Salary/Career Survey

Economic downturn hits ORs, but few layoffs of periop staff

The recession has hit hospital ORs. In all, 80% of OR managers and directors responding to the 19th annual OR Manager Salary/Career Survey said the economic downturn has affected their OR staffing.

The most common effects have been reduced overtime and elimination of open positions. Over one-third have required staff to take time off without pay and reduced use of agency personnel. But only 4% have had layoffs of managers, and just 3% have had layoffs of direct care OR staff.

Vacancy rates for perioperative RNs have dropped compared to both 2007 and 2008. The turnover rate, at 6%, is lower than the 7% reported last year and 10% 2 years ago. The average number of open positions for both RNs and surgical technologists is also down, and it is taking a shorter time to fill the openings that do occur.

The OR Manager Salary/Career Survey was mailed in April to 800 OR Manager subscribers who were directors of hospital ORs; 323 are returned for a response rate of 40%. The margin of error is ± 4.7 at the 95% confidence level. A separate survey...

Continued on page 13

Patient safety

In survey, about half of ORs are using the WHO checklist

Nearly half of ORs (48.5%) in an online survey by OR Manager say they have implemented the World Health Organization (WHO) Surgical Safety Checklist. Of those, almost two-thirds (64%) say they think it has improved patient safety. Several said the checklist helped avert serious errors.

The online survey was sent to 490 OR Manager subscribers in June 2009, with 136 responding (28%). The 2009 OR Manager Salary/Career survey also asked about safety checklists and briefings (sidebar, p 7). The Institute for Healthcare Improvement (IHI) reports more than 800 hospitals have tried the checklist. IHI challenged hospitals to try the checklist in a “sprint” by April 1, 2009.

Still, despite the perceived benefit, the majority of online respondents said surgeons and nurses accepted the checklist “with reservations.” Those who have not implemented the checklist all said they already use a similar one.

The WHO checklist, introduced in 2008, has 3 phases:
Cleaning Brushes

- Full line of instrument cleaning brushes
- Complete brush kits
- Stainless steel twisted wire shafts
- Color-coded for easy reordering!

Many sizes and styles to choose from!

The Right Brushes for...
- Flexible Scopes
- General Instruments
- Bone Reamers
- Laparoscopic Instruments

___Sharp
___Sharper
✔ Sharpest

The sharpest scissors on Earth.

Spectrum SuperCut™ Scissors

NOW ON SALE!

Distinguished by black ring handles, these German-made, German-crafted scissors feature a razor-sharp, knife-edged cutting blade, while the opposing blade is serrated. This design ensures superlative cutting action and prevents tissue slippage.

Spectrum’s SuperCut™ Scissors are ideal for a wide range of surgical procedures and are available in many patterns and sizes.

Call to order today!

800-444-5644
800-444-5644
Extension # 1203
www.spectrumsurgical.com

- ISO 9001:2000 certified
- ISO 13485:2003 certified (medical devices)
- CQI (Certified Quality Inspectors) certification
- Member of ASQ (American Society for Quality)
Editorial

A lot of effort has gone into preventing wrong-site surgery. OR leaders have been working hard to fine-tune compliance with the Joint Commission’s Universal Protocol for surgical site verification.

How will we know when it’s making a difference?

Progress is hard to gauge because there is no national database on wrong-site surgery. But we are seeing hints from Pennsylvania, which has been collecting and analyzing data for 5 years.

“We are beginning to see a trend,” says John Clarke, MD, FACS, a trauma surgeon and clinical director of the Pennsylvania Patient Safety Authority, who heads the effort. In the past, the Authority received about 1 report of wrong surgery a week. “Now it’s about 1 every other week, which we think is encouraging.” The Authority was created by law to help reduce and eliminate health care errors by identifying problems and recommending solutions.

Dr Clarke believes the best chance for lasting change is a scientific approach based on:

• identifying evidenced-based best practices
• sharing with physicians and other OR personnel experiences on implementing best practices.

What prevents wrong surgery?

What has the evidence shown?

Two things Dr Clarke says surgeons can do to make a difference based on the Pennsylvania experience:

1. The surgeon sees the patient preoperatively.
2. The surgeon can see the site mark in the OR preoperatively.

So far, it hasn’t mattered who the surgeon was or where the site mark was placed. Multiple pieces of data were compared by the Authority. The site mark becomes the beacon.

“Then the physician must recognize the site mark is correct—that is, multiple pieces of information checked by multiple people—before you get to the operating room,” he says.

In the OR, the site mark becomes “the beacon to keep you correctly oriented—presuming the site is marked accurately,” he emphasizes.

Another major discovery—the surgeon must let the team know it is okay to speak up.

“We’ve seen a distinct difference if a doctor says, ‘If anyone sees a problem, please speak up,’” Dr Clarke notes.

“Then the physician must respond if someone does speak up.”

These discoveries give OR leaders some concrete findings on which to place their efforts.

You can find reports and tools for preventing wrong surgery on the Authority’s website at http://patientsafetyauthority.org/EDUCATIONAL TOOLS/PATIENTSAFETYTOOLS/PWSS/PAGES/HOME.ASPX

The site has sample forms, checklists, videos, and other useful resources.

—Pat Patterson
Meet The Patient Safety Challenge With The Patient-Aware OR™

- **Consolidate** disparate patient information sources into one easily viewable wall-mounted communication screen: the LiveData OR-Dashboard

- **Bridge** KARL STORZ OR1® audio/visual information with relevant contextual patient information

- **Comply** with the Joint Commission’s Patient Safety Goals, SCIP guidelines and CMS requirements

- **Leverage** your existing IT investments

- **Integrate** OR1® and the OR-Dashboard to hardwire patient safety
Managing Today’s OR Suite

Conference offers practical strategies

The 22nd Annual Managing Today’s OR Suite conference offers sessions designed to help perioperative leaders take their ORs to the next level of performance. The conference will be held Oct 7 to 9 at Caesars Palace in Las Vegas.

Here’s a look at a few of the presentations that offer practical strategies OR managers and directors can take home to improve the functioning of their departments.

Seminar

Operational Excellence Using Lean in the OR

In an all-day seminar on Wednesday, Oct 7, a surgical services director and a Lean expert from Georgia Tech will describe how they adopted Toyota’s Lean strategies for a hospital’s 8-OR department. They’ll discuss how managers can get their front-line staff involved in Lean projects to improve case-cart assembly, turnover time, and other processes.

Breakout sessions

Can the Turnover Beast be Tamed?

An OR director will share a turnover team model, identifying the roles of OR team members and how they support a high daily volume. She will review how to use data to track and improve turnover time and explore how team members with defined roles for turnover can relieve the stress of the whole OR team.

Steps for Success in Your Block Schedule

OR leaders must create a surgical schedule that satisfies the surgeons and balances the needs to run an efficient OR, meets the demand for surgical beds, and enhances market share and reputation.

The presenter will provide tools that have been successful in establishing an efficient, well-managed block scheduling system. She will share examples of policies and procedures, algorithms for decision making, and scheduling guidelines.

Leading a Perioperative Team to Excellence

Managing and leading are different concepts. Decision making is at the core of management and leadership. This session will help both seasoned and novice OR leaders understand how to lead in the OR and the hospital. Managers will gain insight about working with staff and physicians to improve quality and safety in surgical services.

Steps for Success in Your Block Schedule

OR leaders must create a surgical schedule that satisfies the surgeons and balances the needs to run an efficient OR, meets the demand for surgical beds, and enhances market share and reputation.

The presenter will provide tools that have been successful in establishing an efficient, well-managed block scheduling system. She will share examples of policies and procedures, algorithms for decision making, and scheduling guidelines.

Download the brochure and register online at www.ormanager.com
• sign in (before induction of anesthesia)
• time-out (before skin incision)
• sign out (before the patient leaves the OR).

A worldwide study found patient deaths and complication rates declined substantially after the WHO checklist was introduced at 8 hospitals. Results were published in the January 29, 2009, New England Journal of Medicine.

Good catches

One respondent to the OR Manager survey described how the WHO checklist enabled the team to catch a “near miss” in the preoperative area. The patient had injuries on both wrists, and there was confusion about the correct side for surgery.

“The patient, schedule, and consent did not match,” the respondent said. The patient was not moved to the OR until the situation was resolved with another set of x-rays.

In another case, an anesthesia provider was stopped from starting an interscalene block on the wrong side even though the correct side was marked.

Several others referred to catching equipment problems before a case, such as a wrong implant delivered by a sales rep, missing films, and consent inaccuracies. (These issues could also have been caught by the Joint Commission’s Universal Protocol for surgical site verification.)

Some said the checklist contributed to better communication and teamwork.

“The surgeons really like the staff introductions. We have many new personnel and vendors,” one person interviewed by OR Manager said.

Another commented, “It has helped with getting the surgeons to be more interactive, specifically with special equipment and needs.”

Universal Protocol and WHO checklist

Several said physicians and nursing staff were confused about the overlap between the WHO checklist and the Universal Protocol. The Joint Commission says the two do not conflict but have different purposes. The purpose of the Universal Protocol is surgical site verification. The WHO checklist also covers site verification but with fewer details. In addition, the WHO checklist includes other items intended to improve communication, such as introducing team members before the case; a sign out at the end of the case; and checks for anesthesia risks, allergies, antibiotics, and so forth. (See Joint Commission Online, February 2009, at www.jointcommission.org/Library/jconline/jconline_02_09.htm)

Putting checklist into practice

Interviewed by OR Manager, four perioperative nurse managers who have implemented the WHO
checklist say the cultural change doesn’t seem as great as it might have been a few years ago. By now, OR teams are accustomed to team training and the Universal Protocol. Two challenges have been meshing the WHO checklist with the Universal Protocol and figuring out the logistics for involving all team members.

