Two OR nurses are part of a diverse team that cares for Ebola patients at the Nebraska Biocontainment Patient Care Unit in Omaha, and the team’s nursing director is Shelly Schwedhelm, MSN, RN, a former OR Manager of the Year.

“I chose OR nurses to be on the team because they are experts in PPE [personal protective equipment], aseptic technique, and autoclaving,” Schwedhelm told OR Manager. “Who better to watch and assist you in putting on and taking off your PPE? They do not hesitate to call you out on a break in technique. That’s what OR nurses do every day,” she says.

Schwedhelm also chose nurses from interventional radiology, labor and delivery, the intensive care unit (ICU), the emergency department (ED), and the infusion center.

“You need nurses with different skills,” says Schwedhelm. “The infusion center nurses are indispensable for administering experimental drugs, and the ICU and ED nurses are experts in assisting with central line placement and caring for critically ill patients.”

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MAQUET will donate $250 to Make-A-Wish® for any single purchase order of $50,000 or more (before tax, shipping and install) received between March 1, 2014 and February 28, 2015, with a minimum guaranteed contribution of $50,000, up to a maximum of $150,000. For more information about Make-A-Wish visit wish.org.

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Editorial

More than 2,600 hospitals in fiscal year 2015 are facing Medicare readmission penalties, to the tune of an estimated $428 million, a recent Kaiser Health News report indicates.

Among these, 39 hospitals—including some specialty surgical hospitals, small community hospitals, and a major teaching facility—will lose the maximum 3% of their Medicare reimbursements, and 496 hospitals will lose 1% or more.

In all, Medicare is fining 433 more hospitals than it did the previous year, according to the Kaiser analysis.

That’s partly because Medicare is now including chronic lung disease and hip and knee replacements in the penalty mix. And while providers might well argue that some of Medicare’s criteria are flawed, these penalties aren’t going away.

The findings come as no surprise, but they’re a stark reminder of the hurdles ahead in 2015.

The Ebola outbreak hasn’t helped cast hospitals in a more favorable light, as Texas Health Presbyterian Hospital in Dallas knows only too well. Yet this same hospital received an “A” grade on The Leapfrog Group’s Fall 2014 Hospital Safety Score, Texas Health Presbyterian is among the safer hospitals in the nation.”

In Leapfrog’s fall survey, based on 2,520 hospitals, hospitals received the following letter grades: A (790), B (688), C (868), D (148), and F (26).

These grades changed little from those reported in the spring survey. But progress was demonstrated by statistically significant improvements in hand hygiene, ICU physician staffing, and medication reconciliation, as well as a drop in central line-associated bloodstream infections. On the other hand, there were more surgical site infections among colon surgery patients.

Granted, this is just one survey and there are many ways to measure hospital performance and patient safety. Financial penalties, negative publicity, and an alarming infectious disease are problems no one needs. But it’s important to remember that progress is being made, and OR Manager is on your side. In the coming year, we hope you’ll continue to turn to us for ideas to help manage your increasingly complex world. ✷

—Elizabeth Wood

References


Plan now to join your fellow operating room business managers, directors, and professionals at the 2015 OR Business Management Conference, February 16-18, 2015 in Orlando.

Attendees will have the opportunity to work with peers during group breakout sessions to apply the principles covered at the conference. Topics to be covered include:

- Tools to streamline scheduling
- Looking at the supply chain in a new light
- Strategies for optimizing staffing
- Decreasing case cost
- Creative solutions to OR nurse training
- Combining technology and teamwork to maximize efficiency
- Methods for integrating Lean techniques
- Supply and implant contract management
- Using physician report cards to contain costs
- Financial management for new leaders

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Register by January 16 to secure the early bird rate!

www.ormanager.com/managementconference
February is a nice time to be in Florida, and the 2015 OR Business Management Conference (February 16-18 at the Hilton Orlando) is a great reason to go there.

Business managers must understand the clinical needs of a facility, navigate complex financial management systems, and keep costs down without compromising quality of care. The 2015 OR Business Management Conference aims to find fresh solutions to problems and provide the tools needed to help meet the challenges. Topics will range from technological innovations and cost-saving strategies to optimal staffing and skill sets. Leaders from a variety of facilities will share success stories that include:

- adoption of Lean principles to enhance performance
- millions saved in supply expenses
- better patient throughput and shorter length of stay
- development of methods to reduce bioburden
- establishment of a process to match staffing to demand.

A preconference workshop on Sunday will focus on communication among perioperative team members, reporting and regulatory compliance requirements, and how to track and measure clinical performance.

A keynote address on Monday by healthcare attorney Keith Siddel, PhD, JD, MBA, CHC, Monterey, California, will address the latest in Medicare requirements and other aspects of health care reform. Siddel will share his vision of the impact of these new laws on healthcare delivery.

Luncheon presentations by Mary Jane Edwards, RN, CNOR, FACHE, Deloitte Consulting, McLean, Virginia; Susan Bailey, BSN, RN, CNML, CNOR, Kaiser Permanente Baldwin Park Medical Center, Baldwin Park, California; and Kathleen Daw, BSN, RN, ADN, CNOR, KPOC, Irvine Medical Center, Irvine, California, will offer fresh perspectives on cross-generational communication, stress management, and toxic behavior in the workplace.

For more information and to register, go to www.orbusiness-managementconference.com.

—Elizabeth Wood
drawing board, and in the summer of 2014, S2 launched Virtual Backtable 3.0.

**Staff training, education**

“The main use of the Virtual Backtable is to educate and rapidly train OR staff to scrub and manage procedures,” says Foster.

The program shows surgeons’ preferences with images or videos, instrumentation sequences for specific procedures, the exact location for each instrument in a tray, and special instructions for instrument assembly or setup.

Foster and his team photograph instrument trays, single instruments, and equipment and then load the images into the software. OR staff help write case- and surgeon-specific instrumentation sequences as well as information from preference cards such as patient positioning and skin prep. This information is provided to the S2 team, and their proprietary process enters it into the software within 24 to 36 hours.

“We are not trying to duplicate the preference cards,” he says, “we just want them to put in some important things they need to know about covering the case.”

Users can view the Virtual Backtable on an iPad or personal computer (PC). Because the application is cloud-based, staff can practice for cases at the hospital or at home. If a staff member wants to use the Virtual Backtable to set up a case, the iPad can be clamped to an IV pole and covered with a sterile drape. Foster provides iPads, clamps, and sterile drapes for each account.

To begin using the Virtual Backtable, staff members go to the hospital’s own surgeon-specific library (see image above). Procedures are categorized by surgeon, and a photograph of the surgeon is included.

They can visualize the instrumentation sequence for the procedure and the instrument trays. To find out which tray an instrument is in, they touch the instrument and an arrow points to its location in a tray (see image above).

They drag procedure-specific instruments out of the trays onto an area in the software called “the mat,” just as they would take instruments out of a tray and set them on the backtable or Mayo stand in a real case.

They practice placing the instruments in the surgeon-specific sequence, and the software grades them on how well they do. When finished, they hit “score my assessment,” and they are automatically given a score on the first 10 instruments and then a score on the rest of the procedure (see image on p 7). Foster says he decided to highlight the first 10
instruments because, in his experience, if he got the first 10 instruments right, “the atmosphere in the OR was much more positive.”

Scores are saved in the database for future reference, and staff members can print the score and show it to surgeons and OR managers to demonstrate competency in the procedure. “The surgeons really like this,” says Foster. “The OR managers also like this,” he says, “because they are seeing new people competent to scrub for a case in 2 weeks rather than the typical 6 months.”

**Facilitates orientation**

Pam Parnell, MBA, BHA, RN, administrative director of nursing at Methodist Le Bonheur Germantown in Germantown, Tennessee, was one of Foster’s first hospital customers and has helped him with the evolution of the Virtual Backtable software.

The chief surgeon at Methodist told Parnell about the Virtual Backtable after hearing about it while playing golf with Foster. “I thought, this is exactly what we need to orient techs to scrubbing,” says Parnell.

Staff for the 16-room OR include 20 RNs and 25 scrub technologists. They perform about 1,000 cases per month that include all services except transplants and neuro.

“Traditionally,” says Parnell, “we have assigned techs to a preceptor who double-scrubbed with them, and we hoped the techs wouldn’t be scared to death or the surgeon wouldn’t get too frustrated.”

With the Virtual Backtable, technologists can learn how to scrub for a case without any anxiety. They can familiarize themselves with the surgeon’s techniques and routine, and they can ask questions before an actual case begins.

Parnell gave an example of a technologist she hired right after he graduated. After working on the Virtual Backtable for a couple of weeks, he was able to do a total joint by himself.

