SAME-DAY SURGERY

THE TRUSTED SOURCE FOR HOSPITALS, SURGERY CENTERS, AND OFFICES

MARCH 2020 Vol. 44, No. 3; p. 25-36

INSIDE

RELIAS MEDIA

Surgery Centers Must Prepare for Older Patient Population Boom

Patient outmigration from hospitals to ambulatory surgery centers (ASCs) is a trend picking up speed as Medicare removes additional procedures from the inpatient-only list.

ASC volumes rose by 23% in 2017 after doubling their market share between 2015 and 2016.[1] The ASC market is predicted to reach as high as $55 billion by 2025.[2]

One driver of the industry's growth involves the shifting of Medicare patients from hospital-based surgeries to the ambulatory surgery setting. For example, the Centers for Medicare & Medicaid Services (CMS) issued a proposed rule in August 2019 to remove total hip arthroplasty from the inpatient-only list.[3] Earlier, in the CY 2018 Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems (OPPS/ASC) final rule, CMS had removed total knee arthroplasty from the inpatient-only list.[4]

These changes, as well as others that moved more surgical cases to the same-day surgery arena, are resulting in ASCs seeing more Medicare and older patients. As the U.S. population ages, not only will surgery be performed more on older patients, it is expected this group will undergo elective procedures at a rate higher than previous generations. This demographic trend will challenge healthcare organizations, including surgery centers, requiring physicians, nurses, and others to learn more about treating geriatric patients.

"There is a lot that we can know ahead of time and provide training for at the surgical center," says **Alice Bonner**, PhD, RN, senior advisor on aging and innovation for the Institute for Healthcare Improvement (IHI).

For example, older patients could experience delirium and acute confusion as part of an underlying medical cause or because of medication issues. "Acute confusion in an older person that has some kind of underlying medical cause needs to be investigated to reduce it or to make it go away," Bonner says. "An older person comes into a surgery center and is given more medication, but an older person does better with fewer medications."

Financial Disclosure: Nurse Planner **Kay Ball**, PhD, RN, CNOR, CMLSO, FAAN (Nurse Planner), reports she is on the speakers bureau for AORN and Ethicon USA and is a consultant for Mobile Instrument Service and Repair. Editor **Jonathan Springston**, Editor **Jill Drachenberg**, Author **Melinda Young**, Author **Stephen W. Earnhart**, RN, CRNA, MA, Physician Editor **Steven A. Gunderson**, DO, FACA, DABA, CASC, RN, CRNA, MA, Consulting Editor **Mark Mayo**, CASC, MS, Editorial Group Manager **Leslie Coplin**, and Accreditations Manager **Amy M. Johnson**, MSN, RN, CPN, report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

SAME-DAY SURGERY

Same-Day Surgery (ISSN 0190-5066) is published monthly by Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468. Periodicals postage paid at Morrisville, NC, and additional mailing offices. POSTMASTER: Send address changes to *Same-Day Surgery*, Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468.

GST Registration Number: R128870672.

SUBSCRIBER INFORMATION
Customer Service: (800) 688-2421
customerservice@reliasmedia.com
ReliasMedia.com

ACCREDITATION
Relias LLC is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Relias LLC designates this enduring material for a maximum of 1.75 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Relias LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Contact hours [1.75] will be awarded to participants who meet the criteria for successful completion. California Board of Registered Nursing, Provider CEP#13791.

This activity is intended for outpatient surgeons, surgery center managers, and other clinicians. It is in effect for 36 months after the date of publication.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

AUTHOR: Melinda Young
EDITOR: Jonathan Springston
EDITOR: Jill Drachenberg
EDITORIAL GROUP MANAGER: Leslie Coplin
ACCREDITATIONS MANAGER: Amy M. Johnson, MSN, RN, CPN

© 2020 Relias LLC. All rights reserved.

One of the biggest side effects of narcotics, especially in older patients, is that they are mind-altering drugs, observes **Suzanne Salamon**, MD, associate chief of geriatric medicine at Beth Israel Deaconess Medical Center in Boston. Physicians and nurses worry about postoperative pain, but there are milder alternatives to preventing pain, she suggests.

There are several reasons to be concerned about opioid use among older adults. One is that patients' ratio of fat and muscle changes as they age. Older people have more fat, so opioids stay in the body longer for elderly patients than they do for younger ones, Salamon explains.

"If you use narcotics for older patients, use the lowest dose possible, and then try to use it as little as possible," she says. "Start low, go slow."

If a patient develops post-op delirium, the same principle applies to prescribing antipsychotic medication. "It's important to know that an 80-year-old might not need the same dose as a 55-year-old, so use tiny doses," Salamon says.