Adapting the checklist

The managers all said they have modified the checklist to meet their needs, which WHO encourages.

“We tried to keep it focused on the things important to us,” says Pat Robinson, RN, CNOR, OR clinical manager for the 6 ORs at St Joseph Hospital in Nashua, New Hampshire. The hospital is part of a statewide collaborative to implement OR briefings and debriefings.

In St Joseph’s small OR where everyone knows each other, introductions at the beginning of the case are omitted.

“We do go over the antibiotic administration, VTE [venous thromboembolism] prophylaxis and normothermia if appropriate,” Robinson says.

OR teams also have started performing the sign out, or debriefing, at the end of cases. The opportunity to reconcile specimens during the sign out has been a particular benefit, Robinson says. This step gives the surgeons “a sense of security” and is one reason they bought into the WHO checklist quickly, she notes.

Checklist logistics

Planning is needed to decide which checks to perform in the holding area and which to do in the OR. The surgeon may not be available for all of the checks recommended before induction.

In the main ORs at the Hospital of Central Connecticut in New Britain, the solution is to hold 2 time-outs for major cases. The first is led by the anesthesiologist, nurse, or surgical resident before the surgeon is in the OR. The second takes place after the attending surgeon arrives. At this time, the team also reviews the other items on the checklist, notes Carol Sparks, RN, MSN, CNOR, senior director of perioperative services. The hospital has 16 ORs in 2 facilities.

Lakeland Health Care in St Joseph, Michigan, is combining the WHO checklist with the OR briefings and debriefings it is implementing as part of Michigan’s Keystone: Surgery, a patient safety collaborative of 75 hospitals.

“Some parts we do in the holding area, and some we do in the OR after induction,” says Ellen Augustyn, RN, BSN, CNOR, OR manager for the 9 ORs.

In the holding area, the team confirms the patient’s procedure, site, and site marking as directed by the Universal Protocol. Also reviewed are any patient allergies and airway risks. Anesthesia safety checks are performed in the morning before the schedule begins.

Continued on page 8
rather than during the sign in as suggested by the WHO checklist. In the OR before incision, the team conducts the time-out and discusses anything unusual that is expected. At the end of the case, a debriefing is performed as recommended by Keystone: Surgery, similar to the WHO checklist sign out.

Sprint for the checklist

Implementation at Provena Mercy Medical Center, Aurora, Illinois, got a big boost from IHI’s “sprint” day, says Beth Martinez, RN, MSN, director of perioperative services. Martinez found IHI’s “starter kit” helpful, with its tips, strategies, and links to videos (www.ihi.org/IHI/Programs/ImprovementMap/WHOSurgicalSafetyChecklist.htm).

“We had everyone watch a video on how to do the checklist the right and wrong way,” she says. As evidence, she shared with the physicians the New England Journal of Medicine study report.

Some team members initially were concerned that the checklist was long, but she says others welcomed it, saying, “Now we have something tangible to use. If nothing more, the checklist heightens safety awareness and makes the whole team feel more like a team,” Martinez says.

She thinks the WHO checklist offers a fresh approach to the time-out, which for some was becoming rote. A new twist is to include the vendor representative to verify that the correct implant is available.

Documenting the checklist

How to document and audit use of the WHO checklist has been a question.

Robinson notes that she and the nursing staff did not want to add another form to the medical record, which is on paper. Instead, nurses document use of the checklist with a checkbox on the nursing documentation. Copies of the checklist are available in the OR for reference.

As a visual aid, the hospital is ordering preprinted whiteboards that will include the items on the checklist. The boards will have red and green slides to indicate which activities have been completed.

Sparks’s advice to others who want to implement the WHO checklist: “Look at this not as just another task but as a means to prevent complications. It works—the literature shows it works. It is really a benefit to patients, the physicians, and the nursing staff.”

—Pat Patterson

Reference


Learn about WHO checklist

The WHO Surgical Safety Checklist is available at www.safesurg.org

The website has videos showing how to use—and NOT use—the checklist.

The IHI’s starter kit is at www.ihi.org/IHI/Programs/ImprovementMap/WHOSurgicalSafetyChecklist.htm

Are anesthesiologists who read as vigilant?

A new study finds anesthesiologists who read during operations are as vigilant as those who do not.

Researchers at Vanderbilt University School of Medicine observed anesthesiologists reading during 60 of 172 general anesthesia cases at 2 teaching hospitals.

Readers spent an average of 29 minutes reading during each case. Recording the time it took for anesthesiologists to acknowledge a red alarm light, observers found both reading and nonreading groups responded in an average of just under 30 seconds.

Reading took place only when the anesthesiologist had no tasks to perform other than monitoring the patient.

The authors suggest reading is used as a way to prevent the boredom that can occur during maintenance of anesthesia. Policies that prohibit anesthesiologists from reading during procedures may have resulted in unintended adverse events, the authors suggest.

Reference

RI standardizes safe-site protocol

All of Rhode Island’s 13 acute care hospitals have agreed to a single safe-surgery protocol, in what is thought to be a first for a state.


A multidisciplinary task force developed the policy over 2 years after consulting with colleagues as well as the Joint Commission and other agencies.

There were 2 major reasons for standardizing the protocol, according to William G. Cioffi, MD, chief of surgery at Rhode Island Hospital in Providence, one of the leaders of the effort.

First, because Rhode Island is a small state, physicians and nurses often work at more than one facility.

“It was apparent there was wide variability in practice patterns,” he says. “We thought the lack of consistency was creating a problem, not only at our own institution but throughout the state.”

The second reason was to determine best practices for preventing surgical errors, which have been a stubborn problem throughout the country.

Rhode Island Hospital, which has 719 beds and performs about 25,500 surgical procedures a year, has had 2 wrong-site surgeries in the ORs and 2 at the bedside in recent years. The hospital signed a consent agreement over a wrong-side arthroscopic surgery, saying it would revise its surgical-site policy, among other steps.

A Joint Commission official, Mike Crafton, who worked with the task force and the state hospital association to develop the policy, told the Providence Journal, “We don’t have any data that would show the rate of wrong-site surgeries is more frequent in Rhode Island versus other states.” He said it is clear from Joint Commission data “that wrong-site surgery is an issue around the country.”

Not just a checklist

The task force wanted to develop a communication process for the OR, not just a checklist.

“We wanted the time-out, briefing, and debriefing to be valued, not just tolerated,” says Diane Skorupski, RN, MS, CNOR, NE-BC, Rhode Island Hospital’s director of perioperative services, a task force leader.

“We felt it can become rote when the team just goes through items on a list and checks them off.”

The protocol follows the format of the WHO checklist and includes required elements from the Universal Protocol, such as the site marking and time-out (illustration, p 10).

“But the process has to be customized to the patient, which is what the briefing and debriefing are meant to do,” Dr Cioffi says. He added the protocol must be adaptable to many situations, from a 15-minute myringotomy to a multiorgan transplant.

Marking the site

The Rhode Island protocol is specific about who must mark the site and initiate the time-out:

- Completion of site marking is by the surgeon and a second licensed provider.
- The time-out process is initiated by the attending surgeon.
- Involving the second person in site marking is an example of the protocol’s checks and balances, Dr Cioffi says. “The literature is clear that if only the surgeon is involved in marking the site, there are mistakes a certain percentage of the time. We thought it was important to have a second independent person verify the mark.”

In addition, he says, “Other people in the room have a responsibility to help ensure the safety of the patient. They need to be engaged in the process from the beginning.”

Surgeon initiates time-out

Having the attending surgeon initiate the time-out generated a lot of discussion, he says. “Originally, we thought anybody could initiate the time-out. It is a way to engage all the team members.” But in the end, because the surgeon has the ultimate responsibility for performing the procedure, “we thought the best process was to have that person initiate the time-out. That doesn’t mean they are the only ones participating.”

Being specific about who should lead the time-out was also a way to decrease variability. Moreover, when the surgeon leads the time-out, everyone pays attention, Skorupski says.

The decision has been received well at Rhode Island Hospital. In team meetings with surgeons, anesthesiologists, nurses, and other OR personnel, opinions were not unanimous, but “it was common among those groups that the sur-
Speaking up
An essential element of a safety protocol is ensuring that team members feel safe speaking up if something seems amiss.

An important issue is “how you approach people who choose to be noncompliant,” Dr Cioffi says. “To feel empowered, you have to know that if someone impedes the process, we will have zero tolerance toward not participating in the process to make the OR environment safer. That is what we’re striving for.”

In the past, he acknowledges some surgeons did not buy into the process. Now he says there is awareness that a wrong-site surgery “is very destructive to a hospital. Everyone suffers, even if the patient has no untoward consequences.”

Even older surgeons who would not have bought into the process 5 years ago do now, he notes. “They understand what a mistake or wrong surgery does to the morale of the institution and to themselves, even if they have not been involved in one.”

He says OR leaders try to address noncompliance “as close to the time it happens as possible.”

