Updating software? How you can overcome islands of automation

Nine out of ten ORs have some kind of information system, according to the 2004 OR Manager Salary/Career survey. But a large number of systems are older products that do not offer the range of functions most perioperative managers want and need.

“ORs are looking at new systems because their current systems are not robust enough,” says Judith Swanson, RN, BS, director of perioperative services at 715-bed Texas Children’s Hospital, Houston, who spoke at the Managing Today’s OR Suite conference in the fall in Chicago.

Traditionally, ORs have been islands of automation, with systems that worked well but didn’t connect well to the mainland. They might have had bridges to other departments like admissions, finance, and materials management. Sometimes those bridges were solid, and sometimes they were rickety.

Now ORs are looking to turn those bridges into super highways. They want access to real-time data and seamless integration with other information systems.

OR managers want preference cards linked to the charging and materials management systems. They want staff in the OR and postanesthesia care to have immediate access to the patient’s record with lab results and medication history. They want to be linked with physicians’ offices to better coordinate scheduling. And they want easy-to-create reports for improving processes and managing costs.

Continued on page 8

Cultural competence

Giving culturally competent care another element in patient safety

A Laotian woman in her 50s came to a California Kaiser Permanente emergency room in cardiac distress. The attending cardiac surgeon recommended immediate surgery, but her family would not allow it because her older brother, who lived in Arizona, had to make the decision. Her brother was the designated head of the clan, which in their culture meant he was the one to decide all health matters.

The surgeon was frustrated, but the hospital’s medical interpreter brokered a deal. The family would consent to surgery immediately if the brother agreed. Hospital staff worked to get the brother there the next day. After the brother spent time alone with the family performing rituals and prayer, he told the surgeon, “My sister is ready. No matter what happens, it’s OK. She’s in God’s hands.”

“Can you imagine what would have happened if the outcome was not good, but we hadn’t respected the family’s tradition and cultural beliefs?” asks Gayle Tang, RN, MSN, director of Kaiser Permanente’s National Linguistic & Cultural Programs.

For Tang, institutionalizing understanding and respect of other cultures at Kaiser Permanente has been her life’s...
Please see the ad for MEGADYNE in the OR Manager print version.
Handling urgent cases
A surgeon calls and says a case is an emergency—but won’t be done until after 5 pm. What’s the best way to handle urgent and emergent cases?

Disruptive behavior
Both nurses and physicians engage in bad behavior, a new study shows. Read about how some have tackled the problem.

Handling urgent cases

It was a grim story. But only one of many. A leg of a woman was amputated at the buttock using what the Australian surgeon described as a hand-saw. She had already lost huge amounts of blood and, unfortunately, died shortly after the operation.

In addition to the estimated 150,000 who lost their lives, the United Nations estimates that half a million have been injured as a result of the tsunami that devastated Southeast Asia on Dec 26.

Despite fears of cholera, dysentery, typhoid fever, and malaria, the major cause of illness 2 weeks after the tsunami was lacerations and wound infections.

After trying to save grossly infected limbs, the Australian team of doctors resorted to amputations, according to a report in The New York Times. This was a last resort in Banda Aceh, a land that lacks crutches, much less prosthetics and rehabilitation programs.

Dr Paul Shumack, an emergency team leader from Australia, talked about the seawater that swamped Banda Aceh—a foul mixture of sanitation waste, garbage, and debris. “A couple of drops of this putrid water gives these people rip-roaring pneumonia and lacerations that get horrendously infected. The septicemia is incredible. The surgical cases have become more complicated because the infections are becoming more spectacular.”

A 60-year-old fisherman, the only survivor in his family, was told that he would survive only if his left leg was amputated below the knee. With fear visible on his face, he finally agreed.

A 13-year-old girl who had lost 10 members of her family had radical surgery for a deep, infected laceration. She would need a skin graft.

You can only wonder how these stories will play out.

Publisher’s Note

You can only wonder how these stories will play out.

Health care supply companies
Aid to the affected areas has poured in from all over the world. Medical supply companies have a special role in alleviating the suffering in Asia, Health and Human Services Secretary Tommy G. Thompson told 75 health care companies and organizations at a meeting on Jan 7. He urged them to provide financial, medical, and technical assistance.

But many US companies had not waited to be asked. Companies that supply the OR and other areas had already started to send assistance.

• 3M donated $1.5 million, including $500,000 to match employee donations and an additional $1 million in medical products.
• Cardinal Health offered $2 million in products and financial assistance, including 2.5 million erythromycin tablets. Employee donations up to $200,000 will be matched by the Cardinal Health Foundation, which had approved an initial $100,000 donation.
• Johnson & Johnson contributed an initial $2 million and will match employee contributions to the American Red Cross. It has sent sutures and pharmaceutical products to Indonesia and Thailand.
• Kimberly-Clark has donated $500,000 to the United Nation’s Children’s Fund and will match employee donations up to $500,000. It has sent 100,000 gloves to India and Thailand and will respond as products are needed.

If your company is contributing aid, send us information, and we will post it on our web site.

Although the stories of these people may soon be crowded off the front pages of newspapers or the top news broadcasts, the impact on the lives of millions who live in the devastated areas will continue for a long time.

—Elinor S. Schrader
Please see the ad for
SURGICAL INFORMATION SYSTEMS
in the OR Manager print version.
OR Business Management Conference in Tampa

OR professionals concerned with the business management of the OR will meet May 2 to 4 at the Marriott Tampa Waterside Hotel for the OR Business Management Conference. The conference will open with all-day seminars on Monday and continue with general sessions and breakouts on Tuesday and Wednesday.

With a focus on building teamwork, the conference will include sessions on OR design and construction, materials management, and other topics related to the successful financial management of the surgical suite.

Attendees include OR directors, medical directors, materials management personnel, and business managers.

The conference is of special interest to business managers. A networking and problem-solving session will allow business managers to discuss topics of mutual interest.

Four general sessions will anchor the conference, which will open with keynote speaker Toni F. Cesta, PhD, RN, FAAN, speaking on “The Changing Health Care Landscape: Where Do We Go From Here?” A leader in health care business management, she will discuss topics related to the business management of the OR.

The conference will open with all-day seminars on OR design and construction, materials management, and other topics related to the successful financial management of the surgical suite.

At the conclusion of Tuesday, Jeff Peters, MBA, a nationally recognized health business strategist, will speak on “Positioning Your OR for the Future.” Peters will discuss external factors affecting the OR, such as the increasing role of technology, the growing number of outpatient surgical procedures, and competition from specialty hospitals. He is president and managing partner, Surgical Directions, LLC, Chicago.

Opening Wednesday’s sessions, William Moskal, EdD, the popular problem-solver from specialty hospitals. He will provide a keynote from last year’s conference, will talk on “Building High Performance Leadership.” He is senior partner, IRI Consultants to Management. Building on this presentation, Moskal will offer 2

breakout sessions, “Managing Conflict and Change,” and “Ten ‘Demandments’ for High Performance Team Work.” Demandments are keys to assisting teams to perform at the highest level of efficiency and effectiveness. Moskal will close the conference with advice about keeping the enthusiasm for teamwork gained at the conference alive.

Seminars

All-day seminars give attendees an opportunity for in-depth learning. Seminars on Monday will include:
- “Getting What You Want and Need in OR Design and Construction”
- “Breakthrough Strategies for Supply Chain Improvements”

Breakout sessions

Twelve breakout sessions will update participants on OR design and construction, materials management, and other topics related to the business management of the OR.

OR design and construction breakouts include:
- “Using Guiding Principles in OR Design and Construction”
- “Blurring Boundaries Between Surgery and Interventional Imaging”
- “Design Trends for Surgical Facilities”
- “Emerging Technologies Affecting Design and Construction of OR Suites”
- “Developing a Freestanding Ambulatory Surgery Center.”

Advisory Board

Amy Bethel, RN, MPA, CNA
Executive director, surgical services, Iowa Health, Des Moines

Mark E. Bruley, EIT
Vice president of accident & forensic investigation, ECRI, Plymouth Meeting, Pa

Judith Canfield, RNC, MNA, MBA
Associate administrator of surgical services, University of Washington Medical Center, Seattle

Christy Dempsey, RN, BSN, CNOR
Vice president, St John’s Regional Health Center, Springfield, Mo

Franklin Dexter, MD, PhD
Associate professor, Department of Anesthesia, University of Iowa, Iowa City

Mary Diamond, RN, MBA, CNOR
Director of surgical services, Sharp Healthcare, San Diego

Marion L. Freehan, RN, MPA/HA, CNOR
Nurse manager, main operating rooms, Massachusetts General Hospital, Boston

Jo Harbaugh, RN, BS, CCRN
Administrator, Digestive Disease Endoscopy Center, Normal, Ill

William J. Mazzei, MD
Medical director, perioperative services, University of California, San Diego

Mary M. Murphy, RN, BSN, CNOR
Director, surgical services, Munson Medical Center, Traverse City, Mich

Barbara Pankratz, RN, MSN
Director, surgical services, University of Wisconsin Hospital & Clinics, Madison

Robert V. Range, MD
Professor and chairman, department of surgery, UT Southwestern Medical Center, Dallas

Marimargaret Reichert, RN, MA
Administrator, Surgical Care Center, Southwest General Health Center, Middleburg Heights, Ohio

Kathy E. Shaneberger, RN, MSN, CNOR
Director, perioperative services and ortho/neuro service line, Mercy General Health Partners, Muskegon, Mich

Allen Warren
Business manager, surgical services, Mission St Joseph’s Hospital, Asheville, NC

OR Business Management Conference in Tampa

A problem-solving session will be held for business managers.

Managing Today’s OR Suite

Quint Studer, author of Hardwiring Excellence, will be the keynote speaker at the 18th annual Managing Today’s OR Suite conference Oct 19-21 at the Manchester Grand Hyatt in San Diego.

Based on his 20 years of experience in health care, Studer has created 9 principles to guide organizations in their journey to excellence.

The brochure for Managing Today’s OR Suite will be in the April OR Manager and will be available on the OR Manager web site in late March.
Please see the ad for
MEDLINE INDUSTRIES INC
in the OR Manager print version.
Novation splits up sutures, endo devices

In a departure, Novation, the nation’s largest group purchasing organization by volume, has awarded 17 separate contracts for sutures and endomechanical devices to 6 different companies. The new 3-year contract takes effect April 1.