Another way to reduce confusion in patients is to ensure there is someone who can spend the night with them on the first night after surgery, regardless of whether the patient still is in a hospital or a surgery center. "That's when people get the most delirious with anesthesia in their body," Salamon explains. "They wake up in the middle of the night, disoriented, confused, yelling out, and shouting."

A friend or family member can calm these patients. Caregivers can hold patients' hand or talk soothingly. Surgery center staff also can be trained to inquire about patients' healthcare proxy, says **Kelly McCutcheon Adams**, MSW, LICSW, a senior director at IHI. This conversation-ready work includes ensuring healthcare providers are aware of patients' end-of-life wishes, if the patient cares to express these.

"What we've learned in conversation-ready work that could be of use in helping people prepare for same-day surgery is that surgery centers should know who a person's healthcare proxy or agent is," McCutcheon Adams says.

Surgery centers can educate nurses and staff about creating an age-friendly space by following toolkits created for this purpose, such as IHI's "4Ms" guide they published in April 2019.[5] The four Ms include: what matters, medication, mentation, and mobility.

Surgeons and surgery center leaders also should pay attention to their older patients' presurgery medications and suggest changes, as needed.

EXECUTIVE SUMMARY

The Centers for Medicare & Medicaid Services (CMS) has made changes to its inpatient-only list that will shift many older patients to the same-day surgery setting. This makes it important for surgery centers to develop age-friendly sites.

- Older patients account for more than one-third of surgical procedures.
- Surgery centers should be aware of health issues exacerbated by age, including delirium (which can be triggered by medication).
- Older patients might not need the same medication dosage as younger patients.

For example, tranquilizers, sleeping pills, and diabetes medication might affect patients' anesthesia, Salamon notes. "The more medicines an older patient is on, the more likelihood that there will anesthesia problems," she cautions. "Physicians need to get them off the medicines they don't need."

With older patients, another issue is frailty. "Frail people do less well in surgery," Salamon says. "It helps with surgery to get people conditioned before they go into surgery, if at all possible. Have them walk a little more; do prehabilitation."

Surgery centers also should make certain patients are not anemic or are not B12-deficient. Older people often do not absorb B12 as well; thus, they should be tested for this deficiency. Before the procedure, surgeons should advise these patients to take a B12 supplement if their levels are low, according to Salamon. "B12 deficiency is associated with anemia, confusion, and gait problems," she says. "If you want to get someone up and walking after orthopedic surgery, if they have a low B12 level, it won't help." ■

REFERENCES

1. Franklin Trust Ratings. ASC surgical volumes grow in 46 of 50 largest markets while hospitals lose share, Feb. 2, 2018. Available at: http://bit.ly/38rpWMG. Accessed Jan. 23, 2020.
2. Health Industry Distributors Association. *2019 Ambulatory Surgery Center Market Report*. Published October 2019. Available at: http://bit.ly/2GkwsJc. Accessed Jan. 23, 2020.
3. Centers for Medicare & Medicaid Services. Medicare program: Proposed changes to hospital outpatient prospective payment and ambulatory surgical center payment systems and quality reporting programs. *Fed Reg*, Aug. 9, 2019. Available at: http://bit.ly/2RlklFr. Accessed Jan. 23, 2020.
4. Centers for Medicare & Medicaid Services. CMS issues hospital outpatient prospective payment system and ambulatory surgical center payment system and quality reporting programs changes for 2018 (CMS-1678-FC), Nov. 1, 2017. Available at: https://go.cms.gov/30OCUkR. Accessed Jan. 23, 2020.
5. Institute for Healthcare Improvement. *Age-Friendly Health Systems: Guide to Using the 4Ms in the Care of Older Adults*. April 2019. Available at: http://bit.ly/30Oaszx. Accessed Jan. 23, 2020.

Surgery Centers Should Ask Patients About End-of-Life Issues

Same-day surgery centers need to be part of the conversation about patients' end-of-life wishes. As surgery centers treat more older patients, this aspect of care is important.

"Healthcare organizations need to be ready to receive, record, and respect people's end-of-life wishes," says **Kelly McCutcheon Adams**, MSW, LICSW, a senior director for the Institute for Healthcare Improvement.

This conversation could begin with asking, "Have you designated a healthcare proxy?"

The patient's answer would be marked in the chart, and there could be a follow-up question along the lines of: "You have designated a healthcare proxy — who is that person?"

Additional questions might include:

- Can we have a copy of the proxy form?
- How do we reach your proxy?
- Does this person know he or she is your proxy?

"One way we talk about the proxy question is we liken it to allergies," McCutcheon Adams says. "If you open a medical record and a field says, 'Do you have an allergy,' and the answer is 'yes' — and that was all it said — then all you would know was the person has allergies." More information is essential, such as what the allergies are.