The surgical leadership now takes a team approach, Skoruszki adds. “We communicate openly, and we are visible in the OR. We do a lot of point-of-care coaching.

“If an employee is putting us at risk, that is a conversation we have to have with them. It’s not about blaming,” she adds. “It is about bringing about best practices. You have to be visible, supportive, and answer questions.

“You can’t just educate a group and walk away.”

—Pat Patterson

Diane Skoruszki and Jean Marie Rocha of the Hospital Association of Rhode Island will present a breakout titled “Life After Wrong-Site Surgery” at the Managing Today’s OR Suite Conference Oct 7 to 9 in Las Vegas. Download the brochure and register online at www.ormanager.com
Managing allograft tissue is a challenge for a single facility. Developing a tissue management process for a health system takes the challenge to a new level. That was the situation facing the Moses Cone Health System, Greensboro, North Carolina, which has 7 surgical sites on 6 campuses.

During a Joint Commission periodic performance review (PPR) in 2007, Moses Cone identified 3 areas of tissue management needing improvement. The PPR is an annual self-assessment in which organizations assess compliance with Joint Commission standards. For any areas not in compliance, an action plan must be developed.

After the PPR, an Allograft Task Force was formed and set out on a 2-month project not only to address the PPR areas but also to fine-tune the entire tissue management process. The task force was led by Jennifer Zinn, RN, MSN, CNS-BC, CNOR, clinical nurse specialist for operative services.

The result is a consistent approach that is also more friendly for the staff, says Sue Dotson, RN, BSN, MHA, executive director of perioperative services. A poster about the project was presented at the AORN Congress in March in Chicago.

These are steps Moses Cone took to strengthen its tissue process.

Action plan
The action plan covered the 3 areas identified in the PPR:
1. centralizing responsibility for checking Food and Drug Administration (FDA) status of tissue suppliers
2. backup alarm systems for tissue refrigerators and freezers
3. documentation of protocols for reconstituting tissue.

Assigning responsibility
The Joint Commission requires hospitals to confirm that tissue suppliers are registered with the FDA and to maintain a state license when required (TS.03.01.01 EP 3).

To bring consistency to the process, the task force decided to centralize responsibility in the system’s contract administration department, which also oversees the value analysis teams. The department’s executive secretary now acts as the gatekeeper, checking the status of all tissue suppliers on the FDA’s website (www.fda.gov/cber/tissue/tissregdata.htm).

Suppliers must also fax or mail a hard copy of their registration annually, which is kept on file. The staff can access suppliers’ registration status easily using the hospital’s Intranet.

In addition, the vendor must provide information on FDA registration as part of the value analysis process for introducing new tissue products.

Alarm backups
The PPR found a few refrigerators did not have backup alarm systems connected to an outside source that would alert someone if the temperature went out of range. The Joint Commission requires that refrigerators, freezers, nitrogen tanks, and other equipment used to store tissues at controlled temperatures have functional alarms and an emergency backup plan (TS.03.01.01 EP 10).

Every cryo freezer, freezer storing musculoskeletal products, refrigerator, and rooms where tissue is stored at ambient temperature is now connected to a temperature monitor and alarm system with backup. (The Joint Commission does not require continuous temperature monitoring or alarm systems for tissue stored at room temperature.)

Two quality checks are performed: a daily check on temperatures and a quarterly check of the alarm systems, both documented in a quality control temperature log.

Product protocol
The third PPR finding was the most demanding—the hospital must track and identify materials used to prepare or process tissues, with instructions used in the preparations, including lot number and expiration dates.

A dizzying array of methods is used for preparing tissues. Some simply require preparation with normal saline, while others require multiple steps and types of solutions.

“It used to be that when you were asked how you reconstituted something, you always said ‘per manufacturer’s instructions,’” Zinn notes. “The Joint Commission says that is no longer okay. We have to show what solution was used, including the lot number and expiration date” (TS.03.02.01 EP 2). Jaws dropped when the task force

Continued on page 12
learned what was expected. But the group set to work and developed the Product Protocol for Allograft and Graft Tissue, which has a table listing all tissue products with columns for:

- vendor
- product
- reconstitution method
- storage area and temperature
- tissue type.

**Staff-friendly resources**

One task force goal was to create a “one-stop shop” of resources the staff needs to carry out the tissue policy. The solution—post the policy on the health system’s Intranet and provide links to key documents. Now the staff simply opens the policy and clicks on the links to pull up resources such as the product protocol table and temperature logs.

New computer screens were created in the perioperative information system (Picis) to make it easier to document tissue and reconstitution of tissue in the patient record. Nurses use drop-down menus to click on the tissue vendor, the product, and product protocol, entering free text to record the solution lot numbers and expiration dates.

**Automating tissue tracking**

There are plans to take computerized tissue tracking further. The coming upgrade to Picis 8.0 will enable tissue data to be entered in the system when the tissue is received. The information will then be available for electronic documentation, making it easier to trace tissue in case of a supplier recall or an adverse event.

The Joint Commission requires the ability to trace tissue bidirectionally from the supplier to patients and vice versa, which is cumbersome and error prone with paper records.

The Picis upgrade will also make nursing documentation easier.

“Eventually, all of our tissue products will be available to our OR nursing documentation,” Dotson says. “The nurses will just have to find the product, click, and all of the required information from the tissue log and product protocol will be entered into the patient’s record.”

**Further fine-tuning**

The project was an opportunity to fine-tune other aspects of tissue management.

The tissue log was refined after the task force discovered some columns could lead to ambiguity. For example, in the column labeled “Received at recommended storage temperature,” it wasn’t clear what should be entered. Staff asked, “Do you enter the temperature? A checkmark? Does the checkmark mean the temperature was checked or simply that someone had looked at the package?” The column was changed to add a Y and N, which must be circled.

An educational rollout helped get everyone up to speed on the new processes. In addition to in-services, the task force posted a PowerPoint about tissue management and created Family Feud and Jeopardy games to inject a little fun and reinforce concepts.

**New nurses surprised by job pressures**

Dissatisfaction with unexpected work situations may be causing rapid turnover of new nurses, finds a study in the July/August Nursing Outlook. About 18% of new RNs leave their first job in a year, and 26% leave within 2 years. The study, funded by the Robert Wood Johnson Foundation, surveyed 612 new nurses in 34 states.

Respondents said they faced relentless pressure to perform their jobs faster—jobs that did not reflect what they had learned in nursing school—and lacked time to spend with patients.

“Nurses are on the front lines of an increasingly demanding hospital work environment,” said the lead author, Linda Honan Pellico, PhD, APRN, of Yale University.

New nurses suggested schools could have better prepared them by including 8-hour days in clinical training and more realistic patient/nurse ratios. They also needed programs on how to communicate with physicians and make proper chart notations and change-of-shift reports.

**Reference**


The task force, which met every 2 weeks at first, currently meets quarterly to keep up the momentum and to further refine the process. Every meeting ends with 5 or so talking points for task force members to take back to the staff, keeping the focus on safe tissue management.

—Pat Patterson
The economic downturn has affected nearly every business, and the OR is no exception. A tight job market; layoffs of workers in other industries, leading to higher work participation rates of spouses, including nurses; and lower numbers of elective surgical procedures have left ORs with a staffing puzzle.

As one OR leader noted, “Volumes are very soft, and this requires daily assessment and evaluation of staffing needs.” Some reported their

Continued on page 14
How has the economic downturn affected your OR staffing in the past 6 months?

<table>
<thead>
<tr>
<th></th>
<th>Type of facility</th>
<th>Number of staffed ORs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Community</td>
</tr>
<tr>
<td>Reduced use of overtime</td>
<td>59%</td>
<td>56%</td>
</tr>
<tr>
<td>Eliminated open positions</td>
<td>42%</td>
<td>43%</td>
</tr>
<tr>
<td>Required staff to take time off without pay</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>Reduced use of agency personnel</td>
<td>35%</td>
<td>33%</td>
</tr>
<tr>
<td>Had layoffs of management</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Had layoffs of direct care staff (RNs and STs)</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Adjusting staffing

The most common way OR managers were adapting staffing to the slowed economy was reduced overtime, cited by 59%, followed by elimination of open positions (42%), requiring staff to take time off without pay (35%), reduced use of contract staff (35%), management layoffs (4%), and layoff of direct care staff (3%). In all, 80% listed at least one of these effects.

A closer look reveals regional variations. The South (67%), Midwest (65%), and Northeast (57%) all listed reduced overtime as the most common impact of the downturn, but a significantly lower percentage (28%) of leaders in the West reported this effect. The West’s most common response was to reduce the use of contract staff (39%).

At 57%, the South was significantly more likely than the Midwest (40%) and the Northeast (20%) to eliminate open positions; 37% reported this option in the West.

Teaching hospitals were significantly more likely than community hospitals to reduce use of overtime (69% vs 56%).

Vacancy rates

The vacancy rate for OR RNs reported by respondents dropped from 10% in 2008 to 6% this year. For STs, the vacancy rate was 6%, compared to 8% in 2008. According to the American Hospital Association, the national RN vacancy rate was 8.1% as of December 2006, the latest figure reported.

Open positions

The average number of open RN FTE positions in ORs fell from 3.3 in 2008 to 1.8 in 2009, the lowest in 3 years. Most managers (63%) reported the percentage of open RN positions stayed the same compared to 12 months ago; 30% said it had decreased, and 7% reported an increase.