The expiring contract bundled suture and endomechanicals in an agreement with one company, Ethicon. Ethicon is conspicuously missing from the new suture contracts. The suture agreements are with US Surgical, a division of Tyco Healthcare, and Aesculap, whose B. Braun line of sutures is used in Europe and is moving into the US market.

Market dynamics

Novation, the purchasing arm of VHA Inc and the University Health-System Consortium, said the agreements could provide up to a 25% savings for its members.

The selection process was guided by Novation’s Suture and Endomechanical Task Force, which included clinicians and purchasing executives from member hospitals who used both financial and nonfinancial criteria. Nonfinancial criteria included clinical acceptability, breadth and depth of product line, ability to deliver supply and service, and value-added services.

The uncoupling of sutures and endomechanicals “will significantly change market dynamics,” said Eldon Peterson, a Novation senior group vice president.

“In the market today, there are a lot of alternatives. We are trying to accommodate our members’ desire to have choice, particularly with endoscopic devices and with new technology from smaller companies.”

The contract promises to stir up the suture market, dominated by Ethicon, which claims 80% of the US market. US Surgical has about a 20% share. Aesculap has less than 1% at present.

“They’re an up-and-comer,” Peterson said. The task force realized converting these high-cost physician preference items would be difficult, Peterson acknowledged.

Many surgeons are wedded to their suture and endomechanical brands and might argue that converting to another line would force them to compromise on quality.

<table>
<thead>
<tr>
<th>New Novation agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>3M</td>
</tr>
<tr>
<td>Aesculap</td>
</tr>
<tr>
<td>Applied Medical</td>
</tr>
<tr>
<td>Ethicon</td>
</tr>
<tr>
<td>Genicon</td>
</tr>
<tr>
<td>US Surgical</td>
</tr>
</tbody>
</table>

Going for value

The task force “knew there would be quality concerns so they looked at this in depth,” Peterson said. The task force did a hands-on evaluation of endomechanicals. They also visited New England Medical Center in Boston, which has converted to Aesculap sutures. They consulted a report by ECRI, Plymouth Meeting, Pa, a nonprofit organization that researches health care technology.

“Suture conversions aren’t fun to live through, but we couldn’t overlook the value because of physician preference,” said Don Millbauer, director of perioperative services at Harborview Medical Center in Seattle and a member of the task force. His facility, a trauma hospital, has a suture contract with US Surgical.

“What’s nice about this contract is I don’t have to go all with one company. I can go with who’s best,” he said. “It might have been ideal to have Ethicon for suture—the easiest thing would have been to stick with the incumbent. But they didn’t come with value.”

Though changing suture or endomechanical brands is hard, Millbauer asked, “How could you not at least give it a try?” In his opinion, US Surgical’s suture has improved over the past 10 years, and he says physicians who try it find it is not what they might have remembered from years past.

“What we want GPOs [group purchasing organizations] to do is to bring value that we can’t bring on our own. That’s what Novation has done, and I applaud them,” he said.

Some OR managers were taking a wait-and-see attitude. Some who’ve standardized to Ethicon don’t look forward to having to unwind the process.

“This is not like buying 4 x 4s,” said one. “The cardiac surgeons have certain kinds of needles they use, and they don’t want to deal with another brand. I’m not going to be the first one on the block to change.”

One possibility, he said, might be to see if Ethicon would offer a better individual price now that it will not have to pay an administrative fee to the GPO.

GPOs under scrutiny

The new contracts occur against a backdrop of regulatory scrutiny. The Federal Trade Commission and attorneys general of New York and Connecticut have been investigating bundled contracts. The Senate Judiciary Committee’s antitrust subcommittee has held hearings over the past couple of years on GPO practices, which critics say have squelched competition and prevented innovative products from reaching the market.

In response, Novation and other GPOs have developed new codes of conduct. Novation implemented new operating principles in 2002, pledging, among other things, to improve members’ timely access to new technologies, award multi-source agreements for clinical preference items, and not to combine unrelated clinical preference items.

Novation has maintained the changes are driven more by its member hospitals and increasing financial pressure they are under than by the regulators.


**Evaluating systems? Questions to ask**

Here are questions to consider in selecting new surgical services software suggested by Judith Swanson, RN, BS, director of perioperative services at Texas Children’s Hospital, Houston, and Deborah Tuke Bahlman, RN, MSN, regional surgical services information manager for the OR for the Providence Health System based in Portland, Ore.

- **What do you want to achieve?** “You must have a vision and let the software work for you,” Swanson says. “Most of us buy software to match our current processes. We need to purchase software for what it can do, then develop processes to optimize benefits of the software.”

- **Can the software do what I need for the continuum of patient care?** Does it include modules for procedure and staff scheduling, cost analysis by procedure or by surgeon, nursing documentation, inventory control, charging and billing? Will it give the staff easy access to clinical data on the patient while they are in the OR?

- **What will be your return on investment?** Will you be able to better manage your preference lists and integrate them with the materials management system for tighter inventory management and better cost analysis? Will you have better data for managing OR time?

- **Does the staff find the system easy to use?** Give the staff plenty of time to try demos. Providence had the 2 vendors it was considering conduct demos twice for the staff, Bahlman notes.

- **Does the system generate the reports I need to monitor processes, including OR block utilization, staffing, clinical outcomes, costs and revenue, and supply usage?**

- **Is there smooth integration or interface between the OR and materials management systems?** If 2 companies will be involved, what is their track record of interfacing with one another?

- **What do other users think?** Visit other organizations that are using the systems you are considering. Observe the system in action and ask questions.

- **What support does the vendor provide for installation and training?** How much is provided by the company, and what will you have to pay for?

- **How responsive is the vendor to requests for service and support?** If interfaces will be needed, how satisfied are other customers with interfaces that have been built and the timeliness of the service?

- **How much control will you have as a client have over the customization of screens and fields?** “Everyone is moving to online documentation,” says Bahlman. “You want the ability to customize screens to meet the needs of the staff.” For example, will you be able to create an abbreviated record for cataract surgery compared to more extensive procedures?

- **Is the company doing a good job of integrating the Perioperative Nursing Data Set developed by the Association of periOperative Registered Nurses?** The data set is helping to standardize nursing documentation for the OR.

- **Beyond the initial capital expense, what will the system cost in ongoing maintenance?**

The trend is toward greater integration. Most of the niche vendors either have disappeared or been acquired by larger companies, as iPath was by GE Healthcare in 2002.

At the same time, companies that still focus on surgery, such as SIS and Picis, have expanded to include more of the perioperative continuum and even beyond. Picis, which recently merged with ibex, an emergency department system, and offers critical care software, calls itself a “best-in-cluster” company. Both SIS and Picis have partnerships with larger health information companies, SIS with Eclipsys and Picis with IDX. Still others, namely Per-Se and USA, link their perioperative software to their enterprisewide scheduling software.

**Market shifting**

“I think we see the market gravitating more toward enterprisewide systems,” says Ralph Reyes of KLAS Enterprises, a firm that tracks performance of health care IT products. A chief information officer (CIO) might look at an enterprisewide system and say, “I can save $700,000 by buying a single package and still get 80% of the functionality for the OR.”

Ed Brotherson, RN, OR systems analyst at Shands Hospital at the University of Florida, Gainesville, says enterprisewide systems with OR modules have been rapidly evolving.

“Most vendors have been partnering with third parties to get OR modules in the past 2 years,” Brotherson says. “There is a big question whether the enterprisewide systems have a true OR component and whether that is robust enough for most OR needs.”

If an enterprisewide system has a useful OR component, Brotherson says these integrated systems can be easier to use and maintain than those patched together through interfaces.

“Dealing with one vendor is a big reason to choose one system,” he says. “If a problem arises, you don’t have to call 2 vendors to figure out the problem or to retrieve data from interfaces.”

In 2002, Shands purchased iPath, a “niche” system for the OR. Later, General Electric Healthcare purchased iPath and now calls the system Centricity Perioperative.

“We had already purchased a (hospitalwide) system and were just looking...
OR-specific or enterprisewide system?

**OR-specific information systems**

**Pros**
- Product is focused on functionality specific to perioperative care
- Vendor is likely to understand surgical processes
- Customers may receive more attention from vendor for surgery needs

**Cons**
- May be complex to work with multiple vendors within the organization
- Interfaces may be needed with other software, which can be cumbersome and costly
- Decreases leverage if working with more than 1 vendor in an organization
- Procurement and installation costs could be higher
- Updates and new releases may be more time consuming and complex
- Annual operating expenses may be higher

**Enterprisewide systems**

**Pros**
- Patient information is shared in a common database, avoiding duplicate data entry and making clinical information available across the system, for example, on medications, tests, and allergies
- Easier to coordinate scheduling with surgery and other services, such as radiology, laboratory, and physical therapy
- OR system can communicate directly with other systems in organization without building interfaces
- May reduce overall costs and annual operating expenses

**Cons**
- May not have all the needed functionality for perioperative services
- Company may not understand the needs of surgery as well as an OR-specific vendor
- May incur costs if additional features must be added

for an OR module,” Brotherson says. “We will be purchasing a materials management system and interfacing it.”

**Heat on niche vendors**

The heat is on niche vendors, and “enterprise vendors clearly have the momentum,” comments Brian DeBusk, former CEO of iPath. Though niche companies don’t often lose when they go head-to-head with enterprise vendors, they often aren’t even invited to participate in the selection process, he observes.

In the long run, though, DeBusk thinks “niche systems will be just fine” because of dynamics in the industry. First, as enterprisewide systems improve their OR modules and sell them to a significant share of their customers, the market may become saturated. With less income from new sales, he says, these companies will have to depend more on maintenance fees and will have less incentive to upgrade their OR products. That might create an opportunity for niche vendors. Second, enterprisewide vendors don’t have as much incentive to develop OR modules because they can be just as costly to produce as a broader clinical module, yet sell for much less. Finally, enterprisewide companies, though large by health care standards, could become takeover targets for IT behemoths such as Microsoft and Oracle—sending the industry into a whole new round of massive modifications, upgrades, and integrations.

For these reasons, DeBusk thinks that niche vendors will do OK.

“For OR directors who need the flexibility and features of a powerful information system, I still believe a niche solution is the way to go,” he says. Still, “as CIOs get more power, the pressure to work with an enterprise-type OR solution will increase.”

