriately innocuous term, as retained sponges may first appear as something relatively benign, but can mask something that can cause untold human suffering. Immediately after surgery, a *gossypiboma* is often mistaken for an abscess, especially when it is between organs – a fistula. *Gossypiboma* is difficult to diagnose due to vague, inconsistent symptoms and unclear images from X-rays. Sometimes it can present itself as a mass in the body or as a bowel tumor.

The case of a 28-year-old woman provides an example of a sponge being mistaken for a tumor.  

“She came in four weeks after a Caesarean section because of unusual stomach pains and was examined. The ultrasound showed nothing abnormal and she returned home. However, six months later she came back because the stomach pains were persisting. This time, the ultrasound showed an obvious mass in her stomach extending from her pelvic area to the navel. The woman then underwent surgery under the assumption that she had an ovarian tumor. Surgeons cut through her abdominal wall to see a huge mass stuck to the last three feet of her small intestine and the right colon with large associated local lymph nodes. Since the doctors thought the mass was a tumor likely to spread or even cause death, the mass was immediately removed, taking with it part of the small intestine and right colon. After surgery, the mass was cut open and was full of about 2 liters’ of yellow pus and fluid with a large surgical pack (sponge) in the middle of an abscess cavity wall.”

Retained surgical items (RSIs), including sponges, are associated with small-bowel fistula, obstruction, visceral perforation, re-operations to remove the object and, rarely, death, as the case of Geraldine Nicholson of Lumber Bridge, N.C., demonstrates.

Prior to her death, Nicholson spent a year in a hospital with complications after surgery to remove cancerous tissue in her rectum and colon. A surgical sponge measuring more than a square foot was left inside her abdominal cavity, and it stayed there for 10 weeks. The sponge created infections and other complications that disqualified Nicholson from receiving cancer treatment that could have saved her life, testimony at the malpractice trial of Arleen Kaye Thom, MD, showed. The surgeon had failed to order a sponge count before concluding the surgery. A jury agreed that Thom acted with negligence, and a judge ordered her to pay $5.1 million to Nicholson’s estate and $750,000 to Nicholson’s husband.

“Each case is an event that has happened to a human being, so it is incredibly important,” said Ronald Wyatt, MD, Medical Director of the Joint Commission.
Retained surgical items are often hidden from victims. As a young medical student, Dr. Wyatt witnessed a surgeon remove a mass from a patient’s wrist. “When we removed the mass and found a sheared off catheter in the middle of it, the doctor said, ‘Let’s just tell him it was a ganglion cyst.’ This kind of deception has gone on forever and still goes on today.”

The true incidence of RSIs is not precisely known, ranging from one in every 1,500 abdominal surgeries to one in every 8,000 inpatient procedures. However, most researchers now cite as benchmarks two large-scale studies, a four-year project at Mayo Clinic and the other at five large teaching institutions covering 411,526 inpatient surgeries. The Mayo study found an incidence of one in 5,500 operations. The multicenter study estimated an overall RSI incidence of one in 6,975 cases.

Examining the results of more than two dozen studies, it appears likely that roughly two thirds of all RSIs are sponges.

Despite national practice standards related to sponge counting, studies show these protocols are routinely ignored, and in any case are insufficient.

### Patient Outcomes of Surgical ‘Never Events,’ 1990-2010

<table>
<thead>
<tr>
<th>Patient Outcome</th>
<th>All surgical never events N = 2,355 (% of total)</th>
<th>Retained surgical items N = 1,126 (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>155 (6.6)</td>
<td>51 (4.5)</td>
</tr>
<tr>
<td>Permanent Injury</td>
<td>774 (32.9)</td>
<td>184 (16.3)</td>
</tr>
<tr>
<td>Temporary Injury</td>
<td>1,395 (59.2)</td>
<td>879 (78.1)</td>
</tr>
<tr>
<td>Emotional Injury</td>
<td>31 (1.3)</td>
<td>7 (1.1)</td>
</tr>
</tbody>
</table>

Source: Journal of Surgery, December 2012. Data are from National Practitioner Data Bank.