The number of open ST positions also dropped—from 2.1 to 1.2, reversing an upward trend. Still, most respondents (62%) said the percent-
How do open positions compare to 12 months ago?

Open RN FTE positions
- Increased: 7%
- Decreased: 31%
- Stayed the same: 62%

Open ST FTE positions
- Increased: 7%
- Decreased: 31%
- Stayed the same: 62%

How does staff turnover compare to 12 months ago?

RN turnover
- Increased: 5%
- Decreased: 34%
- Stayed the same: 60%

ST turnover
- Increased: 4%
- Decreased: 31%
- Stayed the same: 65%

How does recruiting experienced OR nurses compare to 12 months ago?

- No answer: 2%
- More difficult: 19%
- Easier: 21%
- About the same: 58%

Variations by region, type of facility

All regions reported lower vacancy rates and fewer open positions for OR RNs and STs compared to last year.

The highest RN vacancy rate, 7%, was reported in the Midwest and the South, compared to 2008 percentages of 9% for the Midwest and 12% for the South. The West experienced the steepest drop in the vacancy rate, from 14% last year to 4% this year. The Northeast vacancy rate was 6% compared to 8% in 2008.

ST vacancy rates were highest in the Midwest at 9%, with the other regions reporting 4%. As with RNs, these rates were lower than 2008.

Unlike the past few years, the Northeast reported the highest average of open RN positions at 2.2—unchanged from last year, when it had the lowest average number of open RN positions. Averages for all regions clustered more closely compared to last year’s regional variations. The South reported an average of 2.0 openings, down from 2008’s regional high of 4.1. Decreases in the number of open positions were also seen in the West (1.9 in 2009 vs 3.1 in 2008) and the Midwest (1.6 vs 3.2).

The average number of open positions for STs remained low for all regions: 1.4 for the South and West, 1.0 for the Northeast, and 0.9 for the Midwest. All numbers were also lower than those reported in 2008.

Significantly more managers from the South reported their open ST positions had dropped.

Despite lower vacancy rates and fewer open positions, managers in the Northeast saw the average number of weeks RN positions were open jump from 18.4 last year to 25.2 this year. The West reported an average of 18.2 weeks, compared to 20 weeks in 2008, and the South re-
How often does your OR use overtime to staff its ORs?

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>Overall</th>
<th>Community</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always/almost always</td>
<td>21%</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>53%</td>
<td>51%</td>
<td>56%</td>
</tr>
<tr>
<td>Rarely</td>
<td>22%</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>Never</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Trends in OR nurse staffing

<table>
<thead>
<tr>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of open positions in the OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs</td>
<td>1.7</td>
<td>1.9</td>
<td>4.1</td>
</tr>
<tr>
<td>STs</td>
<td>1.1</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Open positions as a percentage of budgeted FTEs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs</td>
<td>5.4%</td>
<td>6.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>STs</td>
<td>6.6%</td>
<td>6.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Average number of weeks positions have been open</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs</td>
<td>12</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>STs</td>
<td>11</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Average staff turnover rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs</td>
<td>6.8%</td>
<td>7.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>STs</td>
<td>7.0%</td>
<td>7.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Routinely use agency/travelers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>23%</td>
<td>32%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Sources: OR Manager, Inc

Continued from page 15

Reported an average of 11 weeks, down from 16.4 weeks last year. The Midwest’s average was unchanged at 14.1 weeks.

When it came to the average number of weeks ST positions were open, the West was highest at 16.6 weeks, compared to 10.8 for the Northeast, 8.7 for the Midwest, and 6.8 for the South. The West was the only region to report a longer open time for ST positions compared to last year (14.3).

Teaching hospitals continue to experience more staffing problems than community hospitals, but the gap has narrowed over the past year. Respondents at teaching hospitals reported a drop in the average number of weeks an RN position is open, from 19 in 2008 to 13 this year. The average for community hospitals remained essentially unchanged (15.8 in 2008 vs 15.9 in 2009). ST positions were open an average of 8.9 weeks for teaching hospitals, compared with 7.7 in 2008 and were open an average of 10 weeks for community hospitals, compared with 12.3 last year.

RN turnover lower

This year, the average turnover rate for OR RNs was 5%, compared to 7% in 2008, while the turnover rate for STs remained the same at 5%.

Like last year, the West had the highest turnover rate for RNs but saw the percentage cut in half, from 10% last year to 5% this year. All other regions reported lower turnover rates as well. The rate for the Northeast and the South was 6%, compared to 9% and 8%, respectively, in 2008. In the Midwest, the turnover rate decreased slightly from 6% last year to 4% in 2009.

Compared to the previous 12 months, about one-third (34%) of leaders reported a reduced turnover rate for RNs; 60% said it was the same, and 5% noted an increase.

ST turnover rates for 2009 remained the same as last year for the West (6%), South (5%), and Midwest (4%), with the Northeast at 5%, slightly less than last year’s 7%.

Nearly one-third of OR leaders (31%) reported a lower turnover rate for STs in the past 12 months, with 65% saying it was the same, and 4% reporting an increase.

Turnover rates were the same for teaching and community hospitals for both RNs and STs, but teaching hospitals were significantly more likely than community hospitals to report a decrease in RN and ST turnover rates.

Less use of agency staff

ORs are using fewer contract staff, down from 22% last year to 15% this year. Teaching hospitals are slightly more likely than community
The ratio of RNs to surgical technologists (STs) in hospital ORs remains the same as in 2008 at 62:38, according to the 2009 O R M anager Salary /C areer S urvey.

Over the past 10 years, the ratio has shifted slightly from 65:35 in 1999.

Federal Medicare regulations say surgical technologists (STs) and licensed practical/vocational nurses may assist in circulating duties with an RN immediately available. Currently, 37 states specify an RN as the circulator, according to AORN.

The percentage of hospital OR survey respondents who have STs circulating with an RN in the same room was 6%. Only 1% reported that STs circulate with an RN immediately available, and none said STs circulate on their own.

Of the 19 hospitals that said STs circulate, either with an RN supervisor in the same room (17) or immediately available (2):
- 13 are community hospitals
- 5 have 10 or more ORs
- 7 have 5 to 9 ORs

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio of RNs to Surgical Techs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>62:38</td>
</tr>
<tr>
<td>2008</td>
<td>62:38</td>
</tr>
<tr>
<td>1999</td>
<td>65:35</td>
</tr>
</tbody>
</table>

- 5 have 1 to 4 ORs
- Three hospitals reported having a 100% RN staff, and 53 (18%) have 75% to 99% RNs.

Skill mix in ASCs

Ambulatory surgery centers (ASCs) reported an average skill mix of 67:33 of RNs to STs, nearly the same as last year’s 66:34.

In all, 13% (n=31) of ASCs allow STs to circulate either with an RN in the room or immediately available.

Of these, 21 are physician-owned, 3 are joint ventures, 2 are hospital-owned, and 4 are corporate-owned. One ASC reported that STs circulate on their own; this is a single-speciality joint venture ASC located in the South.

The recession has taken an emotional toll on staff, according to several respondents. “Staff are very stressed regarding work issues,” one respondent said. Another reported “experiencing staff tension regarding going home early due to decreased schedule.” Physicians shared the anxiety, with another manager citing “MD stress levels, anesthesia staffing issues, pervasive uncertainty in co-workers.”

OR leaders aren’t immune to the pressure. One summed up the situation: “I am constantly asked to do more with less—and told I’m lucky to have a job. Very stressful!”

—Cynthia Saver, RN, MS

Cynthia Saver is a freelance writer in Columbia, Maryland.
Recession tests surgery center staffing

The economic downturn has checked in at ambulatory surgery centers (ASCs), although with less impact than in hospital OR suites.

More than two-thirds (69%) of ASC respondents to the 19th annual OR Manager Salary/Career Survey said the downturn had affected their staffing in the past 6 months, primarily through decreased overtime and requiring staff to take time off without pay. That compares to 80% of hospital OR leaders who reported negative staffing effects from the recession.

Most ASC leaders reported that open positions and staff turnover were about the same as a year ago. Only 5% of ASC leaders reported layoffs of direct care staff. Still, 25% of leaders found it more difficult to recruit RNs compared to a year ago.

The survey was mailed in April to 1,078 OR Manager subscribers and an external list of nurse managers of ASCs, with 259 usable responses for a response rate of 28%. The margin of error is ±5.3% at the 95% confidence level. Results from the remainder of the survey, including salaries and benefits, will appear in the October issue.

The largest group of survey respondents (46%) work in physician-owned ASCs, followed by joint venture (27%), corporate/LLC (16%), and hospital-owned (7%) facilities.

Feeling the pinch

ASC leaders are feeling the pinch from the recession. One wrote, “We are experiencing a decrease in caseload, with many of our physicians reporting their offices are ‘slow’. Most of my staff has been seeing reduced hours due to low census.”

Another respondent wrote of “juggling the nursing schedule to keep full time [at] 32 to 40 hours.”

One respondent wrote of “I have less time for management of the ASC due to having an assignment every day,” this person said. “We are going to a 4-day work week for all employees.”

Others said they had not been affected. “To date, it has had no impact, although we watch our use of agency staff closely,” one respondent said. Another said the economy had not had much of an effect, “except part-time nurses want to work full-time due to layoffs of spouses.” One manager raised the issue of changing the staffing ratio, saying, “[We] brainstorm ways to be more efficient and cost-effective. Techs to replace RNs?”