“It’s one thing for a new tech to do a case with two trays, but total joints have about 20 trays of instruments, and he knew what he was doing,” she says.

Parnell says RNs also learn to scrub using the Virtual Backtable, and they use it while circulating to find instruments the surgeon needs.

“In the past, nurses would call out to the front desk and ask which tray a certain instrument was in, or they would open two or three trays to look for it. Now they pull up the Virtual Backtable...”

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*Continued on page 8*
Performance improvement

Continued from page 7

on their PC and find where it is,” says Parnell.

Scrub personnel typically don’t want the iPad in the OR for scrubbing, she says. They do all of their studying and preparing ahead of time.

What they do use it for is when, for example, the person who usually scrubs for a liver resection is scrubbed in another room and a liver resection needs to be set up. Someone who is free but not experienced can use the Virtual Backtable to set up the case for that person.

The Virtual Backtable also allows for procedure-specific videos. Using iPads, OR staff members capture their own videos on how to set up instruments and assemble equipment and embed them in the software. In addition, some surgeons have expressed interest in having staff video them talking about what they like and don’t like for their procedures, says Parnell.

The Virtual Backtable has automated competency, she notes. “It shows that staff members can sequence a case with more than 80% accuracy and that they can do it in X amount of time.”

Decreases frustration

Also using the Virtual Backtable for staff orientation is Mary Grace Hensell, BSN, RN, CNOR, nurse manager, Weinberg OR, Johns Hopkins Hospital, Baltimore. Hensell is in charge of 22 ORs and 100 RNs and surgical technologists. RNs and technologists all scrub.

“The Virtual Backtable really decreases the frustrations new people feel when they don’t have an OR background or experience in such a large OR,” says Hensell. She has also found that new RN and technologist graduates take to the Virtual Backtable easily.

Scrub personnel are required to do a case they aren’t familiar with on the Virtual Backtable at least two times and score an 80% on their test.

“The feedback that I am getting from the preceptors and surgeons is that new people who have worked on the Virtual Backtable seem very prepared,” she says. Hensell and one of the technologists are helping Foster develop a similar program to prepare surgical residents for procedures.

Streamlining instrument trays

The Virtual Backtable is also useful for streamlining instrument trays. Once staff members take the instruments out of the trays and drag them to the mat, they can see which instruments and how many are used from each tray.

The program automates this information, which can be accessed via a drop-down menu that charts used and unused instruments per tray by surgeon and procedure, as well as the cost of unused instruments (see image on previous page). These data can be exported to an Excel document or pdf, and the surgeons and OR manager can look at instrument use tray by tray.

Parnell says they found that one of their major instrument trays was being pulled for a procedure, and only three of the 112 instruments were being used. They added those three instruments to another tray they use regularly for the procedure, so the major tray no longer needs to be reprocessed over and over for three instruments.

“It’s this kind of information that takes OR managers months, if not years, to collect because they have to put someone in the OR to count the instruments used manually, and the Virtual Backtable does it automatically,” says Foster.

“The Virtual Backtable has really helped us streamline our instrumentation,” says Hensell.

Assisting central supply

Another feature of the Virtual Backtable is Tray Touch, which assists central supply personnel in locating instruments in specific trays and provides cleaning instructions, safety warnings, and assembly/disassembly instructions.

“If I am in central supply and managing the assembly and inspection of trays, I need to see a visual layout of that, and that’s what we give them,” says Foster.

Because all of the trays and instruments are already photographed for the Virtual Backtable, central supply personnel can touch an instrument and an arrow will show them where the instrument belongs in the tray. This allows any tray to be assembled quickly and correctly. After the tray is assembled, a pdf of the tray contents can be printed that lists all of the instruments present and notes if something is missing.

Tray Touch is also used for vendor trays, which are photographed and added to the program.

When a vendor brings in a tray, central supply personnel inspect it and note in Tray Touch if an instrument is missing or present by touching missing or available on the screen, or they can select all if nothing is missing (image, p 9). A printout of this is put with the tray.

“This is not an instrument management system that costs thousands of dollars. This is a very economical way to improve the efficiency of the central supply staff in putting together trays,” says Foster.

Methodist put computers in central supply at the workstations.
so staff would have access to Tray Touch.

If experienced staff don’t want to use Tray Touch to put together a tray instrument by instrument, they can check their tray against the tray on the screen when they are finished, says Parnell. “It’s important they put the instruments back in the same place as the picture because the software program is designed so that it shows an arrow telling that person in the OR where the instrument is in the tray,” she says.

The Virtual Backtable can also be linked to instructions for use (IFU) for instrument assembly and cleaning. “We click on the instrument, and we get the manufacturer’s IFU,” says Parnell.

Central supply personnel can use this information for reprocessing, or scrub personnel can use it if they need help assembling an instrument for a case.

**Rep-less compatible**

Having been in the medical device industry for many years, Foster anticipated the rise of the rep-less model. In August, Smith & Nephew, Europe’s largest maker of artificial joints, announced it would offer a rep-less service that could cut costs for US customers by 40% to 50%. The new company offering this service is Syncera.

To support the rep-less model with the Virtual Backtable, Foster asks the OR staff to take photographs of the way the OR is set up, the instrument and equipment setups on the Mayo stand and the backtable, and the device trays. They can also capture videos of surgeon-specific instrument and device assembly, which is easily loaded into the software via the iPad or PC.

In addition, Foster and his team have put together a checklist for the trays that must be completed by central supply as well as checklists for other aspects of the procedure.

At the end of a procedure, implants that were used can be reordered with the touch of a button on the iPad or PC. The implant sizes and barcodes are already in the program.

“I have tried to put as much functionality as possible into the program,” says Foster. “If you think about everything the rep does to get ready for and to support the procedure, our software can do that.”

Foster adds that typically when an OR goes rep-less, someone trains the scrub person for a procedure and double-scrubs for the first 15 or 20 cases to make sure everything is done correctly. With the Virtual Backtable, the scrub person’s competence is documented before scrubbing for a procedure.

Foster notes that some companies he is working with are proposing that hospitals implement a 75% to 80% simulation score in the Virtual Backtable before staff scrub for a rep-less procedure.

More and more hospitals will be getting on board with the rep-less model, according to Foster. “It’s the way of the future,” he says.

—Judith M. Mathias, MA, RN

**References**


One way to shave the OR operating budget is to trim the supply spend, and for orthopedic service lines in particular, reining in costs related to implants can make a big impact.

Some orthopedic service providers have achieved dramatic savings by adopting a “rep-less” model for certain procedures. At Loma Linda University Medical Center (LLUMC), a 1,076-bed facility in Loma Linda, California, this strategy has reduced total joint implant costs by more than 50%, according to Justin Freed, executive director of supply chain.

More than 400 hip and knee replacements are performed at LLUMC annually, with four surgeons making up about 90% of the volume, Freed says. “As an academic center, we already have a lot of traffic in the OR when we do total joints, and we really don’t need vendors in the room,” says Ilsa Nation, RN, CNOR, director of the East Campus OR. “We can do stable technology implant cases like total joints without input from a vendor,” she explains.

A rep-less model involves more than simply banning vendors from the OR. It means knowing which procedures use stable technology implants and having access to manufacturers who will sell the implants directly to the facility at wholesale prices.

Transitioning to this approach doesn’t happen overnight. Having the support of leadership—especially a physician champion—is key to success.

Impetus for change

Like many organizations, LLUMC previously had capitalized contracts with total joint and spine vendors. However, vendors who routinely are in the OR during procedures build relationships with physicians, and they tend to promote newer technology that isn’t necessarily an improvement over existing technology, explains Nation.

For procedures such as total knees, she says, implants have remained fundamentally the same for the past 15+ years. “This stable technology is time tested; there’s a lot of documentation about how that technology performs in patients over the long term,” she notes, adding that tweaks like a male knee and a female knee have no track record of performing better for a particular patient.

Nonetheless, physicians have long been in the habit of ordering their preferred orthopedic implants directly from medical device representatives. This “status quo” system has allowed vendors to make substantial profits, says Freed.

“More than 43% of the cost of every hip, knee, and spinal implant comes from selling, general, and administrative [SG&A],” Freed explains in a white paper. “Although SG&A included several components, the largest payment is to the sales group. For example, with a device that costs $6,000, $2,598 of that price tag goes to paying for SG&A, with a significant percentage going to compensate the sales rep.”

Surgeons also have benefited from this system, Nation explains. Sometimes there are inappropriate financial relationships between surgeons and vendors, she says. “Surgeons sometimes earn ‘royalties’ for helping to ‘develop’ and promote a new or improved total joint system. Their involvement in the development process may have been minimal, but they derive significant financial benefit from helping to promote the new product.”