**Two different choices**

Two hospitals systems that recently selected OR software went in different directions. The Portland, Ore-based Providence Health System chose Horizon Surgical Manager, the OR product from McKesson, an enterprise vendor, for its 7 hospitals in Oregon. SSM Health Care, based in St Louis, on the other hand, selected SIS, an OR-specific product, for its 15 hospitals. SSMHC “has made the decision to standardize software across the system,” explains Carol Dodel, RN, BSN, Information Center product specialist for surgical services. “All (SSM) hospitals use the same materials management and hospital information systems, including billing.”

Providence, which evaluated 2 systems, chose Horizon Surgical Manager because the rest of the organization uses McKesson.

“Everyone wanted to move toward a single vendor for clinical systems so they can easily share information. This is important for physician order entry and patient safety,” says Deborah Tuke Bahlman, RN, MSN, regional surgical services information manager for the OR.

“The downside of an enterprisewide system is it may not be as nimble as a niche product in responding to clients’ needs, technical support, and robust functionality,” she notes. A niche product may have better functionality for perioperative processes and richer data and report-writing capabilities for surgery.

Nevertheless, Providence decided to go with an enterprisewide product because “we saw an opportunity down the road to have a fully integrated clinical system for nursing and surgery,” Bahlman says. She also believes Horizon Surgical Manager will continue to evolve to rival the specialized products.

**A large system upgrades**

SSMHC evaluated 8 competing systems.

Heading the team that developed the request for proposal was Beverly Beine, RN, MS, director of surgical services at St Mary’s Medical Center, Madison, Wis. The team discussed processes, best practices, needs, and goals.

“Our old system was sunsetting, and we decided we needed a system with a capability to do more,” says Beine, who oversees 12 ORs at St Mary’s. The team was not confident in the numbers it was getting on OR utilization. It also wanted better information on costs to use in discussions with physicians.

The team identified system requirements, including an interface with materials management for inventory control, automatic notifications, patient tracking, and the ability to capture lost charges.

Continued on page 11
Unibased Systems Architecture (USA) is the winner for customer satisfaction for surgical information systems for 2004, according to KLAS Enterprises.

Several vendors improved in the last half of the year: Per-Se, Cerner, and GE Healthcare.

KLAS, which rates health care software, announced its yearly awards Dec 15. The awards are based on confidential surveys of software users.

These are some comments from KLAS about the major OR software vendors.

USA

USA moved into the OR software business following the success of its enterprise-wide scheduling application, RMS, notes Ralph Reyes, KLAS senior vice president.

“They indicate that the reason they have felt comfortable moving to USA’s surgery management application is that everything USA has committed to, they have delivered.” Reyes says. “As a new player in this industry, they have made a positive impression on their clients, who in turn are expecting USA to continue enhancing the application as promised.”

In all, 73% of comments from clients were positive. The percentage is determined by asking clients in interviews what they like most and least about the product, letting them speak without further prompting, and analyzing the comments for the percentage that are positive and negative.

In addition, he says, 54% of customers rated the company “the best vendor they have ever worked with,” nearly 20 percentage points higher than their nearest competitor.

Per-Se ORSOS

Per-Se’s next-generation software, ORSOS version 9-10 (RDBMS), tied with USA for the percentage of positive comments—73%.

“They indicate that the company’s surgery management software, the majority of comments from SIS customers (58%) were positive.”

KLAS Awards for surgery management systems

<table>
<thead>
<tr>
<th>Dec 2004 rank</th>
<th>Score (out of 100)</th>
<th>Dec 2003 rank</th>
<th>No of installations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unibased Systems Architecture (USA)</td>
<td>88.91</td>
<td>1</td>
<td>17-18</td>
</tr>
<tr>
<td>2. Per-Se ORSOS v 9-10 (RDBMS)</td>
<td>82.27</td>
<td>3</td>
<td>435</td>
</tr>
<tr>
<td>3. SIS</td>
<td>80.15</td>
<td>2</td>
<td>NA</td>
</tr>
<tr>
<td>4. Picis OR Manager</td>
<td>76.66</td>
<td>4</td>
<td>609</td>
</tr>
<tr>
<td>5. Cerner Millennium SurgiNet</td>
<td>76.35</td>
<td>7</td>
<td>170</td>
</tr>
<tr>
<td>6. McKesson Horizon Surgical Manager</td>
<td>73.62</td>
<td>5</td>
<td>300</td>
</tr>
<tr>
<td>7. GE Centricity Perioperative</td>
<td>73.13</td>
<td>6</td>
<td>400</td>
</tr>
</tbody>
</table>


Clients indicate that the company’s postanesthesia care unit (PACU) module is an attractive feature, he adds, as is the recent acquisition of ibex, a top-ratedemergency department application.

Picis also has “indicated they have a strong anesthesia module,” with about 100 installations in Europe and about 15 in the US, he says.

Cerner Millennium SurgiNet

Cerner’s ratings were most improved for the period, rising by 12% between June and December 2004, KLAS reports.

“Overall, it appears the Millennium applications have, for the most part, been improving,” Reyes says, though only 33% of clients ranked Cerner as the best vendor, referring to the SurgiNet software. “That’s a bit disappointing, but they definitely are showing signs of improvement, having moved up 2 positions since the June 2004 report.”

McKesson Horizon Surgical Manager

McKesson also saw a drop in its ratings for Horizon Surgical Manager in the last half of the year, by about 4 percentage points, as well as a drop in the percentage of positive comments from customers, which at 47% was lower than the 61% in the Fall 2003 report. They had the third highest percentage “rated as client’s best vendor” in this report.

KLAS does not include the older McKesson product, SurgiServer, in the awards, though it continues to collect customer evaluations on it.

How customers rate surgical software

Surgical Information Systems

Surgical Information Systems (SIS) slipped from second to third in the ratings, and its score dipped by 1% compared with Fall 2003, Reyes noted.

“They indicate to us that SIS offers a strong suite of products,” he adds, noting in particular the StatCom module, which keeps personnel informed about the status of patients and cases, especially any delays.

A plus, he says, has been the company’s partnership with Eclipsys, a vendor of enterprise-wide software.

“In talking with some sites that have Eclipsys and were considering surgery management software, they were pleased with what SIS had to offer,” Reyes says. Eclipsys says about 10 customers have installed SIS.

Picis OR Manager

Picis’s ratings for its OR Manager product also dipped from 2003 to 2004 by about 2 percentage points, although “they indicate they have had tremendous success with new clients, perhaps more than ever before,” Reyes says, noting that KLAS will need to substantiate this information.

Information systems
Will it be seamless?

How integrated is the OR software you’re considering so patient data can be shared? Here are some questions to ask vendors and your CIO, suggests Brian DeBusk, former CEO of the OR system vendor iPath:

- Does the OR module run on the same hardware platform as the main enterprise system? “If the system resides on its own freestanding server, it is a strong indication that it isn’t truly integrated,” he says.
- Does the OR module operate on the same database (and same version of the database) as the enterprise system? Requiring 2 different database vendors’ products or a solution that uses the same database brand but runs in separate database “instances” is an indication that the product is not truly integrated.
- Does the OR module communicate with the enterprise system directly, or is some type of gateway or messaging architecture used? “Sometimes vendors will ‘integrate’ their products using HL-7 interface engines or proprietary messaging protocols,” he says. “This is not unacceptable—it is how most hospitals integrate systems from differing vendors. But these engines and messaging protocols are not true integration and will suffer from some of the cost and complexity of integrating a niche application.”
- How extensively does the OR module’s dictionary draw upon the enterprise dictionary? Do key data elements such as procedures, billing codes, patient demographics, employee masters, and so forth, have to be double entered? “One of the key selling features of an enterprise system is the need to maintain fewer of these dictionaries,” DeBusk says. “Double entry and/or double maintenance are key indicators that even if the applications run on the same hardware in the same database instance, they may not be truly integrated.”
- Does the OR module “look and feel” like the enterprise application? “This is a subtle indication of how integrated the development teams are,” he says. Typically, software vendors assign each module of their application to a specific team of developers. When standards are well established, products from separate teams will be consistent in their look and feel (Microsoft Word, Excel, and PowerPoint, for example). “An inconsistent look and feel can be an indication that the OR module has been written with little or no cross-organizational communication, and integration may be suspect.” he says.

The KLAS ratings

The ratings for surgical software are based on a confidential 40-item evaluation and interviews with about 200 health care managers and executives representing 500 facilities that use surgical management software. KLAS solicits evaluations through its web site as well as from members of the Health Information Management Systems Society (HIMSS) and other organizations; vendor lists and web sites; and networking. All submissions are verified by phone interviews before they are accepted. ►

More information about KLAS is available at www.healthcomputing.com

Planning and training

Swanson of Texas Children’s cautions selection teams to take plenty of time in the planning stage.

“It is essential that you don’t rush into the design phase until you have taken care of the planning. Get all the stakeholders involved, take in their input, and make sure you know what system will best fit your needs,” she says. She also warned managers to budget plenty of time for staff training.

“Don’t underestimate the time it takes to train your staff. Make sure everyone is fully trained and that you put enough resources into it.”

—Jay Greene
—Pat Patterson

Jay Greene is a freelance writer in St Paul, Minn.
Automation eases the preop process

A preoperative process that doesn’t run smoothly can be costly, not only in revenue but in patient safety and satisfaction.

A case that is cancelled or postponed because key data is missing can cost thousands of dollars. A missed allergy or medication can be a patient safety hazard. It’s also costly if physicians order too many tests or patients come in for a preoperative appointment when they don’t need to.

Automation is helping to make the preoperative process safer and easier. Examples of how automation can help now include:

- Less redundancy in data entry
- Greater integration of patient information
- Electronic links to physicians’ offices for scheduling requests
- Alerts and reminders

Here’s a look at what systems can do now and what’s coming.

Single patient database

As hospitals inch toward more robust information systems and electronic medical records, clinicians will have easier access to patient information throughout the continuum of care (see related article).

Greater integration can help with activities such as scheduling. Using McKesson’s Horizon Surgical Manager system, for example, a scheduler can select an existing patient from the hospital’s master patient index and schedule the surgery and any related appointments, notes Barbara Harris, RN, a McKesson engagement manager. If surgery must be rescheduled, a dialog box pops up to remind the scheduler that the preop appointment also must be rescheduled.

Similarly, once a patient’s name is entered in the Meditech system, software searches for the patient’s record and pulls forward information such as lab tests.