Size mattered when it came to ef-
Effects. Leaders of ASCs with 5 or more ORs were more likely than those of smaller ASCs to require staff to take time off without pay (51% vs 31%) and to eliminate open positions (28% vs 17%).

ASC leaders of multispecialty centers were more inclined to reduce overtime (48%) compared to those in single-specialty centers (38%). And multispecialty ASC leaders were far more likely than single-specialty centers to require staff to take time off without pay (44% vs 24%) and more likely to eliminate open positions (24% vs 13%) and reduce use of contract staff (18% vs 5%).

The Northeast was significantly less affected by the economy compared to the Midwest and the South, with just half of leaders in the Northeast indicating at least one negative effect compared to 78% in the Midwest and 73% in the South, respectively. Nearly two-thirds (65%) of leaders in the West reported at least one negative effect.

“We evaluate every case for profitability, renegotiate implant costs with vendors, and limit agency use,” said one respondent.

Staffing profile

The percentage of budgeted open RN FTE positions in ASCs was 12% for RNs and 15% for STs, with the average number of weeks positions had been open at 9.5 and 4.8 weeks, respectively.

The overwhelming majority of ASC leaders said open positions and staff turnover have stayed the same compared to a year ago for both RNs and STs. More than three-fourths (79%) reported no change in open RN FTE positions, 16% reported a decrease, and only 5% saw an increase. The pattern was similar for STs, with 89% of respondents saying openings stayed the same, 10% saying they had decreased, and 1% noting an increase. The average number of open positions was 0.3 (compared to 0.5 in 2008) for RNs and 0.2 for STs, the same as in 2008. The number of ASCs with no open positions remained high for both RNs (82% in 2009 vs 81% in 2008) and STs (91% in 2009 vs 83% in 2008).
RN turnover for the past year stayed the same for 78% of respondents; 14% reported a decrease, and 8% noted an increase. Again, ST turnover mirrored these results, with 87% reporting no change in turnover, 10% a decrease, and just 3% an increase.

Recruitment

Despite a recession, 25% of ASC leaders reported more difficulty in recruiting RNs compared to a year ago, a finding consistent across all regions. Joint venture ASCs reported more difficulty with recruitment compared to other types of ASCs. One respondent noted, “Less experienced applicants; staff working long hours due to fewer RNs.”

Overall, 15% of leaders, most of whom worked in hospital-owned ASCs, said recruitment was easier, but the majority (60%) reported it to be the same as 12 months ago. Similarly, most respondents (66%) said ST recruitment remained the same, but 19% reported increased difficulty, and 15% found recruitment easier.

Breaking into the ASC

New graduate nurses and RNs without OR experience face challenges when it comes to landing a job in an ASC. Only 18% of ASC leaders said they hire new graduate nurses, and 47% hire RNs without OR experience. More than half (52%) hire neither.

The hiring situation was most favorable for new graduate nurses in single-specialty ASCs in the West. More than one-fourth (28%) of ASC leaders in the West hire new graduates, compared to 13% in the South and 11% in the Northeast. However, 24% of ASCs in the West reported a decrease in the turnover rate for RNs. The Midwest was the second most likely region to hire new graduates at 21%.

Single-specialty ASCs were significantly more likely than multispecialty centers to hire both new graduates (25% vs 13%) and RNs without OR experience (68% vs 34%).

Under stress

As in hospitals, the recession has taken an emotional toll of staff, according to several respondents. “It’s harder to keep staff engaged,” said one. “I work at decreasing their anxiety. I’m working harder on nontangibles so they know I value them.”

Several leaders said staff were anxious about keeping their jobs and having enough hours to work. “Staff are stressed and worried about personal finances. Per diem nurses are taking permanent jobs; husbands’ income at risk.”

OR leaders aren’t immune to the stress. One leader said, “I’m afraid to hire people or spend any money.” Another summed up the situation as, “many challenges, more responsibilities.”

—Cynthia Saver, RN, MS

Cynthia Saver is a freelance writer in Columbia, Maryland.

New SCIP measures to be reported for payment

The government is expanding the number of quality measures hospitals will have to report to receive their full Medicare inpatient payment update in fiscal 2011.

The inflation payment update for 2010 is set at 2.1% but will be reduced to 0.1% for hospitals that do not report quality data.

The changes are in the final 2010 hospital inpatient prospective payment system (IPPS) rule posted on July 31, 2009, by the Centers for Medicare and Medicaid Services (CMS) and scheduled to appear in the August 27, 2009, Federal Register.

Four new measures are added for quality reporting, including 2 for the Surgical Care Improvement Project (SCIP):

- SCIP Infection 9: Urinary catheter removed on postoperative day 1 or postoperative day 2
- SCIP Infection 10: Surgery patients with perioperative temperature management.

The other 2 new measures are structural: Participation in a systematic clinical database registry for nursing sensitive care and for stroke care.

This brings to 43 the total of measures for quality reporting. CMS says this is part of the effort to strengthen “the relationship between payment and quality of service for Medicare beneficiaries.”

The list of hospital-acquired conditions (HACs) was not changed for fiscal 2010.

HACs are conditions such as Stage 3 and 4 pressure ulcers and certain surgical site infections that are considered reasonably preventable if evidence-based guidelines are followed. CMS no longer pays a higher amount if these diagnoses are on the claim but were not present on admission. CMS plans to evaluate impact of the HAC program in cooperation with other federal agencies.

Access the CMS fact sheet about the rule at www.cms.hhs.gov/apps/media/fact_sheet.asp

OR Manager’s Toolbox

Check our web site for practical help on personnel evaluation, codes of conduct, and patient assessment. Go to: www.ormanager.com

Look under The OR Manager’s Toolbox.
Salary/Career Survey

The nursing workforce and the economy

RN employment has risen during the recession, yet large shortages are still expected

- 243,000 more RNs were employed full-time in hospitals in 2008 compared to 2007—an unprecedented increase of 18%.
- Younger nurses are entering the workforce in higher numbers.
- Still, a shortfall of RNs is expected to develop about 2018 and grow to 260,000 by 2025.


Many factors are helping to stabilize the nursing workforce

- The economy is bringing many retired nurses back into the workforce.
- Nurses who planned to retire are holding on to their positions.
- Some part-time nurses have taken full-time positions. Others are working extra shifts to help support their families.

— Buerhaus P I. JAMA. 2008;300:2422-2424. www.jama.com

US nursing schools turned away nearly 50,000 qualified applicants in 2008 because of too few faculty and other resources.

— American Association of Colleges of Nursing, 2008

The cost of replacing an RN ranges from $22,000 to more than $64,000, including filling temporary vacancies and hiring and training new staff.


Hospitals are treating fewer patients

- 59% of hospitals have seen a moderate or significant decline in elective procedures, and 55% have seen a decline in inpatient admissions.
- 48% of hospitals have reduced staff.
- These developments result in more RNs seeking employment.

— American Hospital Association, April 2009

Still, the health care sector of the economy continues to grow

- Hospitals, long-term care, and other ambulatory care settings added 21,000 new jobs in June 2009, a month when 467,000 other jobs were lost.
- Analysts project more than 587,000 new RN positions will be created through 2016.


Source: Much of this information was compiled by the American Association of Colleges of Nursing. For more, see the AACN fact sheets at www.aacn.nche.edu
Hospitals to report on normothermia

ORs are ramping up efforts to keep surgical patients warm.

Medicare has adopted an expanded measure on perioperative temperature management as part of the Surgical Care Improvement Project (SCIP).

The new measure, SCIP Infection 10, calls for active warming or normothermia for all surgical patients under general or neuraxial anesthesia lasting an hour or more (sidebar).

Hospitals will need to report data on the new measure to receive their full Medicare payment update in fiscal 2011, as specified in the final 2010 inpatient prospective payment rule posted July 31, 2009. The previous normothermia measure (SCIP Infection 7) was limited to colorectal surgery patients and wasn’t required for public reporting.

Perioperative managers will need to get ready for more data collection, expand patient warming protocols, and decide what equipment to use.

Support for keeping patients warm

There is strong support for keeping patients warm in the operating room. Hypothermic patients are at risk for complications such as acute myocardial infarction, arrhythmias, coagulopathy, and surgical site infections as well as longer hospital stays.

“This is a perfectly reasonable measure that simply rewards people for doing what they should be doing already,” says Daniel I. Sessler, MD, a leading researcher on normothermia. He is the senior author of the 1996 landmark study on the effects of normothermia on surgical site infections (SSIs), which was a leading force behind SCIP Infection 7.

The study showed that a 1.9° C reduction in core temperature tripled the incidence of SSIs after colon resection and increased hospital stays by 20%.

“We showed that maintaining normothermia reduces infection risk by a factor of 3. But even patients who are not at risk for surgical wound infections are probably at risk for other substantial complications of hypothermia,” Dr Sessler told OR Manager.

Meeting the measure

The expanded SCIP measure calls for either normothermia or active warming because “there are some patients who do not stay normothermic even with active warming—so credit is given either for process or outcome,” Dr Sessler notes.

There is a good reason for allowing a core temperature of 96.8° F (36° C) and above within 30 minutes before the end of surgery, he says, noting that “intraoperative temperature monitoring is more accurate than postoperative temperature monitoring.”