In the multicenter study cited above, among the 55 of 59 RSI cases with surgical counts, operations proceeded to completion in 10 instances (18%), despite at least one team member being aware of an incorrect sponge count. A total of 51 of 177 cases had imaging performed before leaving the operating room. Of those, 27 of 51 were performed for cases with an RSI. In 13 of those 27 cases (48%), the RSI was missed on initial X-ray interpretation.

For 45 of 59 cases, the sponge counts were incorrectly correct, “suggesting that a different strategy must be pursued,” the authors write. “Our results emphasize the need for continued work to develop technology-supported approaches that are informed by performance improvement initiatives and that continue to require team responsibility and accountability to reduce the incidence of RSI to zero.”

Recent guidelines from the Association of Perioperative Registered Nurses (AORN) emphasize that the responsibility for preventing RSIs is shared among the perioperative team, including the registered nurse circulator, scrub person, surgeon, anesthesia professionals and others assisting in the procedure. Significantly, the entire surgical team may be held legally responsible for RSIs.
A Malpractice Minefield

In many states, a malpractice claim based on a retained surgical item is subject to the principle of *res ipsa loquitur*, or “the thing speaks for itself.” In such cases, the burden of proof shifts to the surgeon to prove that he or she was not negligent in failing to remove the foreign body before closing the patient. And it is a long-established principle that the duty to remove sponges before closing the patient cannot be delegated to nursing personnel.

This Indiana court ruling illustrates this principle: “A surgeon is charged, as a matter of law, with the duty to remove sponges used in the operation, which sponges will not be of use in the abdomen after the operation. Ordinary care and caution forbids a surgeon to delegate the absolute authority and responsibility to a nurse or nurses to account for sponges and to thus escape responsibility himselfiv.”

When examining the financial fallout from a retained surgical sponge, much focus is, deservedly, on jury verdicts and settlements. Often, the initial jury award is reduced significantly, either by an appellate court or through an effort to settle the case. It is therefore best to look at closed claims.

For this paper, the Risk Management Foundation of the Harvard Medical Institutions, Inc., was asked to review its Comparative Benchmarking System database of medical malpractice cases from academic and community hospitals and physician practice groups across the country. It found that from 2007-2011, the average final disposition of a lawsuit involving a retained surgical item was $473,022.

### Indemnity Costs for Hospitals and Physicians from RSIs, 2007-2011

<table>
<thead>
<tr>
<th>Total No. of Cases</th>
<th>% With Indemnity paid</th>
<th>Average Indemnity Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>307</td>
<td>46%</td>
<td>$473,022</td>
</tr>
</tbody>
</table>

*Source: Risk Management Foundation of the Harvard Medical Institutions, Inc.*

The foundation also examined the clinical injury severity of RSI cases, and found that indemnity payments are distributed more equally between medium- and high-severity cases. The high-severity cases with “permanent major” injury represent the most severe financial penalties, with average settlements of $2 million (see page 6).

Also for this paper, the Physician Insurers Association of America (PIAA) was asked to examine its Data Sharing Project – the largest independent database of medical professional liability claims in the United States, containing hundreds of thousands of closed claims – for RSI-related data. Its research shows that in the same five-year period, claims against physicians only were lower, averaging $104,842. The research compares the most recent five years against the previous five, and found settlements appear to be on the rise. The largest claim for the period 2002-2011 was $1.35 million.
Clinical Severity of RSI Cases, 2007-2011