“The benefit of an integrated system is that you have past information at your fingertips from previous visits to the hospital or physicians’ office. It saves time and ensures patient safety because information on the patient’s allergies and medications is instantaneously accessible,” says Christine Castagna Murray of Meditech.

Systemwide scheduling

An integrated information system allows coordination of resources at the time surgery is scheduled. As an example, a module of ORSOS One-Call from Per-Se Technologies enables the physician’s office scheduler to coordinate multiple appointments without having to pick up the phone, says product director Mickey Larkins. Unibased System Architecture’s (USA) OR software is linked to its scheduling system, enabling nurses to schedule surgery as well as tests and other needed services like rehabilitation, says USA’s marketing director, Wanda French, RN, BSN, CNOR.

Across the peroperative continuum

There’s more demand for data to flow throughout the peroperative continuum, from scheduling through postanesthesia care, including both nursing and anesthesia. SIS and Picis both claim strengths in this area, having been developed specifically for the OR, anesthesia, and related functions and areas. Other companies, such as GE Healthcare, also have anesthesia modules, and Per-Se says it will introduce an integrated option early this year.

The advantage of integration is that once patients’ information is entered in the system, it is available throughout the surgical episode.

“In the OR, all of our modules are shared,” says Patricia Heid, RN, MSN, clinical consultant for Picis. “The circulating nurse and anesthesia provider can click on an icon to direct them into the perioperative record,” he says. In the SIS system, preoperative information, such as the patient’s nursing and medication history, is available both to nurses and anesthesia providers down the line.

SIS has an exclusive partnership with Eclipsys, an enterprise-wide provider of clinical information systems, which offers “deep clinical integration,” says Steve Pennock, vice president for clinical solutions. “With a single sign-on, you can make the two systems behave as one,” he says. For example, OR and anesthesia providers could bring up lab results in the OR. Postanesthesia nurses would have access to medications given in the OR, and floor nurses could see what pain medications the patient received in the recovery area. So far, about 10 customers use the integrated system.

Paging Dr Smith . . .

Automation allows users to build in a “safety net” of reminders. For example, when a nurse is charting in the system preoperatively, messages can pop up reminding her to check the patient’s identification and verify the surgical site.

Rules can be written so that if a patient is on an anticoagulant, the system alerts clinicians to check when the anticoagulant was stopped or if the patient had a PT and PTT (prothrombin time and partial thromboplastin time).

Missing a history and physical? Need an update note?

GE Healthcare’s software can post reminders to clinicians in multiple ways, notes Donna Maddox, RN, BSN, manager of upstream marketing for GE Centricity Perioperative. As preoperative nurses assemble charts, system-generated worklists can help them keep track of what information is missing. On the day of surgery, when the situation is more urgent, a “white board” tracking system can flash alerts or even page clinicians who need to respond. Other companies also offer similar capability.

Who needs a preop visit?

Keeping track of who needs preoperative testing and appointments is a challenge.
Online patient histories help reduce need for phone tag

It’s 2 pm, and it’s time for phone tag. Preoperative nurses are on the phone, calling patients about their upcoming surgery. Many times, patients aren’t home. Nurses leave a carefully worded message to call back, not wanting to jeopardize the patient’s privacy. The patient may call back—or not.

There’s another way—have patients submit their histories online.

Not many places are doing it yet. But 14 sites, including surgery and a cath lab in Utah’s Intermountain Healthcare (IHC) system, give patients that option. And an anesthesiologist started a business that provides web-based patient histories and registrations for surgical facilities.

Online histories time-saver for nurses

At Cottonwood Surgical Center in Murray, Utah, an average of about 20% of patients per month submit their health histories through the Internet.

Cottonwood and some other IHC surgical facilities have had online history forms available for 2 years.

“We do 100% phone assessments, and the online histories have been a real timesaver for the nurses,” says Cottonwood’s manager, Rebecca Hales, RN, BS, CNOR. Nurses do not spend as much time playing phone tag with patients, and phone assessments do not take as long. They also receive a legible record.

Online histories are an advantage for patients because they have more time to think about their health and medication history, adds Cathy Hughes, RN, BSN, CAPA, nurse manager of the Same-Day Surgery Unit at LDS Hospital in Salt Lake City, where 20% to 25% of patients use the service.

“We see 75 to 80 patients a day, and there is a lot of pressure to get things done,” she says. “Anything that speeds up that process is helpful. We probably get better and more complete information with the online histories.” LDS is building a new hospital, which will include computer stations in the waiting area that patients can use for this purpose.

“It’s surprising to me how many older people want to do this. They will ask for the web address and actually use it,” Hughes says.

How it works

Here’s how it works. When patients are seen at the surgeon’s office or call the hospital to preregister, they are given the web address at www.ihc.com/surgery. They click on the link for their facility, which brings up instructions for the online form. They enter their e-mail address and link into the form, which is on a secure site. The form has fillable boxes and buttons, similar to those used by Internet retailers like Amazon. The form takes about 15 to 30 minutes to complete. Certain fields are required, and the form cannot be submitted until these are completed. The form has a place where the patient can request a nurse to call, provide a phone number, and give a convenient time to call.

At the facility, “the form prints out just like our paper form and goes right into the chart,” Hales says. The form is identical to the manual version.

A nurse reviews the form. All patients are called, even if nurses are satisfied with the information, to give them the surgery time, review preoperative instructions, and ask if they have questions.

Protecting confidentiality

Only 4 or 5 persons at each facility have access to the account where the health histories are received. Once the form is printed out, the patient’s file is deleted. The form is kept on the site for 72 hours so patients can take their time to complete it.

At present, the online forms are kept in hard copy. Cottonwood is moving toward perioperative charting.

Hales led the effort to develop the
form, with the support of IHC’s information services department and Belle Rowan in IHC’s e-Business Department. IHC developed the software in-house. Rowan worked with a company that specializes in business forms (www.moorewallace.com), to develop the PDF version of the form. In addition to the cost of web development and programming, Hales estimates the cost of developing the fillable PDF form was about $1,000. Other IHC facilities have been able to adopt it because most use the same patient history form.

Hales and other OR managers would like to encourage more patients to submit their forms online. To increase participation, they have sent flyers to physicians’ offices and asked admission clerks to give the Internet address to patients when they call to preregister. She says patients like using the online form and only have a problem if the server is down or if they have an older browser version.

Getting started

Hales’s advice to other managers who are interested in developing an online health history:

• Know your patient population. Are enough of your patients online and computer literate to benefit from this service? Utah, the home of many high-tech businesses, has a computer-savvy population.

• Consider the complexity of patients’ health histories. Completing a form for a healthy patient is not time consuming, but the process would take longer for patients with more complex histories.

• You need strong support from the e-business and IS department. “I had complete support from the top of both these departments,” Hales says.

‘Medical passport’ is portable

“We’re basically doing for ambulatory surgery centers what the ATM machine did for banking 20 years ago,” says Stephen Punzak, MD, of his company, Medical Web Technologies, Dover, Mass, which has a web-based service called One Medical Passport (www.onemedicalpassport.com).

Through the web site, patients can create a “medical passport” with demographic and insurance information and a medical history.

The way it typically works, he says, is that a patient is at a surgeon’s office and has decided, for example, to have an anterior cruciate ligament repair at a surgery center. The surgeon gives the patient a One Medical Passport card filled out with the surgery date, type of surgery, surgical site, and how to access the web site. The patient takes the card home, logs on, creates a user name and password, and fills out the online questionnaire.

The questionnaire is broken down into steps, with a page on medications, a page on allergies, and so forth. Patients point and click or use drop-down menus with little need to enter text. They cannot skip questions and can review the information before it is submitted. Once completed, the passport is submitted to the company’s web site where it is processed through software to convert it into reports useful to clinicians.

“Rather than having 5 different people ask the patient the same questions, we ask the questions once in a comprehensive way, and the program generates all of the different forms people need. It’s very user friendly,” Dr Punzak says. Reports can be customized.

A closed loop

At the ambulatory surgery center (ASC), the preop nurse can access the site and get a report of medical passports that have been completed for patients scheduled at that center. She then downloads each patient’s passport, which has several parts, including an admitting page, an anesthesia preop report, a nursing preop report, and a short history and physical with a place for the surgeon to sign.

The system has a task list that shows nurses what tasks have been completed, such as the surgical consent, anesthesia

We’re doing what ATMs did for banking 20 years ago.

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.

Dr Punzak says the program is easy for ASCs to start using, requiring about a half hour for staff training.

Patient participation ranges from 20% to 96%, depending on the facility. The best compliance, he says, is for ASCs that call patients to give them information about the site and how to access it.

A major advantage, he says, is patient convenience. Completing the passport typically takes 20 to 30 minutes. “We get half of the medical passports created after 7 pm,” he says. “The advantage is that they have all of their medications there. If they need to, they can ask a significant other to help them.”

Though he says the system can be interfaced with other software, so far only one hospital has done so.

The medical passport is portable. Patients continue to have access to it and can give it to physicians and facilities they choose.

In all, 34 facilities are using One Medical Passport, primarily ASCs and a few hospitals. For ASCs, there is a monthly charge of $250 a month plus a $2 per-patient transaction fee. Hospitals pay $2,000 a month plus a $1 per-patient fee.
Please see the ad for CARDINAL HEALTH in the OR Manager print version.
Information systems

What’s next for preop automation?

What’s the best way to assess patients preoperatively? Typically, there are 3 approaches:

• a preoperative clinic
• phone assessments by nurses
• screening coordinated by surgeons’ offices.

Each has advantages and disadvantages. Preoperative clinics provide a central point for managing patient preparation, but they are expensive, and it is difficult to make anesthesiologists available for assessments. Healthy patients typically don’t need to come in for a full evaluation, and unnecessary preop appointments can be a dissatisfier for patients.

“These clinics are falling out of favor because there is no separate reimbursement for them. We have found places where clinic costs exceed $150 a visit,” says David Young, MD, an anesthesiologist and member of a task force at 500-bed Advocate Lutheran General Hospital in Park Ridge, Ill, that is working to improve the preoperative process.

Nurse phone assessments can be effective but also are expensive, costing about $70,000 a year with benefits for a nurse FTE. And there still must be a process for assessing patients who need to be seen in person.

Screening by surgeons’ offices can be difficult to coordinate.

Could automation help?