SCIP measure: Perioperative temperature management

SCIP-Infection-10

Numerator statement: Surgery patients for whom either active warming was used intraoperatively for the purpose of maintaining normothermia or who had at least one body temperature equal to or greater than 96.8° F/36° C recorded within 30 minutes immediately prior to or the 15 minutes immediately after anesthesia end time.

Denominator statement: All patients, regardless of age, undergoing surgical procedures under general or neuraxial anesthesia of greater than or equal to 60 minutes duration.


Passing the SCIP measure would require a body temperature of 96.8° F (36° C) or more within a 45-minute span (within 30 minutes before the end of anesthesia or within 15 minutes after the end of anesthesia), or use of active warming.

The SCIP measure does not specify how to measure patients’ temperatures or keep them warm.

“If you can keep patients normothermic without using active warming, that’s fine. The rule is not to use some particular method—the rule is to keep people warm. On the other hand, if your patient is becoming hypothermic, you should do something about it, and forced air offers the best combination of effi-
cacy, low cost, and safety,” Dr Sessler says.

Dr Sessler, an anesthesiologist and chairman of the Department of Outcomes Research at the Cleveland Clinic, Cleveland, says he uses forced-air warming on all of his patients. In contrast, he recommends fluid warming only in occasional patients who require large amounts of fluid.

**Which thermometer is best?**

Dr Sessler recommends oral thermometers for awake patients and esophageal thermometers for anesthetized patients.

A study he and his colleagues published in the August 2009 *Anesthesiology* found that for noninvasive temperature monitoring, oral and temporal artery methods were significantly more accurate than axillary, forehead skin-surface, forehead liquid-crystal display, and infrared aural canal methods in postoperative patients.

Despite the findings, Dr Sessler does not recommend temporal artery thermometers because they don’t detect hyperthermia or fever.

Oral thermometers are simple to use, fast, and inexpensive.

**Gearing up data collection**

Good data collection will be key, not only for Medicare reporting but also to keep OR team members aware of how they’re doing, says Gilda Gilbert, RN, MSN, CNOR, SCIP coordinator for surgical services at Winchester Medical Center in Winchester, Virginia. She has developed an Excel spreadsheet for daily normothermia data collection.

“It has taken more than 9 months to tweak the report so it works at top efficiency, and I still am determining where improvements can be made,” she says.

Most of the patient information can be downloaded onto the spread-

Sheet from surgical services software. But she has to enter some anesthesia data manually, such as ending patient temperature, forced-air warming use, and the temperature measurement method.

She begins collecting data for the 19 ORs at 6:30 am from a central repository for anesthesia records. Data collection takes 45 minutes to 1 hour for the 45 to 55 cases per day. At the end of each day, she analyzes the data and enters the numbers of successes and failures in another spreadsheet that gives the to-date average.

From the data, Gilbert produces a report and circulates it to the stakeholders. She highlights all measure failures—yellow for those below 96.8°F (36°C) who have forced-air warming documented, and red for those below normothermia with no forced-air warming documented.

The data is shared at weekly leadership meetings and posted in the OR for all team members to see.

Sharing data is important, she says. “That way, if one member of the team says, ‘No, we’re in a hurry. We don’t have time to put the forced air on,’ other members can say, ‘Wait, this is a 2-hour procedure. We’re going to be opening the patient’s core. We need to add an additional warmer.’”

**Turning up the heat**

At Winchester, forced-air warming blankets are used for all cases lasting over 60 minutes. Two warming blankets are used for colorectal surgery patients—1 on top and 1 underneath the patient or a lithotomy blanket—because their scores have not been up to par, notes Gilbert. Warmed IV fluids may be given if more than 3,000 mL of fluid are administered.

Nurses have started putting forced-air warming gowns on patients in the preop holding area. Dr Sessler notes that prewarming actually increases heat loss in the OR by warming the skin; however, it reduces core hypothermia by reducing the redistribution of heat from the core to peripheral tissues.

Piedmont Hospital in Atlanta began using forced-air warming for all surgical patients in its 18-room OR department in October 2008.

“We thought if it was good for the colon cases, we should aim to warm all of our surgical patients,” says Nancy Flanagan, RN, CNOR, the performance improvement coordinator for surgical services.

Warming was also expanded for ambulatory surgery patients. About 70% of outpatients now receive forced-air warming, says Randall Heitzman, RN, CNOR, clinical manager of the 8-OR Piedmont’s McDonnell Surgical Center and admission testing area.

Piedmont purchased all new oral thermometers for perioperative services to ensure the same temperature measurement method is used preoperatively and postoperatively. Esophageal thermometers are used intraoperatively.

Some patients have forced-air warming applied in the preoperative holding area. Criteria include patients with advanced age, surgery longer than 1½ hours under general or regional anesthesia, pre-existing peripheral vascu-
Surgical Care Improvement Project

Continued from page 23

lar or endocrine disease, pregnancy, or open wounds.

The same forced-air warming blanket is used preoperatively and intraoperatively. Preoperatively, blankets are placed longitudinally. During surgery, they are placed horizontally across the chest and arms, says Deborah Slough, RN, BSN, clinical manager of preop holding, PACU, and endoscopy. Foil hats are also placed on patients in the holding area.

Warmer holding area, ORs

As an additional measure, the ambient temperature in the preop holding area was raised from 68° to 72° F. Some surgeons have also requested the heat to be turned up in their operating rooms, especially for burn patients and liver transplant patients, who have a great deal of exposure during surgery.

To prevent team members from making the rooms too hot or cold, the engineering department placed a 4° F lockout on the thermostats to keep temperatures in the range of 66° to 70° F.

“It is a challenge to keep it safe for the patient and keep it within a comfort zone for the surgeon,” says Deitra Erickson, RN, CNOR, OR clinical manager. Cooling vests are available for surgeons. They cost about $500 but work well, she notes.

Staying focused

The key to meeting the SCIP measure will be to have all of perioperative services managers working together to keep patients warm, Slough emphasizes. “It is important to reinforce each other daily because it is easy to skip steps when you are in a hurry.” Buy-in by anesthesiologists and surgeons is also essential. The Piedmont nurses say an anesthesiologist and vascular surgeon have been instrumental in championing the warming program to their colleagues. ✤

—Judith M. Mathias, RN, MA

Gilda Gilbert’s sample spreadsheet is in the OR Manager Toolbox at www.ormanager.com

References


Bratzler D. Patient Safety and the Surgical Care Improvement Project. Feb 2, 2009; Presentation at the Colorado Foundation for Medical Care, Englewood. Webinar available at: www.cfmc.org/files/hospital/Great8 SCIP%200209%20%20slide%20per%20page.pdf


Multicenter study looks at preop antibiotic timing

There is a trend toward a lower risk of surgical site infection (SSI) when the antibiotic is given within 30 minutes before the incision, finds a study in the July Annals of Surgery.

The multicenter study with 29 hospitals and 4,472 surgical patients sought to determine the optimal timing for surgical antimicrobial prophylaxis. It also examined relationships between timing, duration, and intraoperative redosing and the risk of SSIs.

A total of 113 SSIs were found in 109 patients. Risk increased with the time between preoperative antibiotic infusion and the incision or if the antibiotic was first infused after the incision was made.

Except for antibiotics requiring long infusion times (vancomycin and fluoroquinolones), infection risk after giving the antibiotic within 30 minutes before the incision was 1.6% compared with 2.4% when the antibiotic was given 31 to 60 minutes before the incision.

Intraoperative redosing appeared to reduce the SSI risk in procedures lasting more than 4 hours but only when the preoperative dose was given correctly. ✤

Reference


www.journals.uchicago.edu/doi/pdf/10.1086/344275

An engineer’s eye on turnover time

Airline pilots and race pit crews bring new perspectives to OR throughput, so why not engineers?

With the help of a University of Southern California (USC) Daniel J. Epstein Department of Industrial and Systems project, turnover time in 3 California hospitals dropped by an average of 9 minutes, or 21%. The California HealthCare Foundation funded the project.

“We can do more patients per month,” says Louise O’Rourke, RN, nurse manager of perioperative services at Riverside County Regional Medical Center (RCRMC), which has 10 ORs and an annual patient volume of 8,824, and reduced its turnover time from 49 to 39 minutes.

From January to July 2008, David Belson, PhD, a professor at USC, and his students worked with RCRMC, Children’s Hospital of Los Angeles, and Ventura County Medical Center (VCMC) to improve patient flow.

A fresh perspective

Turnover time is only one aspect of throughput, and it’s easy to place too much emphasis on it. Belson advocates a broad view, saying, “The effect of turnover time is more than just the arithmetic of the time between cases.”

The OR has categories of personnel and scheduling issues that have to be managed, such as cases added to the schedule, changes in the sequence of cases, backlogs of cases, and the effect of overtime and pay formulas.

Probably the most important variable is the pace of the workflow, which Belson says is difficult to quantify.

“An easy-to-quantify and obvious metric is turnover time,” says Belson. “It’s been my observation in about a dozen hospitals that turnover time is a good proxy for the pace of work. Thus, if you improve the turnover time, you probably improve throughput.”

The engineers collaborated with the hospital staff to examine throughput. “We are efficiency experts,” says Belson, who has worked with companies such as Toyota and whose research focuses on health care process improvement.

The engineers helped bring a fresh perspective.

“It was invigorating to have a different viewpoint,” says Daniel Ludi, MD, chair of surgery at RCRMC. “They brought a naiveté to the process, and their energy inspired change.”