They cannot legally obtain royalties on implants used on their own patients, but by teaching and promoting—particularly in an academic setting—the downstream use results in financial benefits to them, she explains.

Evolution of the process

Seeking a way to reduce implant costs without compromising patient outcomes, LLUMC got help from OrthoDirect USA, a value-based consulting firm in Fort Wayne, Indiana.

OrthoDirect introduced the concept of Stable-Technology™ products. These devices have clearance from the US Food and Drug Administration and have been used effectively for many years. According to Freed, such devices comprise the majority of the implant market and are priced at about 50% to 60% of the cost of their distributor sales rep-supplied counterpart.

OrthoDirect provided guidance about how to buy stable technology orthopedic implants directly from manufacturers at wholesale prices. “OrthoDirect’s...
job is to help facilitate vendors who can operate without reps and show us options to make the best decision for our organization,” Freed explains.

A key player in adopting the rep-less model at LLUMC was Gary Botimer, MD, chairman and associate professor of orthopedic surgery at Loma Linda University’s School of Medicine and institute director of RONI (rehab, orthopedics, neurosurgery institute) at Loma Linda University Health. Dr Botimer, along with executive leaders, OR managers, and supply chain staff, formed a value analysis team (VAT).

“The transition to an objective, data-driven decision process from the marketing hype of the past was truly refreshing,” Dr Botimer says.

Over the course of a year, the VAT met and identified established procedures that have been performed with stable technology for the past 20 years. For such procedures, the VAT knew it made sense to find a manufacturer willing to sell directly to the hospital, thus avoiding the cost of a middleman, Nation explains.

As a result, LLUMC adopted a direct purchase strategy for total joint surgery, enabling them to standardize arthroplasty instrumentation and purchase the corresponding implants at a greatly reduced cost.

“The companies we’re working with for direct buy aren’t the very biggest nationwide companies, but they’re still US-manufactured, recognized brand names,” Freed says. “They are looking for a niche. They produce quality products, and they are flexible and nimble enough to embrace this kind of [working relationship]. We work with two vendors, one for knees and one for hips. We choose vendors based on price and technology; we don’t use vendors who try to mandate that we will only get a good price if we use their products.”

Meeting surgeons’ needs
LLUMC has solved the problem of providing product expertise in the OR by evolving the traditional surgical technologist (ST) role into a new job.

“They receive about an additional year of education in all the different functionalities that vendors usually perform, such as keeping track of instrumentation and implants, and becoming familiar with the supply chain,” Nation explains. “They are the experts on implants, and they are resources for the surgeons and the rest of the staff.”

The vendors who partner with LLUMC provide this education, so the STs become as familiar with the products as the vendors are. The fact that the STs are on staff, however, makes a big difference, Freed notes.

“The surgeons love having someone scrub in with them who has been to the manufacturing plant and who knows how the instruments and implants are manufactured, and the surgeons get more invested in our own staff than they would in a vendor,” Nation adds.

Currently LLUMC has three surgical technologists with these responsibilities and is planning to add another three.

Savings and satisfaction
“It has been a difficult process, and very challenging to set up,” Freed admits. “But we’re seeing the results in our budgets, with more than a million dollars in savings since we implemented this program.”

Changing the culture was harder for some surgeons than for others, Dr Botimer notes. “The list of objections and concerns ran the gamut from real to ridiculous.” However, the success of the program speaks for itself.

Nation points out that although standardization of certain implants has reduced costs, surgeons are not limited to this approach. “We continue to negotiate capitated contracts for total joint implants with all the major total joint implant companies,” she says. “If a surgeon doesn’t want to use one of our direct buy systems, he can use products from any of the vendors that have signed our capitated total joint contract.”

One of the big rewards she sees is the process itself. Making decisions about whether anything new will be used involves careful deliberation and scrutiny. “We will always look for ways to save money, and we will listen to and involve as many people as we can to help us,” she notes.

“We do all this in the spirit of taking care of the patient first and foremost,” adds Freed. “We don’t think we’re sacrificing quality; in fact, we think we’re improving it by standardizing. The quality increases with the same representation in every case.”

—Elizabeth Wood
The 40-member team comprises nurses, care technicians, and respiratory therapists. Respiratory therapists are an important assistant to the registered nurse and are invaluable in airway management. They are very versatile, says Schwedhelm. They can do all of the other roles in the unit except for nursing care. “The group has really clicked from a personality standpoint and has been fabulous from an outcomes perspective,” she says (photo).

Schwedhelm was in charge of the OR and ED at Nebraska Medical Center, Omaha, until 2008, when she became director of the ED, trauma, and preparedness services, which includes the biocontainment unit.

**Drills ensure team readiness**

The Nebraska biocontainment unit is the largest of four such units that opened after the September 11, 2001, attacks as a bulwark against bioterrorism and airborne diseases like SARS (severe acute respiratory syndrome). The other three are Emory University Hospital in Atlanta, St Patrick Hospital in Missoula, Montana, and the National Institutes of Health Clinical Center in Bethesda, Maryland.

The Nebraska Medical Center used more than $1 million of government funds to retrofit a pediatric bone marrow transplant unit to create isolation rooms with concrete-block walls, tornado-proof windows, and a separate air handling system, among other features.

Though Rick Sacra, MD, a missionary, and Ashoka Mukpo, a journalist, were the biocontainment unit’s first patients, the unit has been open since 2005, and the team has been running drills every 3 months since then.

“Sometimes we drill around scenarios of anthrax, sometimes plague, sometimes smallpox, and sometimes viral hemorrhagic fever—the category Ebola falls into. All are a little different, and all require a different unique set of strategies,” says Schwedhelm.

During the years the unit was empty, Schwedhelm says, she ran everything on a “shoestring” budget and all supplies were just-in-time. “We had a medication list, supply list, and equipment list, but until the unit was activated, none of this was stocked in the unit,” she says.

**Managing/staffing the unit**

From a leadership standpoint, Schwedhelm says, she and the charge nurse do daily problem solving, make staff adjustments, and ensure that they have a plan for everything from waste disposal to supply delivery to putting patients on dialysis or a ventilator if needed, taking x-rays and electrocardiograms (ECGs), or drawing blood.

“We had developed processes in advance and had many robust policies and procedures, but it isn’t until you activate that you actually see what processes you need and which to tweak, add, or delete,” she says.

In addition to managing the unit, Schwedhelm talks with other hospital leaders who want to set up their own units, and she has offered suggestions to the Centers for Disease Control and Prevention (CDC) about their PPE techniques.

“We are getting hundreds of e-mails and calls, and we can’t get the information out fast enough,” she says. “We are really working hard to teach everyone about our PPE strategies and other logistics and trying to allay anxieties.”

Staff members work 12-hour shifts—five on nights and six on days. At least three on each shift are nurses. One nurse stays in the room with the patient for 3 to 4 hours at a time and rotates with the other nurses. The other two
staff members include respiratory therapists or care technicians. They help with PPE donning and doffing, getting supplies, and running the autoclave.

Everyone is cross-trained, and at least one nurse has to be in the room at all times with the patient. If the patient requires a second person in the room, that person can be any of the other staff depending on the acuity of the patient.

There is one staff member in the hall (considered a “dirty” zone) just outside the patient’s room who also wears full PPE. If the nurse in the room needs something, or if something happens in the room, that person can immediately go into the room and help. If this happens, a staff member who is in the clean zone will quickly put on PPE and go into the dirty hall.

The unit has five semiprivate rooms, but Schwedhelm says she believes no more than two to three patients should ever be in the unit at one time because of the amount of autoclaving that has to be done, trash that is generated, and equipment that needs to be managed. All trash and linen are autoclaved.

After the first patient was discharged, the entire unit had to be decontaminated. It was 2 weeks before the second patient arrived. During this time, the staff went back to their other jobs.

“The second patient is gone now, but you can’t imagine the logistics of getting the unit cleaned and processed,” says Schwedhelm.

The day he left, she says, they autoclaved all of the trash and linen, but left the room the way it was. “We let the unit sit for 2 days to let the virus desiccate on its own before we sent our team in to do the cleaning. We don’t assume that all of the virus will be dead, but scientifically we know it’s wise and safer,” she says.

**Donning and doffing**

All staff are supervised by a “buddy” each time they don and doff their PPE to ensure they are following proper protocol.

Before staff members enter a patient’s room or the hall outside the room (“dirty” zone), they put on an impervious surgical gown, Crocs covered by surgical booties that come up to the knee, a hood that tucks into the gown, an N95 respirator mask, a full face shield that wraps around the face and neck, and three sets of gloves (photo).