Dr Young and his team began thinking about how automation could help. What if a patient answered an online questionnaire? Is there software with algorithms that could process the patient’s responses, for example, on cardiac health? Could the software produce a report to say whether the patient needed lab tests and needed to come in before the day of surgery? Is there a program that could print patient-specific instructions such as information on diabetes and herbal medications? Could instructions even be printed in the patient’s native language?

The closest thing they found is HealthQuest, an automated patient questionnaire developed by the Cleveland Clinic. HealthQuest is used to screen over 90% of the Clinic’s preoperative patients. Over 185,000 patients have used the program, and, as a result, 55% of patients are now seen only on the day of surgery. Surgical delays have been reduced by almost 50%.

Lutheran General negotiated with the Clinic, which does not market HealthQuest commercially, to adopt it and develop additional features. The expanded program, called PrepQuest, is scheduled to roll out at Lutheran General this month. A commercial version is under development by Surgical Directions, LLC, of Chicago.

How HealthQuest works

Patients answer HealthQuest’s automated questionnaire in the surgeon’s office or at home via the Internet. “The questions are geared to a 6th grade reading level but generate a thorough, processed medical history,” Dr Young explains. “The questions are similar to what you normally answer in a surgeon’s office, except the history is much more complete.” A healthy patient can complete the questionnaire in under 10 minutes; a patient with medical problems takes longer.

Based on patients’ responses and invasiveness of the planned surgery, the program calculates a score for the patient’s health status, which indicates the extent of evaluation needed. Healthy patients are assigned to “express” status and have an anesthesia evaluation on day of surgery. Patients who need more extensive evaluation are assigned to:

• a preanesthesia clinic to be seen before the day of surgery
• an internal medicine clinic, which focuses on medical issues for patients with multisystem disease or
• the patient’s own internist for a preoperative assessment.

PrepQuest will take HealthQuest a step further by building in additional algorithms to determine which if any lab tests a patient needs. After patients complete the questionnaire, a list of lab tests, x-rays, and patient instructions is faxed to the surgeon’s and internist’s office. PrepQuest also will print worksheets for preop nurses to use as well as patient-specific instructions about parking, day of surgery medications, and other issues.

“Our goal is to have the presurgical testing area, the primary care physician, and the surgeon all working with the same requirements,” Dr Young says. “I think there is growing recognition that every institution has to have some sort of organized process for preoperative preparation,” particularly as patients’ conditions become more complex, and new medications become more challenging to keep up with.

“This process will help hospitals and physicians plan for patient care more effectively, especially for patients with cardiac disease or diabetes or those needing beta-blockers or who are on antithromboembolic or anticoagulant regimens.

“I really believe automation is the best method for improving the preoperative process, whether through our program or others. It could really help us standardize and streamline this aspect of patient care,” he says.

—Pat Patterson

References


Fischer S P. Cost-effective preoperative evaluation and testing. Chest. (Suppl) 1999;115:96S-100S.


Our differences are our strengths

At Shands HealthCare at the University of Florida in Gainesville, the process of developing a more culturally sensitive environment began in the OR, with staff learning to respect other staff, says Gail Avigne, BA, RN, CNOR, nurse manager of perioperative services.

“We needed to do something,” Avigne says. “There was a lot of misunderstanding among ethnic groups and in job status.”

About 15 OR staff meet once a month to “talk about the ‘untalkables,’” she says. “We find out what’s going on under the surface. It isn’t always about race; often it’s about position.”

For instance, at times patient care assistants expressed feeling ostracized by nurses, and surgical technologists said they didn’t feel supported by nurses or surgeons.

“At these meetings, I get a heads up on conflicts before they become management issues,” Avigne says.

The OR group began taking steps to improve cross-cultural understanding, which have spread to the rest of the hospital:

Created a diversity bulletin board

Each month a different OR staff member is highlighted with a picture and answers to questions, such as, what is important in your culture? What do you think is positive? What are you proud of? What would you like to see changed?

These questions also are woven into orientation for new OR employees, “so they get an idea of the open attitude we expect on the unit,” Avigne says.

Developed cultural celebrations

Celebrations in the OR correspond with hospital observances of Black Heritage Month, Asian Pacific Heritage Month, Hispanic Heritage Month, and American Indian Heritage Month.

After a year, hospital administrators took note and asked Avigne to help lead a hospitalwide diversity initiative.

The hospital now has 4 festivals a year to celebrate different cultures. A different task force plans each festival, which includes ethnic music and food, poetry readings, and staff dressed in traditional garb.

T-shirts and coffee mugs are sold for each celebration on the hospital’s “Diversity Store” web site. Proceeds go back into next year’s festival, Avigne says.

Created a cultural awareness course

The hospital diversity team created an interactive 4-hour course on cultural awareness that all staff must attend. “It’s an awesome experience,” Avigne says. “We learn about our assumptions and prejudices and how to set them aside.”

Designed a diversity motto

Shands HealthCare created a diversity motto, “Our Differences Are Our Strengths,” and a diversity logo. The logo is similar to the Olympic logo, but instead of rings, has 5 hands of different colors touching. A banner with the motto and logo hangs in the hospital lobby.

In the OR, the efforts to improve the work environment have paid off in retention. Avigne says she has a waiting list of nurses who want to work there.

“I believe the key has been getting staff to tell you the things that are making them unhappy or uncomfortable in their work environment instead of looking for another job and leaving,” Avigne says. —Leslie Flowers

growth is outpacing growth in the Caucasian population. Census data show nearly 1 in 2 Americans will be a member of a racial or ethnic minority by the year 2050.

Historically, minorities receive less care and a lower quality of care, as demonstrated in the Institute of Medicine’s 2003 report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. The Agency for Healthcare Research and Quality’s National Health-care Disparities Report last year also showed that some ethnic minorities tend to be in poorer health than other Americans.

Experts believe cultural competency of health care providers is the key to closing quality gaps, especially for nurses, who are approximately 90% nonminority, says Guadalupe Pacheco, director of the Center for Linguistic and Cultural Competency in Healthcare. The center is part of the Office of Minority Health at the US Department of Health and Human Services.

“Cultural competence enables the health care system to take into account the cultural and linguistic issues of minority populations and to use that knowledge to prescribe the most appropriate treatment options,” Pacheco says.

His center is releasing a free online cultural competency course for family practice physicians at the beginning of 2006 that provides continuing medical education credits. A course for nurses should be available in 2006.

Other than Title VI of the Civil Rights Act, which requires recipients of federal funds to ensure meaningful access to their programs and services by limited English proficient persons, no federal laws or policies mandate cultural competency, says Pacheco.

However, the Office of Minority Health in 2001 issued the National Standards on Culturally and Linguistically Appropriate Services, also known as the CLAS standards. The 14 CLAS standards provide uniform definitions and guidance to providers to implement and develop cultural competency programs at their facilities, Pacheco says.

Accommodating cultures

Cultural competency professionals say a shift is needed to improve outcomes and reduce disparities in care for minority
patients. That shift will be about understanding and accommodation.

Sandra Eliason, MD, co-director of the Center for Cross Cultural Health in Minneapolis, believes culturally based care is enhanced care.

“The old medical model is the Western disease model,” she says. “In the new medical model, we will need to practice medicine that is not only clinically proven but also accommodates cultural beliefs. This is actually better medicine because it brings in the patient’s social, spiritual, and cultural beliefs. It allows the patient to understand medical care within the frame of reference of their cultural beliefs.”

Tang of Kaiser Permanente gives an example of this respectful care. “In some cultures, such as the Cambodian culture, patients believe they must wear a bracelet or necklace that has been blessed by a priest throughout their surgery,” she says.

“If they absolutely cannot wear it during surgery, you must ask first to take it off and how you should take it off, and then how you can best care for it.”

Tang, who is of Cantonese descent, carries a token in an envelope in her wallet that was blessed by the temple priest and given to her as a child by her mother. “I carry it with me all the time,” she says. “It’s important to my mother to feel that I am protected, so it is important to me.”

More culturally sensitive gowns

At Maine Medical Center in Portland, interpreters were reporting high no-show rates for appointments with Somali women. They learned these women, whose Muslim culture requires modesty, were uncomfortable wearing hospital gowns, especially if they had to wear the gowns in public areas.

The hospital’s linen services department redesigned the gown to snap or tie on the side so the women’s backs were not exposed. In addition, the staff created a sarong that covers the women from their waist to their ankles and is acceptable to the women and their husbands, says Dana Gaya, manager of interpreter and cross-cultural services.

OR nurses at Banner Good Samaritan Medical Center in Phoenix, which serves a large American Indian population, save cut or shaved hair to return to American Indians who have had brain surgery. In addition, amputated limbs are retrieved as requested by American Indians who wish to bury them at their home or reservation, says Diane Currier, RN, director of perioperative services.

The medical center also is seeing greater numbers of Asian and Eastern European patients, Currier says.

“It’s difficult for the nurses to have a clear understanding of the background of each ethnicity,” she says. “We still need to do more to learn about each culture.”

Creating a respectful environment

How do health care facilities create a culturally competent climate that is open to and respectful of the practices of diverse racial, ethnic, religious, or social groups?

“While there is little known about the best approaches to operationalize cultural competency, there are a lot of incremental, positive steps that we can start to take on that journey toward cultural competence,” Tang says. “Opening to learning and adapting at individual and systems levels are part of that journey.”

Dr Eliason and colleagues at the Center for Cross Cultural Health are working with health care facilities to bring about systems change, which is “more than just writing a training manual that may just sit on a shelf,” she says.

“Cultural awareness training just touches the surface for a few days or maybe a few weeks. When we evaluate an organization, we look at all the human resource policies, all the ways patients are met and cared for, and help create a sustainable atmosphere of respect and acceptance of patients and staff.”

Continued on page 24
Please see the ad for
3M
in the OR Manager print version.
Meeting patients’ language needs

C ar keys in hand, the young Latino man had unhooked his IV lines, dressed himself over his open wound and was ready to walk out of the emergency department when Luis Diaz, a bilingual medical interpreter, arrived.

Speaking in the patient’s native Spanish, Diaz calmed him down and explained how the doctors and nurses planned to treat him. Diaz convinced the man he needed surgery, and the man consented.

“These patients are people I grew up with and know from the community,” says Diaz, a patient care technician in postoperative recovery at Windham Community Memorial Hospital, a 130-bed hospital in Willimantic, Conn. “Just by speaking the same language, I see patients relax and become much more comfortable with the procedure.”