"We want people to expand their thinking beyond the 'yes/no' to 'Can we have a copy of that, and how do we contact that person?'" she says. "In the same-day surgery setting, this is not the most pressing issue, but it's important to understand who patients want to speak for them. It might not be the most likely space for this conversation to start, but if all healthcare settings saw that as part of their responsibility, then we would have a much higher level of reliability of these conversations happening."

Regardless of whether patients have designated a healthcare proxy, this information should be included in patients' charts. This allows the next healthcare provider to see the answer, that the proxy conversation occurred, and what steps to take next.

Another important part of respecting patients' end-of-life wishes is to understand what matters most to patients. This goes beyond traditional advance directives. "We really need to have more values-based conversations with patients about what matters to them," McCutcheon Adams

says. "There's an opportunity [before surgery] to start this conversation and understand why this person is going to the trouble of having this surgery and what they hope it will accomplish for them." ■

Use the 4Ms to Educate Staff on the Needs of Older Patients

There is a simple tool to help healthcare providers understand how to create an age-friendly healthcare space.

When asking "What constitutes an age-friendly health system?," the Institute for Healthcare Improvement (IHI) answers that with the "4Ms," detailed below:

• **(What) matters.** Often, older patients grew up in an era when people followed the doctor's orders without question. "We now know it's important to ask questions," says **Alice Bonner**, PhD, RN, senior advisor on aging and innovation for IHI.

Physicians, nurses, and other healthcare providers should help these patients understand that it is important they ask questions and let providers know what is important to them personally, she adds.

Ideally, a patient would be able to express a sentiment like this: "My son wants me to have this operation, but I don't know if I want to. Here's what's important to me."

"Often, what's important to the older person is not important for the person's health, but it might be a family gathering," Bonner explains. "Sometimes, they don't want to live in a nursing home or something else, but we can't guess what people want; we have to actually ask them."

• **Medication.** Often, older patients are taking several pills to treat various health maladies. When they visit the surgery center, someone should dig into their prescriptions and find out if they are taking some medications that could be discontinued, or are taking duplicate drugs or the wrong dosage for their age and health situation. "It's important to have a real conversation about medication options," Bonner stresses.

• **Mentation.** It is important to assess older patients' mental status. "One of the biggest areas that's been overlooked for a long time is mental and behavioral health," Bonner says. "Some older people are living with dementia, Alzheimer's disease, or other conditions."

In terms of mental health, as people age and cope with lifelong schizophrenia or personality disorders, healthcare professionals need some training on how to handle these challenges.

"We need to do more training," Bonner offers. "If we don't detect a problem and try to do something about it, a patient could return home and have untreated depression."

• **Mobility.** "There is a lot of literature on how to prevent falls in nursing homes and hospitals by making sure there is good lighting and that people have safe footwear," Bonner says.

Another way to prevent mobility problems and falls is to ask patients to use the restroom when they enter the surgery center, rather than waiting until after surgery, when they might be disoriented and less sure-footed.

"If you're a surgery center nurse, you could think about how likely it is the 80-year-old man will come out of surgery and need to urinate all of a sudden," Bonner says. "That's a setup for falls. Make sure there's somebody with him to take him to the bathroom and help him empty his bladder before surgery." ■

To Improve an ASC's Workflow, Try Following These Principles

Using Lean principles, surgery centers can improve their workflow and increase efficiency. The key is to make workflow efficiency a priority from a managerial perspective.

"One of the most important things is being present with staff when the work is done so you understand how the workflow goes," says **Brian Selig**, DNP, MHA, RN, director of perioperative services at the University of Kansas Health System. "It's really important to make sure you understand what staff experiences so you don't as a leader make assumptions that you know the answer. Be present with them and ask a lot of questions, including the whys."

Why questions could include: Why did you make that decision?, Why did you pick that piece of equipment?, and Why was that stored there?

"You find the most outrageous answers that give you insight into how to improve the process," Selig notes. For example, in answer to why a piece

of equipment was stored in a certain place, staff might say things like "Because that's where it fits" or "That's where it always has been stored." Hearing those types of answers gives a manager insight into how to improve the process, Selig says.

"Asking those questions helps staff be part of the change," he adds. "In terms of low-hanging fruit, the best thing you can do as a leader is make sure you are out there and present on the unit."

Part of Selig's own Lean journey involved spending much more time with staff in their work environment than he had previously. "It changed how I interact with them," Selig reports. "Having this focus on being where the work is done has helped me focus on being with the team."

He blocks off time each day for spending time with staff. This could include 10 minutes in the operating room and then another 10 minutes in the office.

"Sometimes, I am there to watch someone prepare instruments for sterile processing, making sure they are adequately sprayed or employees are separating the clean from dirty," Selig explains. "I want to make sure my staff is doing this right, and I want to understand what are their barriers to doing it right."

When employees are not doing things the correct way, it is usually a process problem, he adds. "I think one of the things we learned quickly in our organization is how to sustain our processes," Selig says. "We can make changes all we want, but unless we're committed to sustaining them over time it's a lot of wasted time and effort that teaches folks this is just another one of those things we'll ask them to do."