Though the CDC recommends double gloving, Schwedhelm says they triple glove. Staff put on the first pair of gloves as they are donning their PPE. Then long purple Nitrile gloves are put on after donning and duct-taped to the gown. The third pair is put on before entering the patient’s room. “We want them to think of the purple gloves as their skin,” says Schwedhelm.

For example, she says, “after they empty any secretions or do any patient care, they replace the outer pair. They are never without two layers of gloves. The same holds true for the doffing process in that they are never without a pair of gloves that are clean.”

Waterproof aprons also are available to don if the patient has uncontrolled diarrhea and vomiting. However, Schwedhelm notes, if they had such a patient, they would have the staff don coveralls and enhanced PPE.

When staff members exit the patient’s room, they step into the hallway onto a doffing pad. A doffing partner with full PPE watches and assists as all of the PPE is removed in proper sequence and put into an autoclave bag. As staff members take off their foot covers, they step into a clean area of the doffing pad and then walk to the shower, touching nothing along the way. After showering, they leave via a “clean” hallway. The Crocs are dipped in a bleach and water solution.

The doffing partner takes the autoclave bag full of the discarded PPE to the dirty line and hands it off to the person running the autoclave. After the PPE is sterilized, it is taken out on the clean side of the autoclave, put into biohazard boxes, and hauled away to be incinerated.

**CDC updates guidelines**

The CDC’s October 20 update of their guidelines on PPE used by healthcare workers caring for Ebola patients was “dramatic,”

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says Schwedhelm. “It was almost a complete overhaul,” she says.

The CDC reached out to Nebraska and Emory for input and adopted many of their best practices, such as those for PPE, a “buddy” to help don and doff, and dedicated areas for donning and doffing.

The earlier CDC guidelines were modeled on how Ebola patients in Africa were treated, according to Arjun Srinivasan, MD, associate director for healthcare-associated infection prevention programs at the CDC. Dr Srinivasan spoke during an October 22 live webcast sponsored by the New England Journal of Medicine.

The new guidance is based on the initial experience with caring for Ebola patients in the US and the fundamental principles of the current scientific understanding of Ebola transmission, he says.

“We know there are a lot of unanswered questions and challenges at this point,” says Dr Srinivasan. “One of the big ones is how to manage and handle the evaluation of suspect cases in emergency departments and outpatient settings.”

Schwedhelm noted that the Nebraska Medical Center developed and implemented a new screening tool in the ED almost 2 months ago, and they have now moved it into an electronic format.

The screening tool gives the following prompts to the ED nurse who greets the patient:

- If any of the countries are in the endemic areas in Africa, the tool prompts an electronic message that tells the nurse what steps to take next.
- Put a mask and gloves on yourself. Provide a mask and gloves for the patient. If the patient needs help walking, put them in a wheelchair.
- Put the patient in a private room.
- Notify the healthcare provider.

ACS issues surgical protocol
On October 13, the American College of Surgeons issued a new surgical protocol for patients with possible or confirmed Ebola. The protocol describes precautions OR personnel (ie, nurses, surgeons, technicians, and anesthesia staff) should take when operating on suspected or confirmed Ebola patients.

Recommendations are made in nine areas:

- training
- patient transport to the OR
- surgical checklist
- OR staff PPE
- surgical drapes
- operative technical considerations, including instrumentation and sharps
- doffing PPE
- specimen and waste management
- OR staff exposure.

The protocol was updated October 21 and will continue to be updated as more data become available.

Speaking at a special panel session at the American College of Surgeons annual meeting in San Francisco on October 27, Sherry M. Wren, MD, FACS, coauthor of the protocol, says when she looked for guidelines on how to perform surgery on patients who might have Ebola, she found nothing. She and Adam L. Kushner, MD, MPH, FACS, a general surgeon with extensive experience operating in developing countries, wrote the guidelines. Dr Wren has also practiced in Africa.

Dr Wren noted that some individuals might wonder why anyone would ever operate on a patient with Ebola. She questions why anybody would deny care to a group of people who were potentially infected with Ebola or had early Ebola symptoms. “To me, it seems ethically not right,” she says.

“We are not talking about elective surgical procedures here,” says Dr Wren. “They should not be performed in patients with suspected or confirmed Ebola. We are talking about emergent or urgent procedures. In these cases, the protocol should be implemented to minimize risk to OR personnel.”

—Judith M. Mathias, MA, RN

References
American College of Surgeons. Surgical protocol for possible or confirmed Ebola cases. https://www.facs.org/ebola/surgical-protocol

Centers for Disease Control and Prevention. Guidance on personal protective equipment to be used by healthcare workers during management of patients with Ebola virus disease in US hospitals, including procedures for putting on (donning) and removing (doffing). http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html


University of Nebraska Medical Center Ebola videos for donning and doffing. http://app1.unmc.edu/nursing/heroes/
Physician alignment is a key element of current hospital strategy. Last month, we looked at how hospital ORs can use co-management agreements to build strong collaboration with surgeons. Payment reform has created an even more sophisticated option—participation in a bundled payment program.

Bundled payment initiatives are more complex than most other alignment strategies. Hospital and OR leaders must perform upfront analysis, manage provider contract negotiations, and work continually with surgeons and other clinicians to manage costs. Yet bundled payment offers strong potential rewards.

**Two avenues**

The basic idea of bundled payment is simple—healthcare providers receive a single payment for a defined episode of care. Overall, healthcare organizations have two distinct opportunities to pursue bundled payment contracts.

The first opportunity is the Centers for Medicare & Medicaid Services (CMS) Bundled Payments for Care Improvement (BPCI) program. With four different payment models and a broad choice of care episodes, the BPCI creates multiple opportunities for partnership between provider organizations.

When an organization enters the BPCI, CMS sets a target price for each contracted patient continuum or episode of care. The target price is the historical average cost of the episode, minus a discount. Historical costs are based either on the hospital’s own data or a blended state/hospital average.

Under Models 1, 2, and 3, participating providers bill CMS and the government pays all claims at the usual reimbursement level. Then, on a quarterly basis, CMS reconciles claims against the contractual target price. There is risk associated with the BPCI program. If the organization’s total claims are less than the target price, the organization can keep the difference. If total claims exceed the target price, however, the organization must pay the difference to CMS.

The second opportunity is to negotiate bundled payment contracts with private payers. Private or commercial insurance payers are at an earlier point on the adoption curve with regard to bundled payments, and pursuing this avenue requires additional preparatory work and negotiation. But private payer contracts may offer some advantages over the federal bundled payment program.

**Evaluating opportunities**

When evaluating bundled payment alternatives, “speed to market” is an important consideration. “CMS has been overwhelmed with applications for the federal bundled payment program,” says Thomas Blasco, MD, medical director of the Illinois Sports Medicine and Orthopedic Surgery Center in Morton Grove and medical director at Surgical Directions, a national perioperative consulting firm in Chicago.

“A large percentage of applicants have had their applications delayed,” Dr Blasco notes. In contrast, private payers may be ready to move forward more quickly on bundled payment negotiations.

There is also an important structural difference between private/commercial insurance and CMS bundled payment opportunities. “CMS rules say that if you are going to enter the BPCI program, all the surgeons on your medical staff must participate,” Dr Blasco says. “So when you sign up one surgeon, you have to sign up all of them.”

In contrast, private bundled payment arrangements can give OR leaders the chance to be selective about which surgeons they can partner with.

Whether a hospital pursues federal or private payer opportunities, the first step is careful analysis of procedure types, costs (all professional and technical fees), and outcomes data. BPCI participants receive extensive data from CMS on all applicable procedures (within the DRGs for which the organization is participating) in the organization’s primary and secondary markets. The additional value of these data is that they allow the applicant organization to accurately gauge market demand and competitive costs.

The most important question is: “Can we reduce costs enough to make an episode profitable?” Keep in mind that cost reduction goals must be large enough to cover the contractual discount and any gain-sharing payment for surgeons. The main goal of the initiative is to improve value in terms of the equation “clinical outcomes divided by...”

Continued on page 16
costs.” Patient safety and clinical outcomes are paramount to the long-term success of the program and the hospital.

Gainsharing contracts
“The BPCI plan provides a waiver within Stark guidelines to allow gainsharing that is with merit and legal,” says Bob Dahl, senior vice president and chief operating officer of Surgical Directions. “Surgeons have the opportunity to receive up to 150% of Medicare professional fee schedule per procedure, should outcomes and cost reductions be achieved.”