Diaz is one of 16 of Windham Hospital’s 700 employees who has completed an interpretation course in medical terminology for Spanish-speaking hospital staff. In 4-hour class sessions, meeting twice a week over 12 weeks, students learn basic medical terms and concepts in English and Spanish related to all body systems and discuss ethics and confidentiality issues.

Each time Diaz is called away from his regular duties in the postanesthesia care unit to interpret, which he says happens almost every workday, he receives a $2.50 bonus. “It’s a little extra money, but mostly I feel obligated to help out with the Hispanic community,” Diaz says.

“The costs go beyond the stipend,” says Martin Levine, SPHR, Windham Hospital’s vice president of human resources. “There is the cost of covering for someone who leaves their regular duties and the $4,400 cost for the interpretation course.”

The hospital developed the interpretation course in collaboration with nearby Quinnebaug Valley Community College faculty, who teach the course at the hospital.

“We would like to get a grant to offset the costs of the course,” Levine says.

An unfunded mandate

Hospitals like Windham are under increasing pressure from government mandates to meet the needs of growing non-English-speaking populations—without reimbursement.

In 2003, the Department of Health and Human Services (HHS) issued new guidance to reinforce the principles of Title VI of the Civil Rights Act with respect to limited-English-proficient (LEP) persons. In short, Title VI requires that providers of health and social services who receive federal financial assistance from HHS, such as Medicare and Medicaid, “must take responsible steps to ensure meaningful access to their programs and services by LEP persons,” according to the HHS guidance.

The Office of Civil Rights, which is under HHS, is the enforcement arm and will determine compliance on a case-by-case basis, in light of the following 4 factors:

- number or proportion of patients with limited English proficiency
- frequency of encountering individuals with limited English proficiency
- importance of the service provided
- resources available.

“Recipients with limited resources will not have the same compliance responsibilities applicable to recipients with greater resources,” the HHS guidance says. “All recipients will have a great deal of flexibility in achieving compliance. The vast majority of all complaints have been resolved through voluntary efforts.”

This flexibility means a small doctor’s office will have more compliance leeway than a large medical system, as long as it evaluates the 4 factors in determining how it can meet the needs of its LEP patients.

The Robert Wood Johnson Foundation offers grants for medical interpretation training and materials for hospitals and health systems in regions with new and fast-growing Latino populations. The program is called Hablamos Juntos.

Ways to comply

“There are a lot of ways to comply without having to spend a lot of money,” says Lori Feezor, a health care attorney with Kennedy Covington Lobdell & Hickman in Research Triangle Park, NC. “You don’t have to hire an interpreter for every language that walks through your door, but you do have to look at your community and do the 4-factor test. If you have significant interpreting needs, you look at alternatives to meet those needs.”

Feezor, who spoke on interpreting and translating requirements at the annual meeting of the American Society for Healthcare Risk Management in October, suggests these alternatives:

- Collaborate with other providers in the area, such as hospitals, ambulatory surgery centers, pharmacies, and nursing homes, to create a pool of interpreters and to get group purchasing discounts by telephone translation contractors.
- Tap into volunteer organizations of particular ethnic populations. You train the interpreters in medical terminology; they volunteer their services.
- Hire a diverse employment population to cover your language needs. “Some hospitals pay employee interpreters an extra 40 cents an hour just to be on call,” Feezor says.

A large urban center responds

At large urban centers, the burden and responsibility to assist LEP patients is much greater.

Boston Medical Center has a $2.2 million budget for interpreter services. On weekdays, LEP patients, who make up about 30% of the patient population, can be serviced by more than 80 interpreters, including 37 full-time staff who cover 18 languages, 20 per diem interpreters, more than 50 contractors on call, and hospital staff who are bilingual, says Oscar Arocha, director of the interpreter services department and guest support services.

Continued on page 22
Please see the ad for KARL STORZ ENDOSCOPY-AMERICA in the OR Manager print version.
Spanish is the number one interpretation need at Boston Medical Center, which also has a large call for French Creole for Haitian patients and Portuguese Creole for patients from Cape Verde.

Language assistance begins the moment a patient approaches the main information desk. A large poster written in 30 languages allows patients to identify their interpreter needs. The poster says: “You have the right to an interpreter at no cost to you. Please point to your language. A medical interpreter will be called. Please wait.”

The reception desk gives patients a form that identifies their primary language to take to their destination. The hospital department calls an interpreter services scheduler, who pages the appropriate interpreter with a text message of where to go.

If LEP patients cannot read, they are set up with a telephone system programmed to 20 languages to help the reception desk identify their language.

“Sometimes we have to play detective,” Arocha says, and relates how a Hungarian man needed an interpreter in the emergency room. The hospital’s Hungarian interpreter was an hour and a half away. Arocha recalled that Hungary has been under the former Soviet Union’s Iron Curtain, and he correctly surmised the man also spoke some Russian. The hospital’s Russian interpreter was able to fill in until the Hungarian interpreter arrived.

Long-distance interpretation

If an interpreter is not available for a particular language, many hospitals employ a telephone interpreter service, which costs about $3 per minute.

Despite shortcomings of telephone interpretation, which include the cost, lack of face-to-face interpretation, and intimacy, Arocha says it’s a necessary backup. “Nothing is guaranteed when you have this kind of volume,” says Arocha, noting his staff has 140,000 requests a year. “What if the ER is expecting a busload of Vietnamese patients? Nobody has 15 interpreters who speak Vietnamese.”

Boston Medical Center contracts with 4 phone services to ensure all languages are covered and to promote competition among the vendors, Arocha says. A video conferencing service is available for deaf patients when an American Sign Language interpreter is not immediately available.

**OR assistance with interpretation**

At 4 pm Monday through Friday at Boston Medical Center, the OR scheduling nurse has a phone date with a scheduling supervisor in interpreter services to review the next day’s surgery schedule for LEP patients. Also, an interpreter services staff member is in the office at 6 am specifically to service unexpected OR needs.

“Anything unpredicted is taken care of in person,” Arocha says.

The interpreter translates throughout the preoperative process, including verification of identity and correct procedure, with the preoperative nurse, OR nurse, and anesthesiologist.

Patient consent forms are written in English, Spanish, French, and Portuguese. The forms are available via the hospital Intranet and can be downloaded from any computer. Departments can request consent forms translated into other languages as needed. If patients are illiterate, the interpreter translates the document aloud and signs it along with the patient, Arocha says.

The interpreter usually stays in the preop area until the patient is under anesthesia and is paged when the patient begins to wake up in the PACU. For outpatient surgery, the interpreter calls patients the day after surgery to see how they are feeling.

**‘Un poquito Español’ syndrome**

In addition to paid interpreters, many hospitals rely on bilingual staff to communicate with LEP patients.

For instance, during endoscopy procedures, in which interpreters are not allowed, Sandy Hyde, RN, a preoperative and postoperative nurse at Windham Memorial Community Hospital, will speak in Spanish to help relax her Latino patients. She augmented her college Spanish classes by teaching herself and her colleagues how to say phrases such as, “Turn on your side.” “Take a deep breath.” “Almost done.” “Turn over.” And “Where are you having pain?”

Arocha at Boston Medical Center has concerns about staff members who are not bilingual and trained in medical terminology communicating about clinical issues with LEP patients.

“We call this the ‘un poquito Español’ syndrome,” Arocha says, describing staff who may have taken high school or college Spanish and try to speak the language with their patients.

“I realize people want to be able to communicate directly with their patients, and I respect them for that, but I personally discourage it,” Arocha says. “It’s not so much what you say to patients. The issue is, What do you understand? What are you going to do when you say ‘Cómo estás hoy?’ (How are you today?) and the patient comes back in fluent, rolling Caribbean Spanish with a 5-minute answer?”

A small study published last year in Pediatrics found mistakes in interpreting could be common. In this study, 31 errors were committed on average during each of 13 recorded doctor visits. Ad hoc interpreters, such as family and friends, were significantly more likely than hospital interpreters to commit interpretation errors of clinical consequence, such as omitting questions about drug allergies or stating that hydrocortisone cream must be applied to the entire body, instead of only to a facial rash. The study also found that less than one-fourth of hospitals nationwide provide any training for medical interpreters.

The Joint Commission on Accreditation of Healthcare Organizations is taking note of how hospitals respond to patients’ language needs and is working to develop standards. JCAHO will gather baseline data on a sample of hospitals to assess their capacity to address language and cultural issues that affect the quality and safety of patient care. JCAHO says the results will be a foundation for setting realistic expectations for
Please see the ad for INTEGRATED MEDICAL SYSTEMS in the OR Manager print version.
Cultural competence

Continued from page 18

For instance, Dr. Eliason poses these questions to employers about demographic shifts in the workforce: “What are you as an employer going to do when you have an employee whose holy day is Friday and not Sunday? Or when your team member needs a prayer break 5 times a day? Or when wearing a head-dress is required in the employee’s culture but is not the type that is worn in the OR?”

**Good business**

A culturally and linguistically competent environment is good business, says Tang of Kaiser Permanente.

“We cannot provide high-quality care if we cannot fundamentally communicate with patients,” she says. “And costs are greater when care is poor because patients are not comfortable with the system and have waited until they are sick to get help. It behooves us to do it right from the beginning.”

Kaiser Permanente senior management has endorsed culturally responsive care and weaves it into the system’s guiding principles and strategic and business planning.

“Cultural and linguistic competence has to be everywhere,” Tang says, “even in the business office when a limited-English-proficient-patient needs help understanding a charge on his bill, or a housekeeper cleaning a hospital room where the patient may have different ‘good luck’ charms adorning the bedside that may seem to get in the way.”

Tang’s program produces a national diversity conference annually that many Kaiser Permanente facilities attend to share progress and best practices.

At Kaiser Permanente’s West Los Angeles Medical Center, which has an African American population of about 45%, cultural competency training began with physicians.

“They are leaders in providing culturally responsive care, and patients value their relationship with their physicians,” says Amy Brotzman, RD, who is responsible for cultural diversity at the center.

Physicians attend weekly continuing education presentations at the center. Incorporated into their education sessions is a diversity program titled “Cultural and Linguistic Competence Approach.” These sessions include speakers, interactive sessions, hospital actors for role-playing, and bioethical discussions that link disease management with cultural aspects of care.

The same approach was attempted with nursing and ancillary staff but was poorly attended because it was held during lunch or after hours and was not mandatory, Brotzman says.