<table>
<thead>
<tr>
<th>Severity</th>
<th>No. of Cases</th>
<th>Total Indemnity Paid</th>
<th>Share of Cases</th>
<th>% of Indemnity Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>3</td>
<td>$0</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Emotional only</td>
<td>2</td>
<td>$0</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Temporary insignif</td>
<td>1</td>
<td>$0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Medium</td>
<td>280</td>
<td>$43,207,827</td>
<td>91%</td>
<td>65%</td>
</tr>
<tr>
<td>Permanent minor</td>
<td>28</td>
<td>$15,056,912</td>
<td>9%</td>
<td>23%</td>
</tr>
<tr>
<td>Temporary major</td>
<td>223</td>
<td>$27,210,915</td>
<td>73%</td>
<td>41%</td>
</tr>
<tr>
<td>Temporary minor</td>
<td>29</td>
<td>$940,000</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>High</td>
<td>24</td>
<td>$23,015,190</td>
<td>8%</td>
<td>35%</td>
</tr>
<tr>
<td>Death</td>
<td>13</td>
<td>$9,571,000</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Permanent grave</td>
<td>1</td>
<td>$464,190</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Permanent major</td>
<td>5</td>
<td>$10,000,000</td>
<td>2%</td>
<td>15%</td>
</tr>
<tr>
<td>Permanent significant</td>
<td>5</td>
<td>$2,980,000</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Totals</td>
<td>307</td>
<td>$66,223,017</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Risk Management Foundation of the Harvard Medical Institutions, Inc.

Physician Indemnity Costs for RSIs

<table>
<thead>
<tr>
<th>Years</th>
<th>Closed Claims</th>
<th>Paid Claims</th>
<th>Avg. Payout</th>
<th>Largest Payout</th>
<th>Total Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2006</td>
<td>727</td>
<td>244</td>
<td>$73,889</td>
<td>$1.35 million</td>
<td>$18 million</td>
</tr>
<tr>
<td>2007-2011</td>
<td>892</td>
<td>253</td>
<td>$104,842</td>
<td>$865,000</td>
<td>$26.5 million</td>
</tr>
</tbody>
</table>

Source: Physician Insurers Association of America Data Sharing Project

The indemnity payment is not the end of this story, however. What is known about defense costs is limited, with many earlier estimates being partly or entirely anecdotal. According to the Insurance Information Institute, approximately 61% of medical professional liability insurers’ total incurred losses was spent on defense costs and cost containment expenses in 2010, compared to approximately 40% in 2000.

According to a 2012 study published in the *Journal of Law, Medicine & Ethics*, the majority of reported claims are either dropped, withdrawn or dismissed, therefore resulting in no indemnity payout. Notably, that finding does not extend to RSIs; the above data show nearly half of all cases result in an indemnity payment.

The relevant finding here is that for whatever reason, defense costs are rising, regardless of whether a claim is fully adjudicated. Legal defense costs generally include attorney fees, expert witness fees, court costs and securing of medical records. In terms of total money spent on legal costs, those claims that are dropped, withdrawn, or dismissed are almost as expensive as those claims that result in a plaintiff settlement – a result of the sheer volume of claims.

Since 1985, the average amount of money spent on legal costs has been steadily increasing for all claims, as the table on page 7 shows. This holds true regardless of the adjudication status of the claim.

Source: *Journal of Law, Medicine & Ethics*, Spring 2012
Combining indemnity and legal costs from additional data supplied by the PIAA produces insight into what procedures result in the highest total malpractice costs – at least for physicians.

### Surgical Procedures with Highest Average Physician Indemnity Payments and Defense Costs for RSIs, 2002-2011

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Average Indemnity</th>
<th>Average Defense Cost</th>
<th>Average Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallbladder, biliary tract</td>
<td>$173,139</td>
<td>$24,716</td>
<td>$197,855</td>
</tr>
<tr>
<td>Abdominal</td>
<td>$158,500</td>
<td>$32,285</td>
<td>$190,785</td>
</tr>
<tr>
<td>Small and large intestine</td>
<td>$137,250</td>
<td>$26,613</td>
<td>$163,863</td>
</tr>
<tr>
<td>Uterus</td>
<td>$96,606</td>
<td>$24,310</td>
<td>$120,916</td>
</tr>
<tr>
<td>C-section</td>
<td>$76,458</td>
<td>$27,777</td>
<td>$104,235</td>
</tr>
</tbody>
</table>

Source: Physician Insurers Association of America Data Sharing Project

Based on all of this data, a calculation was made of the malpractice impact per case of an RSI in the U.S. annually. This calculation is based on the Centers for Disease Control and Prevention’s National Hospital Discharge Survey, which showed 34.1 million inpatient procedures for which a retained sponge was possible (excluding eye surgery, CT scans, etc.); the incidence of RSIs found in the most-cited study, done at Mayo; the average indemnity payout from the Harvard database; and the legal costs in inflation-adjusted 2013 dollars from the Journal of Law study.