“The beautiful part of the CMS bundled payment program is that it provides an avenue for hospitals to do gainsharing in a pre-approved manner,” says Chad Beste, a partner in PBC Advisors, LLC, Oak Brook, Illinois. “Unfortunately, there is still some confusion about what is and what is not acceptable.”

Under existing guidance, organizations have broad leeway for structuring gainsharing contracts. According to CMS, gainsharing arrangements must:
• support improved quality, improved patient experience, and cost savings
• include a methodology and a comprehensive plan for sharing gains among contracted parties, notably frequency and criteria
• support quality improvement and include minimum quality thresholds, a process for monitoring quality, and metrics for improving quality of care.

In addition, arrangements must be transparent and auditable by the government. Gainsharing payments cannot be based on referral volume or value (although “payments based on achieved savings are permitted”). Overall, gainsharing payments cannot exceed 50% of physicians’ normal fee-for-service reimbursement for services.

The guidance does not set specific quality standards or metrics for bundled payment contracts. “CMS is allowing organizations to propose their own quality criteria,” Beste says. “Most organizations are using things like PQRS [Physician Quality Reporting System] measures and readmission rates.”

Working with surgeons
“The key to controlling costs under bundled payments is to develop a consistent, repeatable, relatively uniform model of care for a given procedure,” Dr Blasco says. “The hardest part is getting surgeons to agree on one single approach.”

According to Dr Blasco, it is relatively easy to get surgeons to agree on preoperative screening and risk stratification protocols. “But getting surgeons to reach consensus on a common technique or single-source implant is very daunting,” he says. “Even standardizing the recovery phase is a challenge, since many surgeons are more comfortable with one approach or another.”

The entire effort requires extensive planning and facilitated discussion. Supply costs are an obvious starting point. OR leaders can use multiple strategies to address supply expenses, including preference card standardization, value analysis, vendor control, and better inventory management (see OR Manager August 2013, pp 21-23). In addition, single source or capitated pricing for consigned implants should be a consideration for the OR.

OR leaders should also use a bundled payment initiative to look at supply costs from a holistic perspective. Customized patient-specific joint implants are an often neglected option.

“These joints are more expensive than standard implants, but you need to look at the issue of time and OR instrument costs as well,” Dr Blasco says. “When you consider the additional time as well as the costly and numerous implant trays it takes to measure and fit an implant during surgery, noncustom hardware can often end up being more expensive.”

Surgeon collaboration is also important for addressing non-OR hospital costs. The inpatient room and surgical floor coverage can account for one-third or more of total episode costs. Surgeons can move the dial on these costs by adopting clinical care pathways that can reduce inpatient length of stay.

Direct costs are not the only issue. Efficiency is an underappreciated factor in bundled payment management. For example, a hospital might control costs associated with a bundled episode and generate a profit from the point of view of reimbursement. But if the OR has low overall utilization, its high department cost structure will erase any profit generated.

Given this pitfall, ORs must also collaborate with surgeons on efficiency issues such as increasing utilization (OR Manager, May 2013, pp 21-22, 24) and decreasing case times (OR Manager, May 2014, pp 25-27).
**OR business performance**

**Postacute reboot**
For most hospitals, the major opportunity to reduce episode costs will be in postacute care. According to Beste, there are three principal areas to focus on:

**Readmissions.** “Each hospital readmission adds about $20,000 to the total spend,” Beste says. In his experience, readmission rates for joint replacement range from about 7% to 20%. “If your rate is closer to 7%, you obviously don’t have a lot of room to reduce spending. Hospitals that are starting at 20%, on the other hand, have a big opportunity to cut episode costs.”

**First postacute setting.** “Where patients start in postacute care is significant because we find that each setting—long-term care, inpatient rehab, SNF [skilled nursing facility], and home health—adds about $10,000 in costs,” Beste notes. For patients discharged directly to home health, postacute costs are typically under $10,000. For patients who start out in a SNF, costs are about $15,000 to $20,000. “Say 75% of your joint patients are discharged to skilled nursing and 15% to home health. There may be an opportunity to reduce costs significantly just by increasing home health discharges from 15% to 25% of all the patients.”

**Postacute length of stay.** Patients discharged to a SNF tend to stay through most of the Medicare 100% coverage period. “Plan design is the issue here, and many facilities try to maximize their reimbursement,” Beste says. “The question is whether there is an opportunity to reduce utilization.”

According to Dr Blasco, surgeons can take a greater role in optimizing postacute care. For example, some surgeon groups have put home health at the center of joint replacement postacute care. “For the right patients, home health with tightly controlled physical therapy and visiting nurse support is very successful,” he says. “Patients do just as well or better. There is also greater patient satisfaction.”

The key to success is data-driven proactive patient triage and management. “If you are going to take part in bundled payment, you have to monitor and manage patients very closely,” Dr Blasco says. He recommends creating information systems that follow patient care throughout the perioperative period, from scheduling to discharge and follow-up care. Ad-

Continued on page 21
Best sterile processing managers anticipate, collaborate, stay up to date

With more than 36 years of experience in sterile processing, I have seen many changes occur, and I know what it takes to be an effective sterile processing (SP) manager. The goal of an effective SP manager is to determine where the department is now, where you want it to be, and how to get there. It is all about being prepared for change and keeping up to date. An effective SP manager does not go it alone but utilizes the expertise of staff from SP, infection control and prevention, and the operating room to collect data and ask for more resources to improve quality and patient outcomes.

Trends over time
The number of loaner instruments has increased, and so has their complexity. For example, the longer and narrower lumens makes them more challenging to clean, and without a good loaner policy it is more difficult to have in house implants cleaned, sterilized, and quarantined until the biological indicator (BI) result is available.

Steam sterilization cycles have been expanded to include extended cycles, which lead to logistical nightmares when it comes to preparing for the next day’s surgical schedule—and the schedule, of course, is also affected by loaner instruments not arriving on time. More low-temperature sterilization options are available, but with more lumen and material limitations to be aware of, it has been a challenge to ensure items are effectively sterilized.

I have seen advances in cleaning and disinfection equipment and chemicals, faster BI results, commercially available process challenge devices and Bowie-Dick test packs, more chemical indicator options, more options for containment devices, and a disposable wrap that is stronger and reduces the chances of tears. Another addition has been monitors for verifying the effectiveness of mechanical cleaning equipment, the instruments processed by mechanical and manual cleaning, and scopes.

Ensure easy access to current manufacturers’ IFU
The first step to ensuring that instruments are effectively processed is to have access to and read the current manufacturer’s instructions for use (IFU). Each staff member should be provided with education and training as well as the tools needed to execute the IFU and recognize that the objectives of the IFU have been met (eg, cleaning verification tools, BI’s, etc).

Competency verification is done after education and training to verify the staffs’ ability to perform the critical steps in the processing and to evaluate the effectiveness of those steps.

An effective SP manager establishes a system that provides for easy access to the current manufacturer’s IFU. Requiring an IFU to accompany loaner instruments before they arrive, and reviewing to see if any IFUs have changed, will assist in ensuring you have the most up-to-date IFU for those instruments. Corporate websites may also provide IFUs.

Another option is using a service that provides (for a reasonable fee) up-to-date IFUs. Best Practice Professionals, Inc. (www.onesourcedocs.com, 1-800-701-3560) can assist you in obtaining IFUs. The website describes the oneSOURCE Document Site as “an online, electronic binder of Manufacturers’ Instruction for Use documents for equipment and surgical instruments, with a search engine that provides multiple paths to needed documents.”

Searching is done by instrument catalogue number, manufacturer, or description. This system can be used as a facility-wide electronic binder by all departments in the healthcare facility.

An effective SP manager identifies and prepares a trainer, schedules sufficient time for training, and has the tools and the IFUs available. A competency testing schedule is established to include periodic and regular competency verification.

An effective SP manager never alters the IFU for any reason without contacting the corporate Sterility Assurance or Quality Assurance Services of the manufacturer to see if the changes (eg, changes in the cleaning, packaging, or sterilization cycles or processes) have been validated. Request that information in writing.

If the change you want to make has not been validated by the medical device manufacturer, it is risky to make that change. Doing so could result in improperly processed medical devices and poor patient outcomes.
**Keep up to date and follow recommended practices**

The Joint Commission states that all policies and procedures should be aligned with evidence-based guidelines and/or professional organization guidelines. This information, along with the most up-to-date manufacturer’s IFU, is needed to keep the SP department’s policies and procedures current. The recommended practices to follow are published by the Association for the Advancement of Medical Instrumentation (AAMI), AORN, and the Centers for Disease and Control and Prevention.