Instead, the center disseminates short lessons through e-mail, including tips about various cultures, CLAS standards, how to use interpreter services, and patients’ rights. Because the California population is anticipated to have a Latino majority by 2040, Kaiser Permanente has developed “Spanish for Rookies” lessons, also available electronically, to help employees relate to and assist patients of Latino descent, Brotzman says.

**A cultural fair**

West Los Angeles Medical Center hosts an annual cultural fair with singing, dancing, and a fashion show of employees wearing clothing of their native cultures. The fair also links culture with workforce issues. For example, employees in the fashion show display appropriate and inappropriate work attire from the perspective of their culture, Brotzman says.

Culture goes beyond race, religion, or ethnicity, she adds.

“Kaiser takes cultural awareness further and includes persons with disabilities; women and men; adults and children; lesbian, gay, bisexual and transgendered people; doctors and patients; and doctors and staff, or anyone who may have different perspectives,” she says. “We want to treat all people with dignity and respect.”

Tang concludes that when it comes to cultural competence, the Golden Rule of “do unto others as you would have them do unto you” does not apply. “In health care you shouldn’t treat people the way you would want to be treated—you should treat people the way they want to be treated.”

—Leslie Flowers

Leslie Flowers is a freelance writer in Indianapolis.

Continued from page 22

hospitals to meet needs of populations they serve.

**Needs of surgical patients**

Keith Goodson, RN, clinical service coordinator for ambulatory services and pre-admission testing at Yale-New Haven Hospital, New Haven, Conn, supports his hospital’s policy that the only personnel who can serve as interpreters are those who speak the patient’s native language fluently and are either medical staff or have been trained in medical terminology.

“It didn’t take much convincing for most of our nurses because they were frustrated by not being able to communicate well with their patients,” Goodson says. “Once they saw how well the interpretative service worked, they embraced it.”

Indeed, in 1997, Yale-New Haven’s interpretative services office had about 2,000 requests for assistance in interpreting 26 languages spoken by patients. In 2003, there were about 18,000 requests for 50 languages. The hospital has 6 full-time interpreters, including 3 surgical technologists.

Computerized scheduling notifies interpretative services when the OR is expecting an LEP patient. Goodson illustrates why qualified interpreters are needed with this story:

A Spanish-speaking woman was scheduled at Yale-New Haven for a hysterectomy. A week prior to surgery, a bilingual secretary in OR scheduling called the woman at home to set up her pre-admission tests. When the secretary asked why the woman was coming in, the woman said she was trying to have a baby. The secretary, who had been trained in medical terminology, knew a hysterectomy was not the way to get pregnant.

“It turned out she should have been scheduled for a hysteroscopy, not a hysterectomy,” Goodson says.

“With the number of safeguards we have in place, we would have caught this before surgery, but it does underscore the need for qualified medical interpreters as our non-English speaking population grows,” he says.

—Leslie Flowers
When Greenspring Station Endoscopy, Lutherville, Md, noticed its endoscope repair costs had shot up by 54% in a year, the management team was worried.

The price of a repair had risen from $7.93 to $12.23 per procedure.

Why was this happening? Were other centers having the same experience?

Greenspring Station set out on a year-long quality improvement project starting in July 2003 that helped them track down the reasons, find out how their repair costs compared with others, and develop a plan that brought the costs down by 16% over a year, saving the center more than $12,000.

The center was recognized for its efforts at the Accreditation Association for Ambulatory Health Care Institute for Quality Improvement’s National Quality Forum in December in Las Vegas.

Digging into the problem
The first step was to involve the staff in identifying the problem. In a brainstorming session, RNs and gastroenterology technicians came up with 3 reasons they thought damage was occurring:

1. Because of a change in the staffing pattern during procedures, more personnel were handling the endoscopes. Previously, staffing consisted of an RN, who administered sedation (midazolam and fentanyl) and monitored the patient, and a GI technician. The center changed the staffing to have certified registered nurse anesthetists (CRNAs) administer and monitor propofol sedation for colonoscopies, with an RN to assist the physician. Nurses rotated in that role, which meant many more staff members were handling scopes.

2. Fluid invasion repairs had increased.

3. Many repairs were due to the mishandling of scopes. Some of the problems included laying scopes on counters or basins with the control knob face down; stacking scopes on counters; using excessive force when connecting fluid bottles; bumping the distal end of the scope, damaging the lens; or allowing the biopsy forceps to come in contact with the scope while transporting it.

Not only were repair costs mounting, but there also were patient safety issues. Damaged scopes and variations in scope reprocessing can lead to scopes that aren’t properly cleaned and disinfected, raising the potential for infection transmission.

What were others paying?
The team wanted to find out how its repair costs compared with others.

“We didn’t have a good baseline on what was acceptable,” notes Helen Rolf, RN, BSN, nurse manager for the center located in Lutherville, Md, which performs about 6,000 procedures a year.

A search for benchmarking information turned up little, so Rolf decided to call other nurse managers in the local area. As she talked to them, they began discussing the need for a networking group. That led to formation of the Greater Baltimore ASC Network, which now numbers 18 members.

The network decided to conduct its own benchmarking study on endoscope repair costs. The group developed a simple questionnaire, which asked participants for:

• number of scopes the center owned
• annual volume of procedures
• age of scopes owned
• yearly scope repair costs for the past 3 years
• vendor for scope repairs.

Participants could respond anonymously by choosing their own 4-digit personal identification number. Results showed an average repair cost per procedure of $7.08, though there was a wide variation—from $1.73 to $15.81 per procedure (sidebar). The repair cost per procedure is calculated by dividing the center’s total annual repair cost by the total annual number of procedures.

Developing a strategy
Armed with the results, Greenspring Station developed a strategy for reducing its repair costs, which included:

• partnering with a vendor
• organizing an educational program
• introducing a preventive maintenance program.

Continued on page 26
Partnering with a vendor

The center researched endoscope repair vendors and selected one that offered not only repairs but also education and consultation. Rolf personally visited 2 companies—the original scope manufacturer and one that specializes in repairs. She selected the repair specialist because, she says, the company “was going to give the most personalized service.” This includes analysis of repairs and education for the physicians and staff.

“Our rep is here 2 or 3 times a week and is always available to explain in great detail what the repair entailed—I’m a nurse, not a mechanical wizard!” she says.

The rep assessed the physical environment, including how the staff transported and stored the scopes. “It was like having a private consultant who knew scope repair inside and out,” Rolf says.

Organizing an educational program

The program was designed to review scope handling and reprocessing with the staff and physicians. The rep spent time with the cleaning-room staff and gave Rolf feedback about their learning needs. The rep also reviewed GI techs’ leak-testing competencies.

One in-service session included “dissecting” an endoscope so the staff could see where damage could occur. The center also asked the vendor to return broken parts so the staff could understand what had led to the breakage.

As part of this effort, the rep spent a morning discussing with physicians how their technique could decrease repair costs. For example, angulation adjustments were needed after a scope was held at the maximum angulation for extended periods. Other technique-related problems included twisting or applying excessive force to the insertion tube and forcing biopsy forceps through the channel.

Introducing a preventive maintenance program

Preventive maintenance is performed twice a year “to prevent inexpensive problems from becoming expensive ones,” Rolf notes.

Through the project, the center brought its repair costs down from $12.23 to $10.26 in the first year and since has lowered the cost to $8.50 per procedure.

Greenspring Station has expanded the project to include monitoring of scope utilization. The aim is to encourage physicians to use all of the endoscopes and even out wear and tear.

“The physicians want the latest and greatest, so it’s difficult to get them to use all of the inventory,” Rolf explains.

Lessons learned

In addition to lower costs, one of the project’s best results was formation of the nurses’ network. “It’s been invaluable,” Rolf says. The network consists primarily of endoscopy centers plus a few urology centers and 2 hospital departments. In addition to the endoscope repair survey, the group has benchmarked salaries and discussed performance evaluations.

Also important was involving the staff in the repair project, she adds. Because the staff works with the endoscopes every day, they are in the best position to spot problems and propose solutions.

She makes an effort to recognize and reward the staff for their contribution. Year-end bonuses at the center reflect overall cost savings.

“Without the staff, it could not have happened,” she says.

Conducting an improvement project takes time and commitment, she adds. That’s true not only for the project itself but for the effort to sustain the results.

Results of scope repair study

Participants included 7 freestanding endoscopy centers and 2 hospital departments.

- Number of procedures per year:
  - Average 4,731 (range 800 to 8,534).
- Scope repair costs: Average $7.08 per procedure (range $1.73 to $15.81).
- Age of scopes requiring repairs:
  - < 1 year: 13%
  - 1 to 3 years: 37%
  - 3 to 5 years: 10%
  - > 5 years: 40%
- For vendors, 6 centers each used 1 vendor, and 3 centers used a combination.

Source: Greenspring Station Endoscopy.

Awards available for central service personnel

Central service supervisors and technicians can win scholarships, cash awards, and recognition for themselves and their hospitals.

The International Association of Healthcare Central Service Materials Management (IAHCSMM) is offering 6 awards CS personnel can apply for. The deadline for submissions is March 1.

Winners can have their expenses underwritten for the IAHCSMM Annual Meeting in May.

Go to www.iahcsmm.com and click on the Awards icon for application forms.

Check our web site for the latest news, meeting announcements, and other practical help.

www.ormanager.com
Can any more efficiency be achieved in cataract surgery? For years, ambulatory surgery centers (ASCs) have fine-tuned their process for this high-volume but reimbursement-challenged procedure. With Medicare payment tight, they have to count pennies and minutes.

Recently, a reader asked about staffing for cataract surgery—are ASCs finding ways to economize on labor costs? In talking with ASC managers and other experts, we learned that centers performing a high volume of cataract surgery actually seem to use more staff, not fewer, to help move cases along.

We also discovered a couple of other innovations ASCs say have helped—a “slurry” dilating method that eliminates giving a series of eye drops and an online buying service that expedites paperwork.

### Benchmarking findings

A 2003 benchmarking study of 62 centers found that participants with the shortest procedure times also used more staff. That is because high-volume centers often employ 2 operating rooms for 1 cataract surgeon in a day. That enables them to schedule more cases and keep them flowing: As soon as the surgeon finishes in 1 OR, the next patient is ready in the second OR. For this approach to work effectively, the ASC needs enough staff and instrumentation to expedite cases.

“In the study, most of the organizations that did well on procedure time spent more on staffing” because they use 2 ORs per surgeon, notes Naomi Kuznets, PhD, director of the Accreditation Association for Ambulatory Health Care (AAAHC) Institute for Quality Improvement.