<table>
<thead>
<tr>
<th>Cost of RSIs per Inpatient Surgical Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.1 million inpatient procedures + 5,500 = 6,200 annual RSIs</td>
</tr>
<tr>
<td>6,200 RSIs X $519,741 = $3.22 billion in total annual costs</td>
</tr>
<tr>
<td>$3.22 billion ÷ 34.1 million procedures = $94.50 legal cost of RSIs per surgery</td>
</tr>
</tbody>
</table>

The result far exceeds earlier estimates and is roughly nine times the per-procedure cost of assistive counting technology. And it does not include the lost revenue due to RSIs from payment reform.
One Effort to Incentivize Technology

Through the efforts of the surgeon, writer and public health researcher Atul Gawande, MD, CRICO, the medical malpractice insurer for Partners Healthcare, an 11-hospital system affiliated with Harvard Medical School, has offered to fund the adoption of sponge-counting technology at the hospitals.

“CRICO will literally cut a check for $75,000 to pay for the first year of capital costs for switching to an automated sponge counting technology,” Gawande said. Brigham and Women’s Hospital, where Gawande practices, has adopted the SurgiCount Medical bar-coded system with success. “This is technology that has been around for several years, and some of our hospitals have had incidents of retained sponges since then. These are completely preventable incidents.”

The problem with adoption, he says, is that while the technology comes from the operating room budget, the malpractice payout comes from the chief counsel’s budget and the issue may not rise to the level of the C-suite.

“So what we are trying to do through CRICO is just put it on the chief medical officer’s plate and just say, ‘Look, this just has to be done, and we will give you money to do it.’ ”

Gawande leads the Partners patient safety committee, made up of the hospitals’ chiefs of surgery. At a recent meeting, he won the endorsement of every member to adopt the technology. “They don’t oversee purchasing decisions, but they are taking their endorsement to the CMOs. I don’t know how effective it all will be. When you look back, every hospital that has made this shift has done so either because there has been a leader at the top level who has decided that this is what he wanted to do or there has been a high-publicity bad event, and when those events happen, it is an opportunity.”
The Feds Take Action ...

Since 2008 Medicare has had a policy of not reimbursing hospitals for the added costs of treating 11 hospital-acquired conditions, including RSIs. According to CMS: “A foreign object left in the body constitutes an adverse event that should never occur.”

This policy has had rather limited effect in terms of refused claims. According to a 2010 CMS study, in 2009 the policy resulted in 3,416 payment adjustments (.04%) from a total of 9.3 million Medicare hospital discharges, yielding $18.8 million (.01%) in savings out of $133 billion in total hospital expenditures.

The CMS study calculated incidence rates for adverse events and found that more than 13% of Medicare beneficiaries experienced some form of reportable incident each year. It found that 1.5% experienced an event that contributed to their deaths, which projects to 15,000 patients in a single month, or 180,000 per year. Of beneficiaries who experienced adverse events, 84% did not incur additional costs for care associated with the events. “This occurred primarily because many Medicare claims for beneficiaries who experienced events did not include diagnosis or procedure codes relating to the events,” the report said. “When Medicare claims included codes associated with the events, the codes often had no effect on costs because the claims included other costly diagnoses or procedure codes that elevated the reimbursement to equivalent or higher amounts.”

Adds Gawande: “The stay associated with the bill is for someone who has already been in the hospital, so they are there for another reason. Thus, the code for a retained sponge can disappear at the bottom of the bill. Taking somebody back to the operating room is expensive, and you would like to have further cost reimbursed. It may also be that if you have a retained sponge, the hospital simply decides that it is going to eat the cost of the second surgery as just a cost of doing business.”