The Joint Commission uses the most up-to-date Comprehensive Guide to Steam Sterilization and Sterility Assurance in Health Care Facilities, ANSI/AAMI ST79:2010 & A1:2010 & A2:2011 & A3:2012 & A4:2013 (Consolidated Text) for surveys. An effective SP manager ensures that the SP department has the most up-to-date copy of AAMI ST79 and the most current edition of the AORN Perioperative Standards and Recommended Practices or access to the AORN documents through the OR.

The International Association of Healthcare Central Service Material Management (IAHCSMM) and AORN sell the AAMI ST79 recommended practice at membership prices. Another option is to ask the hospital library to purchase the documents for you to store and use in your department. Electronic versions of AAMI and AORN recommended practices are available to share between departments.

An effective SP manager ensures policies and procedures are updated to reflect both the up-to-date manufacturer’s IFU and the most recent changes to recommended practices. Choose a person on your staff to become the expert in standards and recommended practices and to be in charge of the updating. An effective SP manager needs to stay on the cutting edge of standards and recommended practices to assist with periodic review of policies and procedures.

**Require certification of all SP personnel**

AAMI ST79 states that all supervisory personnel should successfully complete a sterile processing management certification examination from either the Certifica-
tion Board of Sterile Processing and Distribution (CBSPD, www.stereleprocessing.org) or IAHCSMM (www.iahcsmm.org) (Section 4.2). In addition, all personnel performing sterile processing activities should be certified as a condition of employment within 2 years of employment. New Jersey and New York currently have mandatory certification.

An effective SP manager is certified as a SP technician and manager and works with administration to develop a career path for employees that involves certification. In addition, the manager is a member of the national and local IAHCSMM chapter, which provides education and an opportunity for interaction with peers about common problems and solutions. Other departmental staff should be encouraged to join IAHCSMM.

Make informed purchasing decisions

Sometimes new products enter the market before they are addressed in AAMI and AORN standards and recommended practices. Section 12 of AAMI ST79 on new product evaluation suggests what to consider when choosing a product for which there are no guidelines from AAMI or similar organizations.

An effective SP manager, along with the rest of the members of the multidisciplinary committee who are conducting a product evaluation, will review this list and AORN Recommended Practices for Product Selection in Perioperative Practice Settings. FDA clearance documents are the place to start. Read the labeling cleared by the FDA and compare with all the literature supplied by the company. Any discrepancies between the FDA and the literature, or totally different claims among different pieces of the literature, are red flags.

If you have questions about product claims, contact the FDA using MedWatch (www.fda.gov/Safety/MedWatch/HowToReport/defaults.htm). Also seek out experts’ opinions and relevant research articles published in peer-reviewed journals, along with reports from peers who are using or have trialed the product. Effective SP managers do their homework before making new product decisions.

Identify quality process improvement programs

The Joint Commission is interested in quality improvement processes that reduce the risk of transmitting infections associated with medical equipment, devices, and supplies (Standard IC.01.04.01) that are processed in the SP area. The first step in this process is to perform a risk analysis in SP to determine what risks are being taken that could lead to a sterilization process failure and healthcare-associated infections.

Here is a list of my top quality process improvement programs that are related to sterilization process failures. Every effective SP manager should be working on these process improvements.

• Loaner instruments not arriving on time for the cleaning and sterilization IFUs to be followed and the implants to be quarantined until the BI results are known.
  
Time is the critical word here. Develop a loaner policy based on IAHCSMM’s documents that require loaner instrumentation to be received in the facility’s decontamination area at least 2 working days (48 hours) before a scheduled case for existing sets or 3 working days (72 hours) for new sets. This will ensure enough time to follow the IFUs (which should arrive before the sets) and comply with AAMI and AORN recommended practices.

• Reduce the number of implants released before the BI result is available. This can happen with a loaner policy with teeth and better planning and inventory.

The Joint Commission wants SP departments to use the Exception Form for Premature Release of Implantable Device/Tray from Annex L in AAMI ST79 and to have in place a department of surgery policy with multidisciplinary input that addresses who can authorize early release of implants. The Commission suggests it be a surgeon, but a signature is not required on the exception form. Many hospitals do require the surgeon’s signature to stress the importance of making this decision to release implants before the BI results are available.

• Allow immediate-use steam sterilization (IUSS) only for instruments that are intraoperatively contaminated to reduce the risk of surgical site infections.

The Commission will check to make sure you are collecting data on instances when IUSS is used. (See Annex L in AAMI ST79 for an implantable device load record for data collection along with the Premature Release of Implantable form.) The Commission will then check to see if ac-
tion is being taken based on the data. If surveyors don’t find that to be the case, they may cite the organization under the performance improvement standards.

- Monitor or verify the cleaning process to determine if instruments are clean. You cannot see microorganisms, bioburden, or inside lumens or crevices. Don’t become another news headline. Cleaning process monitoring tools are available and addressed in recommended practices.

Martha Young, MS, CSPDT, is president, Martha L. Young LLC, providing SAVVY Sterilization Solutions for Healthcare in Woodbury, Minnesota. She is an independent consultant with long experience in medical device sterilization and disinfection.

References


Potential Rewards

Continued from page 17

Additionally, patient data analysis can be used as the basis for risk stratification, patient selection, and management algorithms.

Market strategy

“The BPCI program incentivizes surgeons to perform contracted procedures at an approved facility,” Dahl says. “This incentive can provide a strategic competitive advantage for hospitals that are ‘first to market’ with a bundled payment opportunity.”

Physician engagement is another factor. Surgeons who have entered into a bundled payment contract with a hospital assume personal responsibility for a service line, becoming highly invested in the long-term success of the OR.

A successful bundled payment program can also help an OR develop a center of excellence that wins case volume from both referring physicians and patients, Dr Blasco believes. “Bundled payments give hospitals the opportunity to create a sustainable competitive advantage by partnering with surgeons to create ’best in class’ service lines.”

This column is written by the perioperative services experts at Surgical Directions (www.surgicaldirections.com) to offer advice on how to grow revenue, control costs, and increase department profitability.

Reference

Potsurgical pain scores are highly correlated with reports of overall patient satisfaction during hospital stays, according to a poster presented at the 2014 American Academy of Pain Medicine annual meeting.

Dermot Maher, MD, and his colleagues from Cedars Sinai Medical Center in Los Angeles examined patient responses on HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) surveys of 2,933 surgical patients who were hospitalized at a single trauma center between March 2012 and February 2013. Questions assessing satisfaction with in-hospital pain management and general satisfaction showed a statistically robust relationship when compared retrospectively with patient pain scores as assessed via the postanesthesia care unit visual analog scale.

Additionally, in a 2013 survey of members of the National Association of Orthopaedic Nurses, 43% of respondents said patients undergoing joint replacement are less prepared for pain management than for home care tasks, changes in mobility, insurance paperwork, or planning for different discharge options.

Now that hip and knee arthroplasty has joined the list of readmission measures for which hospitals will be penalized in the future, it’s more important than ever to anticipate potential postoperative complications (see OR Manager, June 2014, p 5). Coordination of care among all departments, including preoperative, intraoperative, and postoperative care, will be necessary to prevent readmissions.

Avera McKennan finds innovative strategies to address orthopedic pain management

Impetus for improvement
Avera McKennan Hospital & University Health Center, Sioux Falls, South Dakota, is a 545-bed tertiary hospital and the flagship facility of the Avera Health system, a regional network of 300 locations in five states. Even though our locations are in the rural Midwest, Avera is home to the most advanced use of e-services in a rural setting, and has been recognized as a thought leader and innovator, appearing on “Most Wired” lists and named one of the “Top 10 Trailblazing Hospitals” in 2010.

Avera McKennan’s 32-bed orthopedic unit performs approximately 700 joint replacements (hips and knees) a year with two primary orthopedic surgical groups.

Our scores in pain management and transitions of care were our lowest measures on HCAHPS surveys among hip and knee total joint replacement patients in 2013. HCAHPS questions for pain are:
• How often was your pain well controlled?
• How often did the hospital staff do everything they could to help you with your pain?

We began seeking ways to improve the patient experience by managing their expectations and better preparing them for surgery.

Patient preparation
In the 1980s, Avera McKennan implemented an “Easy Street” approach to rehabilitation. Staged bathrooms and bedrooms along with a car, grocery store, bank, and movie theater were built into a specialized floor of the hospital to simulate real-life environments. These help patients adjust with confidence to life with a new joint and give physical therapists an environment in which to teach patients the right and wrong ways to move after surgery.

In 2002, we began offering a “Total Joints 101” preoperative class to help prepare patients for surgery. Many patients live as much as 90 minutes away from the hospital, so only about half of joint replacement patients are able to attend class. Total Joints 101 covers:
• joint disease
• what to expect throughout the entire joint replacement process
• the role of the coach/personal support person
• learning breathing exercises to assist relaxation
• using assistive devices postsurgery to protect joints
• discharge planning
• insurance
• a tour of the Joint Replacement Center
• questions and answers.