Into the OR

Engineers donned scrubs and spent time in the OR observing processes. “The engineers walked through the layout to see how the patient progresses from point A to point B to point C to get an idea of the system,” says Brad Ditto, RN, clinical nurse manager of surgical services at VCMC, which has 5 ORs and an annual case volume of 5,500.

Ditto says for him the reasons for the study were threefold: to add more cases, to decrease overtime if more cases weren’t added, and to heighten awareness of staff about how their turnover time compared to that of other hospitals.

“Our weekly caseload has picked up slightly, and our overtime is noticeably down from before the study,” he says. “Everyone seems more aware of the need for efficiency, so our turnover times continue to be down from where they were before the study began.”

Engineers’ suggestions

The engineers developed specific suggestions. For example, VCMC’s preoperative area is not close to the OR, and the preop holding area holds only 4 patients for a 5-room OR. The engineers suggested caring for the fifth patient in the postanesthesia care unit instead of the preoperative area, which improved patient flow.

Engineers directly observed in the OR rooms. For privacy reasons, they left when the patient was brought into the room and returned only when the patient left. Through observation and hospital information systems, the engineers collected and analyzed data.

“They broke down turnover time in detail such as doctors, specialties, and types of procedures,” says Ditto. The engineers then looked at factors affecting throughput, such as when outpatients arrived at the hospital, on-time starts of first cases of the day, cleaning the room between cases, and add-on and emergent cases, to identify trends.

Devising solutions with surgeons

The hospitals had work to do, too. “We had to flow-diagram everything from mopping the floor to when the surgeon arrived. The process was enlightening,” says David Ninan, DO, chair of the anesthesiology depart-

Continued on page 26
ment at RCRMC. The engineers even counted the number of steps people had to take for certain actions.

Having data to present to surgeons was invaluable, says Ditto. “It takes all the emotional aspects out of it.” He found surgeons often didn’t realize how they affected turnover time. Once they knew, Ditto could work with them to devise solutions. An example is to have a surgeon who simply can’t arrive on time for the first case of the day change his surgical schedule.

Staff had their own reactions. When they learned their turnover time was higher than they thought, “it bruised their pride a bit,” says Ditto, motivating them to improve.

Engineers in the OR produced a Hawthorne effect at VCMC. “No one wants to look bad when you are being observed, so staff picked things up a bit,” says Ditto. Achieving better turnover time primarily came through better scheduling, housekeeping services, and staff communication.

**Optimal schedule**

Belson’s team used computer models, including a mixed integer programming model, to analyze data on OR demand for different specialties and OR times to determine optimal scheduling.

“This approach is used by airlines and the petroleum industry to find the best possible way to schedule things,” says Belson, who stresses the need to develop a realistic and accurate OR schedule.

He also advises managers to determine their true utilization, noting that hospitals often think it’s higher than it actually is. The effort is worthwhile, as OR managers know. As Belson says, “If you don’t keep an OR busy all day, you’re throwing away a lot of money.”

The charge nurse plays a pivotal role, says Belson, and needs to be aware of each patient’s status in the OR. “You can use walkie-talkies, a whiteboard, video monitors, or computerized patient tracking systems.”

**Translation, please**

In some ways, the engineers’ lack of health care training was a bonus. “To look at our OR through the eyes of someone who doesn’t understand the process was a breath of fresh air and renewed our commitment,” says O’Rourke, who emphasizes the need to set expectations. “It was very important in the beginning that everyone knew there wouldn’t be finger pointing or blaming.”

In addition to Dr Ninan and Dr Ludi, the team included Jill Stewart, RN, assistant nurse manager; Susan Rand, DSc, patient safety/compliance officer; and Luis Orozco, LCSW, MSW, assistant hospital administrator.

**Bridging 2 worlds**

On the other hand, the engineers’ lack of a health care background brought its own challenges.

“They didn’t understand medical procedures, how in-depth procedures can be and how invasive,” says O’Rourke, adding, “We take it for granted. If we went into their world, we wouldn’t understand their language either.”

Some problems were easily corrected. For example, engineers had to be told that the hospital defined turnover time as beginning when the patient, not the surgeon, left the room.

Other differences went deeper. “They were unaware of how many factors affect the care of the patient—the appointment, the arrival of the patient, a code on the floor, the admitting process; all those details,” says O’Rourke.

Working in a public care facility...
Performance improvement

such as VCMC meant even more issues.

“Our patients have a lot of problems with rides and getting labs done,” says Ditto. “They [the engineers] didn’t look at some of the inherent problems we have.”

Ditto, whose facility was built 50 years ago, cites the example of the engineers wanting to turn an area into a preop holding area. “They didn’t understand that it’s not that simple,” he says. However, he plans to keep their suggestions in mind if more space or a new hospital is available in the future.

“I thought they were terrific,” adds Ditto. “We butted heads a few times, which is good. They validated information we try to give doctors. It’s another way of presenting the information, because they were independent auditors.”

Do it again?

Those interviewed said they found the experience valuable and would invite engineers into their OR again.

“We want to see where we are,” says Dr. Ludi. “It helped us to look inside [our processes].”

If you’re interested in an engineer’s take on your OR, Belson recommends contacting larger universities, which likely have an industrial engineering or systems engineering department. Fewer than 10 such schools currently focus on health care. But, he says, “Health care is a hot topic these days, and it’s going to get hotter. Engineering schools are looking at how to get involved in health care, so schools would probably be receptive.”

If that’s not an option, he suggests using manufacturing-based training programs such as The Toyota Way (Lean manufacturing) to promote process improvement.

Of course, improving throughput is an ongoing effort, with or without engineers. “It’s not just turnover time,” says Dr Ninan. “It’s a constant process that we’re always working on.”

—Cynthia Saver, RN, MS

Cynthia Saver is a freelance writer in Columbia, Maryland.

Reference


Enjoy the New Digital OR Manager. It’s Cool!

You are a privileged group. You get the latest news sooner. As a Super Subscriber, you get early access to the digital OR Manager weeks before your print copy arrives in the mail.

The digital OR Manager lets you read the issue on your computer, turning the pages with the click of your mouse. Or you can print it out. You can link to website references. You can share an article with a colleague. You can read the issue on the road without lugging the print copy in your briefcase.

Super Subscribers get this and more:

- The electronic publication, OR Reports, a summary of scientific studies relating to the OR environment.
- Weekly e-mail bulletins with the latest news that affects your OR.

Go to: www.ormanager.com to see a sample of the digital OR Manager.

Not a Super Subscriber? You can upgrade your subscription by calling 1-800-442-9918.
In today’s recessionary economy, capital equipment, like real estate, represents a buyer’s market. For an ambulatory surgery center (ASC) contemplating new imaging or operating room equipment, believe it or not this is a great time to go shopping.

“In my 42 years of medical equipment planning and procurement, there has never been a better time to buy capital equipment than there is today,” says Larry Hampton.

Hampton, a consultant with HELP Equipment Planning in Plano, Texas, with other supply chain experts offered purchasing strategies for major equipment during the 2009 Ambulatory Surgery Center Association conference in the spring in Nashville.

In another session, Travis Hagan of Seven Hills Surgery Center in Henderson, Nevada, explained how he saved 20% on colonoscopes and related equipment using market savvy and negotiating skills. Hagan is the full-time materials manager at Seven Hills. Based on an informal poll Hagan took at the ASC Association meeting, only about 30% of ASCs have full-time materials managers on staff.

Why it’s a good time to buy

According to Hampton, construction of medical facilities has decreased with tightening credit and declining patient volumes, so manufacturers are either losing sales or being forced to drop prices. Competition, therefore, is sharper than ever, with less-successful vendors being forced out of business and the remaining few ready to deal.

There is a catch: Many ASCs are also seeing declining volume and are short of funds or wary of taking on more debt.

In addition, the same forces weighing on vendors are making financing hard to obtain, and lower volumes mean less revenue to allocate to the equipment budget.

Therefore, few ASCs can afford to take advantage of the current equipment market without extensive research and long-term strategizing.

Long-term consequences

For those with the courage and long-term outlook to commit to a major equipment investment, Hampton warned that the process is much more complex than ordering medical-surgical supplies.

For one thing, the impact is greater: “Capital equipment is a one-time purchase with long-term consequences,” he told a group of ASC attendees. Both pricing and quality vary widely in the market, and research is essential, he said. “Knowledge is strength.”

List price has little (actually, “nothing”) to do with what the

Ambulatory Surgery Advisory Board

Lee Anne Blackwell, RN, BSN, EMBA, CNOR
Director, clinical resources and education, Surgical Care Affiliates, Birmingham, Alabama

Nancy Burden, RN, MS, CAPA, CPAN
Director, Ambulatory Surgery, BayCare Health System, Clearwater, Florida

Lisa Cooper, RN, BSN, BA, CNOR
Executive director, El Camino Surgery Center, Mountain View, California

Rebecca Craig, RN, BA, CNOR, CASC
CEO, Harmony Surgery Center, Fort Collins, Colorado and MCR Surgery Center, Loveland, Colorado

Stephanie Ellis, RN, CPC
Ellis Medical Consulting, Inc
Brentwood, Tennessee

Rosemary Lambie, RN, Med, CNOR
Nurse administrator, SurgiCenter of Baltimore, Owings Mills, Maryland

LeeAnn Puckett
Materials manager, Evansville Surgery Center, Evansville, Indiana

Donna DeFazio Quinn, RN, BSN, MBA, CPAN, CAPA
Director, Orthopaedic Surgery Center Concord, New Hampshire
ASC can expect to pay for an item. Group purchasing organizations (GPO) are good sources, because they can consolidate the equipment purchasing plans of members and present vendors with a “group buy” in return for discounts.