The Accountable Care Effect

New payment and organizations created by the 2010 Affordable Care Act may incentivize healthcare providers to ensure that RSIs are consigned to history.

The accountable care organization (ACO) replaces the idea of reimbursing individual doctors and hospitals by procedure with a lump-sum payment to clinicians working as a formal ACO team. Under the terms of the Affordable Care Act, a Medicare ACO agrees to be responsible for all the care needs of a group of patients and to be paid based on those patients’ health outcomes, satisfaction and costs.

“The demand side push for healthcare system transformation has to be there or else it ain’t gonna happen,” said Andrew Webber, President and CEO of
the National Business Coalition on Health, a consortium of 54 business health coalitions across the United States representing over 7,000 employers and approximately 25 million employees and their dependents. “It is foundational in our mind. We can point the finger at ourselves for not being demanding enough previously in using the payment system so that providers are at risk for complications such as (RSIs).”

It’s a big shift culturally for hospitals that have always focused on volume, Gawande says. “Under ACOs, hospitals are going to be on the hook for complications and the population-based care of all their patients. Hospitals have often left money on the table that could have gone toward improving quality and saved on costs.”

A similar arrangement is bundled payment, under which a hospital and physicians assume the financial risk for delivering all care for one price for one patient episode over a set period — anywhere from 30 days to a year. Private insurance companies such as UnitedHealth Group, Humana, Aetna and most Blue Cross and Blue Shield plans are making bundled payments to groups of doctors and hospitals. More than 500 hospitals and related healthcare organizations have agreed to be paid bundled payments as part of a three-year initiative to lower costs and improve quality in the Medicare program.

Most bundled payment programs today are for acute care episodes, such as hip or knee replacement or spine or cardiac surgery. Some health plans are making bundled payments to providers for patients with asthma, diabetes, cancer and other chronic conditions. In these cases, the episode of care is usually for one year.

Bundled payments are effective in transforming care because they focus providers on areas where there are unwarranted variations and realizable savings. Bundled payment brings alignment with physicians, which allows hospitals to cut their variable costs and reduce post-surgical complications, pharmacy costs and length of stay.

Obviously, a medical error such as a retained surgical sponge runs counter to the goals of bundled payment.

... and so do the States

State governments have, if anything, been more active in working to reduce RSIs than the federal government.

Since 2012, CMS has required state Medicaid programs to adopt non-payment policies for, at a minimum, Medicare’s list of hospital-acquired conditions. At that time, however, more than half the states had already enacted laws either banning payment for errors or demanding public reporting of errors – or both.

A federal analysis of state adverse event reporting systems in 2010 found that seven state systems publicly disclosed more extensive information about causes of adverse events and prevention strategies than other state systems77. They are Colorado, Maryland, Massachusetts, Minnesota, Oregon, New Jersey and Rhode Island.
New Jersey passed a law in 2004 under which any hospital that discovers an RSI as a result of a surgical procedure that occurred at its facility must report the event within five days and is responsible for performing a root cause analysis. Under mandatory reporting of all preventable adverse events, RSIs have been the most frequently reported surgery-related event type.

Hospitals in Maine won’t charge patients or their insurers for 28 errors, as defined by the National Quality Forum. In other states, hospitals – encouraged by medical associations – have agreed not to charge patients for certain preventable errors.

In nine years of public reporting of adverse health events, the Minnesota Department of Health has collected detailed information on more than 2,000 events. The state has used the information from those events to identify ways to improve patient safety. In its most recent report, from October 2011 to October 2012, a total of 314 adverse health events were reported to the department. Of those, 31 cases were RSIs, a decline of 16% from 2011. That year’s data has maintained the current pattern of items most likely to be retained, with both device fragments and sponges/soft goods making up a large portion of retained objects (see chart).