For patients who could not attend the class, our community outreach educator had to mail paper binders and facilitate hour-long one-on-one phone calls. Those patients often misunderstood their role in pain management, did not retain information, or missed education about alternatives to pain medications, such as a change in position, ice or heat, increased mobility, or other comfort options.
An automated Web-based patient engagement tool implemented in March 2013 was part of the solution. Web-based information supplements in-class discussions, helping remote patients prepare from home and reducing the time our community outreach educator spends on the phone.

**Journey to better care**

The Avera McKennan orthopedics team went through an assessment and optimization process on a patient’s joint replacement journey. Multidisciplinary teams were formed to “walk in the patients’ shoes” and uncover opportunities for improvement. This process gave us fresh eyes to challenge the common routines that we take for granted and made us think globally instead of in silos.

For example, our project team brought together representatives from nursing, anesthesiology, and pharmacy into a single unit to determine the best way to communicate consistent information to patients about pain management in an integrated manner across the episode of care.

We mapped out a pre- and post surgery care plan with Wellbe, a healthcare technology company based in Madison, Wisconsin, and then used its automated patient engagement tool to guide patients through the steps. The program offers prehabilitation and rehabilitation exercise videos, collects functional outcomes measures from patients pre- and postsurgery, provides education on preparation and recovery care, and checks in with patients to see how they are feeling about their progress. Wellbe is the creator of the Guided CarePath, a suite of online tools that provide patient education, action lists, monitoring, and communications to engage patients in their treatments. We created Guided CarePaths for hip and knee replacements and called it Avera TotalCare.

The Avera TotalCare program, launched in March 2013, provides patient resources in multiple formats, including text, images, and videos to introduce the staff and to show proper prehabilitation and rehabilitation exercise techniques. Patients are introduced to the program at their surgeon’s office or by the community educator. New to-do items are delivered by email, and the Web-based program is easy to navigate.

“One patient worked for an airline and flew internationally, and he said that without access to the Avera TotalCare program at his fingertips, he felt he would not have been as prepared for surgery. If we had mailed a binder to his home address, it was unlikely he would have gotten it before his surgery date, but because he had access to his care plan online, he was able to walk through all the steps during his free time waiting in airports and staying in hotels as far away as Europe,” says Nancy Klinkhammer, community outreach educator for Avera McKennan.

The program also collects functional outcome measures from patients and administers feedback surveys. We added a specific question to collect pain control opinions from our joint replacement population: “What did you find most helpful in controlling your pain while you were in the hospital?” This gave us information we needed to develop best-performing pain management techniques.

We also can use functional outcome measures to address ongoing concerns through our medical and therapy programs. For example, if the data show that patients consistently note problems with climbing stairs, we can adjust our therapy to help in this specific area.

The online system has proved to be a cost-effective tool in set-
Pain management

Continued from page 23

ting proper patient expectations and collecting actionable feedback (sidebar, p 23).

**Ongoing improvements**

Our Avera TotalCare program won a Gold Web Health Award in fall 2013 in the competitive Web-based resource/tool category from more than 300 entries. This competition, held twice each year by the Health Information Resource Center, recognizes the nation’s best digital health resources. Our system allows patients to be better prepared for surgery by getting answers to more of their questions beforehand, including those about anesthesia, equipment needed for home recovery, and when they can resume normal activities.

Over the past year, Avera has implemented other innovative ideas and proven concepts for improving pain management scores, including purposeful hourly rounding, leader rounding, and a pharmacist-anesthesiologist pain team with one-call response.

During purposeful hourly rounding, the care team checks in on patients, monitors their comfort and pain, helps them change position, assists them in reaching the bathroom, if needed, and ensures that personal belongings are within reach.

We created a dedicated number within the hospital, ###-OUCH, that patients can call if they feel their pain is not being addressed appropriately, which connects to a pharmacist-anesthesiologist pain team.

**Targeted approach to medication**

In December 2013 Avera launched a new innovation to improve pain management in orthopedics by using personalized medicine. For patients who qualify, we use genetic testing to select pain medications that will work best for them, based on unique genetic characteristics that indicate how the liver metabolizes drugs.

Elective orthopedic patients for whom a test is deemed medically necessary have their testing completed at the on-location Avera Institute for Human Genetics. We hope this will cut down on medication costs as well as create a better experience for the patient.

Orthopedic physicians receive an easy-to-interpret, color-coded report that outlines which medications would be metabolized well, which medications could be used with caution, and which medications should be avoided. For example, in the testing of one patient, it was learned that he would respond well to fentanyl or hydromorphone but not hydromorphone or acetaminophen with codeine.

“Pain is a major concern for patients who have orthopedic surgery. We can’t eliminate pain completely, but we can offer a more targeted approach to pain control for our patients,” says Brian Kampmann, MD, orthopedic surgeon with Avera Medical Group Orthopedics and Sports Medicine.

**Future outlook**

Avera orthopedics experienced 11% growth in 2013 in terms of inpatient hospital volumes in a competitive market marked by reduced overall hospital volumes. We hope these innovations will continue to help us grow and will create a compelling competitive differentiator.

We have seen average year-over-year improvements of 5% across our orthopedic patients’ HCAHPS scores in the areas of transition of care and pain management, as well as our overall score and patients’ willingness to recommend our facility. We plan to continue using feedback and reports to drive more process changes and improve our program.

❖

**Reference**


Julie Benz, director of outpatient therapy services, Avera McKennan Hospital & University Health Center, Sioux Falls, South Dakota.

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Peak One Surgery Center in Frisco, Colorado, had a lucrative day this past October, when surgeons performed 14 procedures on local residents in the following specialties: orthopedics, general surgery, gynecology, pain management, and gastroenterology. Their pay? A mountain of gratitude.

Helping at home
Frisco, population 2,683, is located in Summit County, which has Colorado’s highest rate of uninsured residents.

Since 2010, Peak One has conducted an annual Community Surgery Day, offering free elective surgery to residents without health insurance. Peter Janes, MD, a surgeon at Vail-Summit, decided to organize a free surgery program after volunteering in Haiti following the 2010 earthquake there. He says he realized people in his own community also needed help.

Peak One has been working with Summit Community Care Clinic to identify patients who have the greatest need for surgery but cannot afford it. Candidates are then screened for suitability for outpatient surgery.

Seven clinicians, including surgeons, nurses, and anesthesiologists, plus about 50 other volunteers, make the day possible.

Rick DeHart, principal owner of Pinnacle III, which manages Peak One and 10 other ambulatory surgery centers (ASCs), says he believes it is one of very few ASCs that provide free treatment to underserved Americans. In addition to the clinic, Peak One coordinates with local practices including Vail-Summit Orthopaedics, Anesthesia Consultants, Peak One Pain and Spine, High County Health, Swan Mountain Woman’s Center and Rocky Mountain Gastroenterology.

Involving everyone
In addition to clinical professionals, the Peak One board of directors and local residents provide administrative help, serve meals, and act as interpreters. Even vendors donate implants and supplies. For example, Metropath provides laboratory tests, Surgical Notes offers transcription services, Sodexo assists with food services, and Alsco Linen donates linen service. Local physical therapists offer rehabilitation help free of charge.

A patient’s thank-you note for the surgery, quoted in the local newspaper Summit Daily News, concludes, “The time involved with all of the volunteers, coordinating everything, the doctors, and the nurses, is definitely not free, and I wish I could thank every single person that touched our lives on Saturday.”

Dr Janes says plans are forming for Community Surgery Day 2015.

Peak One staff continue to serve in other countries, too. The ASC encourages surgeons, nurses, and administrative staff to participate in humanitarian visits to Africa and South America and to join disaster relief efforts.

These medical mission trips are sponsored by Centura Global Health Initiatives (CGH). In July 2014, physicians, nurses, office staff, physician assistants, vendor representatives, and anesthesia specialists traveled to Rwanda on a CGH mission to provide orthopedic surgery to residents.

—Paula DeJohn
You can’t say that: Using social media in the healthcare setting requires sound judgment

It is hard to have tea with a friend or brag about a school soccer victory without involving social media. What was once a private or family matter no longer seems real until it is texted, posted, or even turned into a movie.

Healthcare organizations, including ambulatory surgery centers (ASCs), also are affected by the prevalence of social media, but unlike other businesses, they are bound by patient privacy restrictions that often bump against ever-widening concepts of free speech.