Most major GPOs run group buys several times a year, providing a 2- or 3-month commitment period for specific products. Don’t stop there, Hampton advised: “No GPO has the best price on everything at any one time.” Besides, he noted, clinical preference is a factor, and physicians will have the final say in many cases.

What a GPO can do, he noted, is provide benchmarks, which are especially valuable for the small-scale, infrequent buyer. The GPO has established specifications and has determined the products and vendors that qualify.

Taking one or more GPO contracts as a starting point, the ASC can then compare prices and products. In addition to looking for bargains through group buys, the enterprising ASC can go directly to vendors with the aim of using the GPO deal to negotiate even better terms.

**Bid basics**

The request for proposals (RFP), which may be sent to specific manufacturers or perhaps announced on the ASC’s own web site or in an industry publication, should ask for specific details beyond the price and product options.

Among estimates or descriptions potential vendors should provide are:

- freight terms
- payment terms
- warranty terms

**Develop detailed specifications.**

- future discounts
- cost of related supplies
- installation services and terms
- in-service training
- travel expense responsibilities.

If the cost doesn’t work, or there is no clear winner, a second RFP will ask for more details and may contain revised specifications. At this point, Hampton noted, it is a good idea to review ethics standards, with the goal of treating all competitors equally.

**Preparing to negotiate**

Before picking up the phone or drawing up an RFP, the ASC administrator or equipment planner should know some “facts of life” about the market, Hampton advised.

First, he noted, “Nothing is forever.” The equipment that is state-of-the-art today will be outmoded sooner or later and may even turn out to be less effective than the model you currently own. For that reason, “Don’t buy the first year [model] of anything without [warranty] protection,” he said.

It is important, for both present and future needs, to establish good relations with the sales representatives. However, the final decision must be about the product and company behind it, not the personality of the person who sells it.

Remember, too, Hampton said, “Sales persons are paid on commission, and their first obligation is to their employer.”

To stay in the driver’s seat, or, as Hampton put it, to “be a buyer without ‘being sold,’” it is important to have the facts at hand. Determine your actual needs (not a wish list) and develop detailed specifications. In addition to soliciting bids or quotes, he said an ASC might decide to hold a product fair at the facility.

In any case, before and after the contract award, it is important to keep the rep at arm’s length. Hampton warned, “The more comfortable a vendor feels that it will get the order, the higher price you will pay.”

**A word about used equipment**

The idea of buying a computed tomography (CT) scanner or surgical C-arm that a large hospital has traded in and is being offered by the manufacturer or one of the clearinghouses at a deep discount from the original price is tempting but calls for further research.

There is a difference, Hampton noted, between products that are merely used and those that have been refurbished or remanufactured. But all share an inherent risk over new items and may not even represent a lower cost, especially if they will need more maintenance.

“Never buy off the Internet,” Hampton warned. “Never buy without detailed specs, the serial number, a picture, and references. Check the warranty terms.”

In general, remanufactured equipment will provide a better investment in this category, he said.

Continued on page 30
He also advised working with a consultant who is experienced in buying equipment when venturing into the used market.

**The ‘demo’ option**

Seven Hills Surgery Center found even better value in equipment that has never left the manufacturer’s possession but has been used in demonstrations.

Seven Hills, a multispecialty center that opened in 2003 with 5 operating rooms and 2 procedure rooms, averages 600 cases per month. According to Hagan, “demo” equipment offers less risk than rebuilt or refurbished equipment yet usually comes with a smaller price tag than the same product fresh from the factory.

He defined “demo” as a product used only in a brief trial and then returned to the manufacturer. Demo equipment comes with the same warranty as new products out of the box, covering manufacturing defects but not repairs.

Last year, Seven Hills purchased 5 colonoscopes that the manufacturer, Olympus, had taken to trade shows but had never been used in an actual procedure. Hagan says he paid $150,000 for the scopes and accompanying light sources, which was about $30,000 less than if they had been brand new.

Seven Hills also buys refurbished equipment from third-party companies and is hoping to take advantage of several upcoming group buys from its GPO, Broadlane, in Dallas. —Paula DeJohn

---

### Federal government is funding ASC infection control surveys

The federal government is funding infection control surveys in more than 125 ambulatory surgery centers (ASCs) in 12 states by September 30, 2009, Health and Human Services (HHS) Secretary Kathleen Sebelius announced July 30, 2009.

The surveys, funded by economic stimulus money, will be carried out in Maine, New Jersey, Maryland, Florida, North Carolina, Indiana, Michigan, Arkansas, Oregon, Utah, Wyoming, and Kansas.

The Centers for Disease Control and Prevention (CDC) is also making $40 million available to states for infection prevention and surveillance efforts.

Surveyors will use a new infection control tool developed by the Centers for Medicare and Medicaid Services (CMS) and the CDC. The surveys will include tracers that follow a patient’s care from admission to discharge, checking to see that a facility is following Medicare standards.

It is expected that the surveys will follow the interpretive guidelines for state surveyors issued by CMS on May 15, 2009. The guidelines are intended to assist surveyors in evaluating ASC compliance with the Medicare Conditions for Coverage (CfCs).

In the guidelines is an Infection Control Surveyor Worksheet (Attachment 2, Exhibit 351) that outlines what surveyors are likely to look for. The interpretive guidelines are available on the ASC Association website at www.ascassociation.org/coverage

Kathy Bryant, president of the ASC Association, said she understood the new tool will have specific questions related to the CDC guidelines, making it less likely individual surveyors will bring biases.

The surveys seem to stem from concerns outlined in a Government Accountability Office (GAO) report released in February 2009. First, though 43% of surgery in the US is performed in ASCs, there is no national reporting mechanism for infection data from freestanding facilities.

Second, though experts consider infection risks in ASCs to be low, there have also been a few widely publicized incidents, such as reuse of syringes and medication vials in an endoscopy center in Nevada, which led to testing of thousands of patients for HIV and hepatitis. Six cases have been identified.

In pilot surveys in Maryland, Oklahoma, and North Carolina in 2008, the GAO says inspectors found some “serious lapses” in ASCs not following some CDC recommended practices, such as failures to reprocess equipment properly. Details of their findings have not been published.

The GAO recommended that HHS develop a plan for random infection control surveys in ASCs.

Bryant said the ASC community wants “to turn around” the government’s perception that infection control lapses in ASCs may be a serious problem.

The association has mailed the infection control standards to all Medicare certified ASCs, members and nonmembers alike. The GAO report (GAO-09-213) is at www.gao.gov/new.items/d09213.pdf
22nd Annual

MANAGING TODAY’S OR SUITE

Oct 7 to 9, 2009

Caesars Palace
Las Vegas

With the AORN Leadership
Specialty Assembly

For a conference brochure and to register online, go to www.ormanager.com.
At a Glance

Study questions endoscopic vein-graft harvesting

Endoscopic vein-graft harvesting for coronary artery bypass surgery is associated at 3 years with higher rates of graft failures, death, myocardial infarction, and repeat revascularization compared with open harvesting, finds a study in the July 16 New England Journal of Medicine. Endoscopic harvesting of leg veins has been widely used to reduce postoperative wound complications. The study concluded that endoscopic vein-graft harvesting is independently associated with vein-graft failure and adverse clinical outcomes. Randomized clinical trials are needed to further evaluate the safety and effectiveness of this harvesting technique.

Companies that make endoscopic vein-extraction devices cast doubt on the findings, saying the study wasn’t rigorous enough, the July 16 Wall Street Journal reported.


Cranial surgery without head shaving is studied

Among 632 patients who had cranial surgery without head shaving, only 7 (1.1%) developed a postoperative wound infection, researchers from Japan reported.

Their method entailed brushing a chlorhexidine-alcohol solution onto the craniotomy site, parting the hair from the incision line, and fixing it with adhesive drapes. In recent cases, electrosurgical scalpels were used for scalp and subcutaneous dissection.

At the end of surgery, the wound was closed in the usual manner, taking care not to catch hair in the wound and rinsing the wound with clear water in the OR.

Disinfectant was not applied to the wound but hair was shampooed on the 2nd, 4th, and 6th postoperative day.


Severe shortage of heart surgeons predicted

A severe shortage of heart surgeons is likely in the next 10 years, according to a study in Circulation. Researchers project demand for cardiothoracic surgeons could increase by 46% by 2025. Even if cardiac bypass surgery is eliminated, they predict a shortfall because the supply of active surgeons is expected to fall 21% during the same time as a result of retirement and fewer entrants.

The shortage could lead to lower quality of care and delays for patients needing heart surgery, according to the study.


Orthopedic surgeons creating joint registry

The American Academy of Orthopaedic Surgeons (AAOS) is creating a national joint registry to monitor artificial joint implants throughout recipients’ lifetimes. The database will include information about the patient, surgeon, and facility where the procedure took place.

The data will help surgeons monitor device longevity, identify poorly performing products, and match patient procedures and devices to optimize outcomes.

Registries in other countries have seen reductions in the revision rate, which could yield substantial savings.

—www.aaos.org