The best-performing centers had “their preop team review the patient information well before surgery, either when the patient is scheduled or 3 days before the surgery, not at the last minute,” says Kuznets. That avoids last-minute surprises that could delay surgery.

The AAAHC Institute did not collect data on staffing during the OR phase of the procedure, except for sedation monitoring. For most participants, anesthesia providers monitored sedation (chart).

The 5 centers we interviewed for this article all assigned 1 circulating RN and 1 surgical technologist (ST) to scrub.

OR Benchmarks, in a 2001 study involving 11 facilities (both ASCs and hospitals), found 9 facilities used 1 RN and 1 ST during the procedure. The remaining 2 used 2 RNs.

A staffing study by OR Manager and the Association of periOperative Registered Nurses published in April 2001 found that for cataracts, 87% of facilities used 2 staff in the OR, 2% used 1 staff, and the rest used 3 to 5 staff.

### Keeping up the pace

Two centers with a high volume of cataract surgery described how they manage staffing and patient flow on a day when a surgeon operates in 2 ORs. These centers may do 24 or more cases a day, 12 in each OR.

Scottsdale Eye Surgery Center schedules cataract cases 15 minutes apart on busy days when 2 ORs are available. OR time, patient in to patient out, is approximately 20 minutes.

“Each OR is staffed with 1 circulating RN and an ST,” says Lynn Dugan, RN, BSN, CNOR, director of nursing. All RNs are cross-trained for the preoperative, postoperative, and intraoperative areas. Staffing for the preop and postop areas consists of 2 to 3 RNs who rotate between these areas and assist as needed.

In addition, a full-time housekeeper is cross-trained to assist patients preoperatively and to help with OR turnover. She helps the admitting RN by bringing the patient to the preop area and assisting with the surgical gown (tops only are removed) and the preop face wash. A full-time certified nursing assistant also facilitates cases.

“Cross-training is key,” Dugan says. “It helps prevent burnout and allows staff to assist in every area.”

### Surgeons help move cases

El Camino Surgery Center in Mountain View, Calif, also uses 2 ORs for the same cataract surgeon on high-volume days. The multispecialty center has an annual volume of 10,000 cases, of which 2,500 are cataracts.

The average procedure time for most
'Slurry' method for dilation

Using a gel mixture to prepare and dilate the eye for cataract surgery has been a satisfier for patients and surgeons and a time saver for nurses at El Camino Surgery Center in Mountain View, Calif.

“Basically, the idea is to use a system that provides prolonged and concentrated administration of the preop medicines,” explains David Chang, MD, the cataract surgeon who introduced the method at the center.

The gel consists of lidocaine jelly mixed with dilating drops, an antibiotic, and a nonsteroidal inflammatory drug to make a “slurry.”

When the patient arrives for surgery, a nurse starts the process by instilling one set of dilating drops. Once the patient is seated or lying down, the nurse inserts the slurry and tapes the eyelid closed. While the patient waits for surgery, the slurry medicates and numbs the eye and keeps the cornea moist.

In the OR, residual gel “immediately rinses off with a few drops on the cornea, and we get a clear surgical view,” Dr Chang says. “In addition, the prolonged contact with the gel seems to give a little better anesthesia to the conjunctival surface compared to topical anesthetic drops alone.”

The slurry has replaced the pledget method for most of El Camino’s surgeons. For the pledget method, a nurse soaks a small pledget in a similar eye-drop mixture and places it underneath the lower lid to dilate the eye. The pledget method has similar advantages to the gel-slurry: The one-time administration does not interrupt patients and saves nurses’ time. The pledget’s prolonged contact with the eye’s surface improves drug delivery. It also minimizes the amount of medication entering the tear duct and thus the systemic circulation.

But the pledget method also has some minor disadvantages. It can be hard to insert the pledget in patients with tight lids, and it tends to ride up as patients blink or squeeze their eyes. It can also cause a corneal abrasion, which interferes with the surgical view and causes patient discomfort postoperatively. And inserting the pledget requires more nursing skill and experience than the other methods.

The slurry overcomes these drawbacks, Dr Chang says, because it is easy to administer, cannot cause an abrasion, and patients do not blink it out with their eyelid taped.

“When you take the tape off, you can see some gel is still there, proving that you have prolonged contact time,” Dr Chang says. “Overall, we have found patients are comfortable with it.”

Information about the slurry method and the formula are on Dr Chang’s web site at www.changcataract.com.

Continued from page 27

of the surgeons is 15 minutes, patient in to patient out, with a turnover time of 2 to 3 minutes.

Surgeons assist in keeping cases moving.

“Probably 80% of our surgeons bring the patient into the room,” says Lisa Cooper, RN, BSN, clinical director.

The circulating RN and ST stay in the room to get ready for the next case while the surgeon and an orderly take the patient to the recovery area. While the surgeon talks to the family in recovery, the orderly goes to the preop area and places the electrocardiograph leads on the next patient. The surgeon then comes to the preop area and he and the orderly bring the patient to the OR, where the orderly assists with positioning. That leaves the circulator free to finish setting up the case.

Cataract days are so fast paced that Cooper rotates the staff to avoid burnout. The clinical staff is cross-trained, and all are expected to do eye cases in addition to other specialties.

Enough instruments

Enough instrument sets and standardized supplies contribute to rapid case turnover.

On days when 2 cataract rooms are running, the Scottsdale Eye Surgery Center uses 4 instrument trays so a tray is always ready for the next case.

“This is a big deal,” Dugan says, “because if the tray isn’t ready, your turnover time will be about 12 minutes” to wait for the sterilizer.

El Camino has 5 to 6 eye sets. As a multispecialty center, it can’t always count on having a sterilizer just for eye cases, so additional sets are needed for backup.

Both centers use standardized custom packs.

“The more you are able to standardize supplies, the more efficient and cost-effective you can be,” Dugan says. Most of the blades are multiuse, and phaco tubing is reusable. Items not in the pack are the prep solution, the BSS (the center does not use BSS-plus), viscoelastic, cloth towels, sterile water, the Mentor Eraser, eye shield, and custom blades.

Physicians’ orders and the dilating regimen also are standardized. At El Camino, cataract surgeon David Chang, MD, has introduced a gel mixture for dilating the eye that takes the place of multiple eye drops (sidebar).

Continued on page 30
Please see the ad for SPECTRUM SURGICAL INSTRUMENTS in the OR Manager print version.
Automating inventory

The Pennsylvania Eye Surgery Center in Harrisburg, Pa, shaves minutes off its cases by using a personal digital assistant (PDA) to scan information about the patient and intraocular lens (IOL) for implant tracking. The scanning module is part of Internet-based supply management and reordering from Suppleye.com.

Nurses save the time it used to take to fill out the implant card to be sent to the manufacturer, notes the center’s director of surgical services, Jill Stiteler, RN, CNOR.

The nurse simply scans barcodes with information about the patient, procedure, and lens. The data is sent over the Internet to Suppleye.com, which relays it to the manufacturer.

The barcode technology is part of Suppleye’s Internet-based inventory management and reordering system for eye centers.

“All you need is a computer with Internet access; you don’t need to invest in hardware or software,” says John Meeks, president of the privately held Akron, Ohio-based company. There is a small transaction fee.

He estimates the company has about 100 customers, 90% of which are eye centers. ✪

—Pat Patterson

Continued from page 28
Please see the ad for
BFW INC
in the OR Manager print version.
New campaign aims to save 100,000 patient lives

Saving 100,000 lives of hospital patients in the next 18 months is the goal of a project launched Dec 14 by the Institute for Healthcare Improvement, Boston. The campaign plans to sign up thousands of hospitals and get them to commit to specific steps in 6 areas:

- Deploy rapid response teams at the first sign of patient decline.
- Deliver reliable, evidence-based care for acute myocardial infarction.
- Prevent adverse drug events with medication reconciliation.
- Prevent central line infections.
- Prevent ventilator-associated pneumonia.

There is no cost, but organizations must sign up. They will be eligible to participate in phone conferences and interactive material on the Internet.

—www.ihi.org/IHI/Programs/Campaign/

JCAHO modifies goal on abbreviations

The Joint Commission on Accreditation of Healthcare Organizations has modified its National Patient Safety Goal 2b, which requires organizations to standardize abbreviations and develop a list of abbreviations not to use. In the modifications, JCAHO says the goal applies only to all orders and all medication-related documents, applies to preprinted forms (100% compliance is expected), and keeps the minimum expected compliance at 90% for handwritten documents.

—JCAHOonline. www.jcaho.org/about+us/news+letters/jcahonline/index.htm

Incentives help improve anesthesiologists’ performance

Providing written feedback and a financial incentive helped improve anesthesiologists’ performance for first-case starts, anesthesia prep time, and anesthesia emergence time, a study from Vanderbilt University found.

After 6 months of profiling performance by physicians and paying an incentive of up to $500 per month, the percent of first cases of the day that were in the room on time improved significantly. Also improved was the percent of cases with an anesthesiology prep time lower than the target.

Incentives were paid to the top 20% of physicians in each of 5 categories and went into a continuing education fund.


Notice delayed on hand-gel dispensers in corridors

A notice by the Centers for Medicare and Medicaid Services (CMS) lifting a ban on alcohol-based hand sanitizers in corridors, originally scheduled for Dec 23, now is expected in March, according to the Association for Professionals in Infection Control and Epidemiology (APIC). The notice was postponed for a review by the Office of Management and Budget, APIC said. CMS informed APIC in a letter last fall that it planned to lift the ban.

Until the CMS notice is published, APIC advises infection control professionals to contact their local jurisdictions if their facility is cited for having handrub dispensers in corridors.

—www.apic.org

Study probes link between disruptive behavior, outcomes

In a survey, 17% of physicians, nurses, and administrators in hospitals were aware of adverse events that had occurred because of disruptive behavior. In all, between 53% and 75% saw a strong link between disruptive behavior and negative clinical outcomes, such as adverse events, errors, and patient satisfaction (except for patient mortality, where only 25% saw a link). For example, one respondent said, “Physician was told twice that sponge count was off. She said, ‘They will find it later.’ Patient had to be reopened.”

Disruptive behavior was defined as “any inappropriate behavior, confrontation, or conflict, ranging from verbal abuse to physical and sexual harassment.”

The study by VHA West Coast had 1,500 participants from 50 VHA hospitals.