In terms of its financial effect on hospitals, California may have the toughest law. Under new legislation that took effect in 2009, an administrative penalty for a preventable adverse event carries a fine of $50,000 for the first violation, $75,000 for the second, and $100,000 for the third or subsequent violations.

A review of state records found that from January 2010 to June 2013, California hospitals paid out $1,825,000 in administrative penalties for 30 cases of retained surgical sponges, or $57,000 per incident.
Private Sector ‘No-Pay’

The debate over who should pay for medical mistakes shot to the forefront in 2005 when Minnesota’s HealthPartners became the first insurer to declare it would not pay hospitals for anything on the National Quality Forum’s list of never events. Since then, Cigna Corp., Aetna, Anthem and most Blues plans have followed suit.

The effect of these policies came into question in April 2013 when the *Journal of the American Medical Association* published a study finding that most payers pay more for surgical mistakes than for successful surgeries. Private payers paid the most for surgical errors, a differential of more than $55,000. The study did not specifically look at RSIs.

An effort to find out the effect of private “no-pay” rules, including a request for data from HealthPartners, met with silence from health plans.

Horizon Blue Cross and Blue Shield of New Jersey uses the Leapfrog Hospital Survey (see page 14) to recognize hospitals with an annual bonus based on achievement scores for patient safety. The average payment was close to $150,000, with a maximum of $250,000. Hospitals must complete the survey to be eligible for the recognition program.

Some corporations have also taken an interest in adverse events. At General Electric, which is one of the founding members of Leapfrog, employees see information about safety and quality on their internal website.

The No. 1 Sentinel Event

The Joint Commission defines sentinel events as serious, life-threatening or life-ending errors. Each hospital is encouraged, but not required, to report to the commission any incident meeting the criteria for reviewable sentinel events. Increasingly, the commission is becoming aware of sentinel events from communications by patients, family members, hospital employees and the media.

If the commission becomes aware of a sentinel event at an accredited hospital, the hospital is expected to:

- Prepare a thorough and credible root cause analysis and action plan within 45 calendar days of the event or of becoming aware of the event. The hospital should look for systems that might be improved to prevent recurrence.
- Submit to the Joint Commission its root cause analysis and corrective action plan under an approved protocol within 45 calendar days of the known occurrence of the event.

The Joint Commission then determines whether the root cause analysis and action plan are acceptable.
Since it added RSIs as a reportable sentinel event in 2005, the commission has seen it rise up the ranking of most frequently reported events to No. 1 for the past three years (see chart).

Because RSIs have led the list for so long, the Joint Commission is preparing a Sentinel Event Alert on the topic. The alerts come out infrequently, and reflect a trend that is threatening patient safety across the nation.

“We know that the actual number of (RSIs) is vastly underreported, likely accounting for not much more than 10% of the events that actually occur,” the commission’s Wyatt says. “Most hospitals are just at the starting point of working on and improving the reliability of processes, and this is one of them.”

The alert will dig into root causes, including failure of leadership, lack of good processes, poor communication among the surgical team and other human factors.

“Part of a root cause analysis may be to look at other cases of a retained object they have had. Did they do a literature search? Did they look at evidence-based practices?” Wyatt says. “We also look at whether the sponge count was accountable. Are you bringing in the right guidelines, policies and procedures, and how do you monitor compliance going forward?”

The commission also encourages the use of “safe, assistive technology” to decrease the chance of an RSI, Wyatt said.
Concerns Over Lost Reputation

With the media, employers, payers and consumer groups more focused than ever before about the scourge of preventable medical errors, it may be adverse publicity that ultimately vanquishes adverse events.

In March 2013 USA Today issued a lengthy investigative report on retained surgical sponges and hospitals’ failure to clean up this problem, a story widely republished in journals and other papers, along with social media. When California issues a new round of administrative penalties for a surgical error, it also issues a press release that gets national, statewide and local coverage. Lawsuits that result in jury jackpot awards to plaintiffs get major press attention.

“It is very clear that for a hospital institution, community reputation is critically important to their branding, to their image, and they will respond, particularly if that information is transparent enough and out in the open,” said the business coalition’s Webber.