Responsibility for ensuring patient privacy is something ASCs share with hospitals and other healthcare providers, but ASCs often are small and independent organizations, without specialists in human resources, legal liability, or Internet services.

Many ASC administrators believe they should establish policies on social media use; others say current standards, such as the Health Insurance Portability and Accountability Act (HIPAA), apply to social media as well as other forms of communication.

Both positions are correct, according to Marcus Crider, JD, but ASCs should consider other factors in deciding how to handle employee use of social media.

“You’re not required by law to have one; it’s not essential,” Crider says of formal policies.

Crider is a partner at the Waller law firm in Nashville, Tennessee. He specializes in labor and employment litigation on behalf of employers, and he often works with ASCs. He spoke on social media issues at the 2014 conference of the Ambulatory Surgery Center Association (ASCA).

One ASC that has opted not to issue a formal social media policy is Redmond Surgery Center in Redmond, Oregon. “We talked about it at the board level,” recalls Anna Barr, RN, CASC, CNOR, the center’s administrator, “but they decided not to go forward with it at this time.”

About half of the ASCs in the US have made similar decisions, Crider estimates.

The rest have established various policies, often as a result of an incident in which an employee, inadvertently or not, revealed confidential information. To craft an effective policy, one that will be understandable, enforceable, and able to withstand a legal challenge, requires knowledge of both the social media world and the law.

It’s everywhere

According to statistics compiled by Crider, 73% of American adults use social media in its various forms. Users of Instagram total 130 million; LinkedIn, 238 million; Google and Twitter, 500 million each; and Facebook, 1.15 billion.

The ubiquity of social media means that misuse is inevitable. Crider, in his ASCA presentation, recounted the tragic result of a thoughtless Tweet. A young woman on her way to vacation in Africa made a racist comment that circled the world within a few hours. She lost her job, millions of people were insulted, and millions more outraged.

“Do not underestimate the power of social media,” Crider warns. “Use other people’s mistakes as learning opportunities.”

Whether a formal policy exists or not, have a frank talk with employees about best practices, he advises. Remind staff to keep personal and professional matters separate, avoid controversial topics, and guard against the impulse to vent emotions online.

To protect the ASC (or any company) and patients, as well as to spare the poster from embarrassment or discipline, Crider offers more specific best practices in social media use:

• Protect sensitive information such as financial data and trade secrets.
• Don’t reveal private information about colleagues.
• Don’t publish photographs, trademarks, or logos without permission.
• Never use social media to harass someone or make offensive comments or jokes.
• Don’t imply you are speaking on behalf of the company; if necessary, specify that you aren’t.

Why have a policy?

HIPAA spells out requirements for patient privacy, but its provi-
sions may be far from the mind of an employee texting at home or in the break room.

“One of biggest reasons for a social media policy would be to remind everyone of the need for strict compliance with confidentiality,” Crider says.

Additional reasons to develop a policy are to make managers and staff aware of their rights and responsibilities, and to have a written statement to refer to when addressing violations.

A policy, Crider notes, can spell out rules of etiquette for social media. It can address an employee’s expectation of privacy and freedom of expression, which must be honored if the policy is to survive legal challenge. It can inform managers, owners, and governing board members who may not be regular users of social media of its potential to harm or enhance the organization’s reputation.

Such a policy recently came in handy at The Eye Associates Surgery Center in Bradenton, Florida. After an employee posted a seemingly innocent photo that could have revealed a patient’s identity, compliance coordinator Jody Gibbs sent an email to all staff recapping the rule. “Please refrain from posting pictures, descriptions, or experiences regarding patients, patient visits, or exams as it relates to you and The Eye Associates,” she reminded them. “This information, even without patient names, is considered a HIPAA violation,” she added.

“We take it really seriously,” Gibbs says of the surgery center’s social media policy. Employees attend a training program on the topic, and they are encouraged to review the materials when questions arise.

A word about Facebook

The Eye Associates has a website, like most ASCs. It also has a Facebook page, with less detailed information but more chances for interaction with the public and patients. As Gibbs notes, “Any patient on the site has signed a release.”

Facebook can be a public relations tool if used properly. Crider recommends hiring a marketing firm or consultant to design and moderate the website and Facebook page, as it is unlikely any staff member has that expertise. Be sure a system is in place to obtain releases for any personal photos or information, and control online patient feedback to avoid false postings.

What is a good policy?

A good source of guidance for social media regulation is the National Labor Relations Board (NLRB), according to Crider. Over time, through its rulings, the NLRB has made clear which policies it considers justifiable and, equally important, which ones it does not.

The NLRB frowns on policies that are too general. A vague or unexplained statement could be construed as infringing on someone’s rights or subject to being unfairly enforced.

The NLRB considers the following rule to be too general: “Employees must avoid posting anything on social media sites that is disparaging to the company or disrespectful to the company’s employees.”

Other words the NLRB prefers to avoid are “confidential,” “sensitive,” and “unprofessional.”

Since healthcare organizations as a group and individual ASCs have special considerations regarding social media, they will need to develop their own wording. Be as specific as possible, Crider advises. “Provide examples of forbidden behavior to help educate employees, and explain the consequences of violating the social media policy.”

List the specific types of confidential information you do not want disclosed, such as patient names, identifying information, or financial transactions. When discussing harassment or forbidden language, choose descriptive terms like “threatening” and “obscene” and those that have legal definitions, like “hostile work environment” and “defamation.”

It is important to understand and respect employees’ rights, Crider notes. Do not ask for their passwords. Administer discipline consistently. Provide education, and have supervisors monitor compliance. “Develop a thick skin,” Crider adds. “Overreaction can potentially exacerbate negative publicity.”

Finally, ASCs that elect to have either an informal social media policy or none at all are subject to the same regulations mentioned in formal policies, particularly that of protecting the privacy of patients and avoiding disclosure of confidential information. Ensure that employees understand that HIPAA applies to electronic interactions as well as those taking place in person.

“There’s no cyber excuse for violating other policies,” Crider says. °

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Call for Proposals
2015 OR Manager Webinar Series

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OR Manager’s twice monthly webinars are an important educational tool, allowing nurses to earn 1 continuing education unit per webinar. Each 1-hour presentation provides timely, relevant, high-level information on leadership, safety and quality issues, OR business management, and healthcare reform, to name some recent topic areas.

To submit a proposal, send a brief abstract (100-150 words), 3 to 4 learning objectives, and biographical information to Ellen Lord, MS, RN, Webinar Coordinator, OR Manager, at zlord@ix.netcom.com.

CDC offers Ebola clinical resources
The Centers for Disease Control and Prevention in partnership with Medscape has released a video, “Ebola: Donning and Doffing of Personal Protective Equipment (PPE),” which gives a step-by-step demonstration of how to put on and take off PPE properly when caring for Ebola patients.

The CDC has also issued an Ebola clinical slide set, “Ebola Virus Disease,” for clinicians to use for grand rounds and other clinical presentations.

Frailty test predicts total joint outcomes
A simplified frailty index mapped to the American College of Surgeons National Surgical Quality Improvement Program database allows surgeons to better predict the risk of morbidity and mortality in elderly patients considering total joint replacement procedures, a study finds.

The index takes into account 11 data points; frailty scores ranged from 0 (no positive frailty values) to 0.64 (four positive frailty values).

Those with a frailty score of 0 had a mortality rate of 0.08%, and those with a score of 0.36 had a mortality rate of 2%.

Morbidity increased from .67% in those with no frailty associated values to 6.24% in those with four frailty values.

The study was presented October 28 at the Clinical Congress of the American College of Surgeons in San Francisco.

Questions raised about endoscope reprocessing
From January to December 2013, 39 patients in an Illinois hospital were infected with Escherichia coli after undergoing gastrointestinal endoscopy. An investigation found the endoscopes had been disinfected in the recommended way and there were no reprocessing lapses.

After the hospital changed its reprocessing procedure from automated high-level disinfection with ortho-phthalaldehyde to gas sterilization with ethylene oxide, no additional cases were identified.

An accompanying editorial recommends that healthcare providers report and publish all infections linked to endoscopy, particularly if recommended reprocessing procedures were followed, to see if this study “is the tip of the iceberg or an isolated occurrence.” If it’s the former, they said, endoscope reprocessing guidelines may need revision.

Survey: 92% of nurses dissatisfied with EHRs
A survey by New York-based Black Book Research of 14,000 RNs from 40 states who use electronic health records finds that 92% are dissatisfied with their software. Among other findings:
• 82% say EHRs disrupt productivity and workflow.
• 88% blame nonclinical administrators and CIOs for selecting inferior systems.
• Most say EHR selection did not consider nursing workflow.
• 90% say the EHR has worsened communication between nurses and patients.