Among many other assessments of hospital quality, the release of a patient safety report card by the employer-sponsored Leapfrog Group in the spring of 2012 attracted the most national attention. The effort, which awards hospitals letter grades from A to F, is based on a methodology created by an expert panel that included Ashish Jha of Harvard, Arnold Milstein of Stanford, Peter Pronovost of Johns Hopkins and others. The formula uses publicly available data, drawing from the CMS’ Hospital Compare database, Leapfrog Group’s annual hospital survey and the American Hospital Association’s annual member survey. RSIs make up 6% of the total score; Leapfrog’s is the only consumer hospital safety assessment project that includes RSIs.

In May 2013 Leapfrog released its latest round of safety scores, and nearly three-quarters of hospitals maintained the same letter grade they received in November 2012, when the organization issued its last update. Of the 2,514 hospitals covered in the most recent update, 780 received an A, 638 a B, 932 a C, 148 a D and 16 an F.

“Our board considers the Hospital Safety Score the most important patient safety initiative we have ever done, and we are full speed ahead on this,” said Leah Binder, Leapfrog’s CEO. “We got hospitals’ attention, but more importantly, we got consumers’ attention. We have had tens of thousands of pieces written about the safety score. I don’t think there is a media market that hasn’t covered the Hospital Safety Score at great length.”

Perhaps more importantly, Leapfrog has had hundreds of calls from hospitals that have had low safety scores, want to understand the score better and learn how they can improve. “One hospital system board ordered staff to do a complete review of its safety score and put it on agenda for every meeting rest of the year,” Binder said.
Conclusion

The new focus on retained surgical items has struck a nerve. An Association of Perioperative Registered Nurses survey in June 2013 found that retained surgical items were the No. 2 patient safety concern of members, right behind wrong site/wrong patient surgeries. Sixty-one percent of the nurses who were surveyed identified preventing RSIs as a high priority.

AORN’s Recommended Practices for Prevention of Retained Surgical Items was significantly revised in 2011 and includes guidelines focusing on a multidisciplinary approach to prevention. The recommendations state that “perioperative staff members may consider the use of adjunct technologies to supplement manual count procedures. Adjunct technology provides the needed control for the causes of potential failures in managing surgical sponges (e.g., distraction, multitasking, time pressure).”

“I think the interest in retained surgical sponges and the focus has really increased in the last three years, with more hospitals adopting technology,” says Victoria Steelman, PhD, RN, AORN’s President-elect, who has written several studies on the topic. “Public awareness and public reporting are stronger than reimbursement as motivators.”

So why hasn’t every hospital adopted an assistive technology?

An Association of Perioperative Registered Nurses survey in June 2013 found that retained surgical items were the No. 2 patient safety concern of members, right behind wrong site/wrong patient surgeries.

“This goes back to the fact that every healthcare purchasing decision is a bureaucratic nightmare,” Gawande says. “The sponges and counting technology are bought on the operating room budgets, but if you have a retained sponge, it’s on the general counsel’s budget. So spending money for the operating room to save money for the general counsel leaves the CMO saying, ‘Why bother doing that?’ Then you have a CEO who might be motivated to prevent a retained sponge, but is not sure whether a new counting technology will upset nurses, so he sends it down to them and they evaluate the three main technologies, etc., etc. So it has been easier not to do anything,” he said.

“The good news is that we are starting to see that when there is publicity around an event, someone is asking, ‘Why don’t you have an automated system?’ The USA Today article was an example of that,” Gawande said.

Already, 12% of all hospitals have embraced a retained sponge prevention technology. Many leading academic institutions – including Mayo Clinic, Cleveland Clinic and Ochsner Health System – have adopted bar-coded sponges, as have Veterans Affairs hospitals and a number of smaller facilities. The experiences of these pioneers in getting to or close to zero retained surgical sponges and reducing malpractice exposure should point the way for more hospitals to follow suit.

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This research was cosponsored by Surgicount Medical, Inc. and Honeywell International Inc.