Realizing this is a major obstacle to sustaining Lean principles is a first step toward coming up with a plan to sustain a more efficient workflow. "One of the things I've learned is that having front-line leaders who are absolutely committed to our process is critical to our success in this," Selig says. "For me, that means having managers and supervisors out on the floor, each day, supporting the initiatives and spending time observing their teams. They educate their team members when they see noncompliance with their new processes, and they are willing to speak up with surgeons when needed."

To make the Lean program sustainable, the surgery center must develop a process that can prevent problems from occurring and a process to standardize the center's workspace so it is the same every time people enter the facility. It also is critical to the program's success to engage in difficult conversations with stakeholders.

"We spent a tremendous amount of time on how to collect specimens from patients, standardizing the process to not lose anything or mislabel anything," Selig says. "That was a big effort with the nurses and the lab. Not only did we have to develop the right process, but we had to sustain it over time. Whoever did this had to be in the room, watching the specimen collection over and over again."

If surgeons did not execute their part regarding specimens and the media, then the manager had to ask why they did it the way they did.

"Then, we put in corrective measures to help us sustain them over time," Selig explains. "Maybe we needed a poster in the room to prompt people about what type of media we have."

For example, at Selig's facility, there were four or five sentinel events several years ago. These involved mishandled surgical specimens. This problem could lead to repeat procedures or failed diagnoses. "When you have those kinds of events, you have to figure out why you're having them and make sure you're never having it again," Selig stresses.

There were several steps Selig and colleagues took to reach the goal of eliminating sentinel events related to surgical specimens:

- **Start with workshops.** "We focused on how to develop a process that eliminates the possibility of error," Selig explains. "We did two different Lean workshops, meeting with surgeons, operating room personnel, and quality and safety folks."
- **Develop new processes.** Then, the group developed a process on removing specimens and moving these from the patient to a sterile field.

"We made sure it got to the lab timely and with the right chain of custody," Selig says.

- **Create a chain of custody.** "We created a standard work document that we go through step by step," Selig says.

"We say these are the steps that must happen and happen in a certain order every time," he adds.

When the specimen is handed off, someone documents the type of specimen and medium. When the specimen moves to the next location, someone validates the patient's name and record number, checking for a match with the requisition. Then, the lab timestamps it and validates they have received it. "If you have a requisition that matches the label, and it's verified, then you've eliminated the risk," Selig says. "If all those pieces are in place, every single time, then you eliminate those mistakes."

After putting the new process in place, Selig reports the operating room lost only one specimen — which happened when the specimen was caught in a suction trap. ■

Following Lean and the 5S Philosophy Can Make Quality Improvement Sustainable

Surgery centers can put workflow processes in place that are sustainable — if leaders use the right tools.

One way is directing the team to collaborate using the Lean method and its philosophy of "5S."

As defined by the American Society for Quality, the five S's are: Sort (separate items in the space, eliminating whatever is not needed); Set in order (organize remaining tools, equipment, and supplies, arranging and identifying them for easier use); Shine (keep the workplace clean); Standardize (schedule regular cleaning and maintenance so the workplace looks the same each day and over time); and Sustain (Make the five S's a way of life and a habit for employees). *(Learn more online at: http://bit.ly/2RKGB73.)*

The foundational philosophy of 5S pertains to a workplace making equipment and supplies available at the precise place where they are needed, according to **Brian Selig**, DNP, MHA, RN, director of perioperative services at the University of Kansas Health System.

Following this Lean process, Selig says his health center saw a substantial reduction in lead time, cutting off 90 minutes over the first couple of years. The health system followed the Lean and 5S process to reorganize its surgical bays, making their workflow more efficient.

The first step was to empty the room and sort through each supply item and piece of equipment.

"We went through everything, saying, 'Do we need this piece of equipment?'" he explains. "If not, then we would get rid of it and put it where we would need it." For example, if the operating room only needed 10 of a particular item, but there were 12 in stock, the extra two items were removed, he says.

"If we need a basket on this side of the room, we put it there," Selig says. "If a scanner doesn't reach across the room, we make it wireless."

The goal was to put the precise items needed in the best location for easy access. This reduces the amount of time staff spend reaching or hunting for what they need.

"You spend a lot of time making that one room right so your staff can minimize movement and time," Selig explains. "You don't have extra junk in the room that you don't need."

Certainly, the 5S process can be time-consuming. Going through the initial clean-up process with one room can take a couple of days, Selig notes.

"We've done week-long workshops on a single storeroom," he recalls. "It's all about making sure you know where everything is at all times. I should be able to know when I walk into the room that there will be 10 test tubes in that area at any moment."

When the room is changed and everyone agrees it is arranged as needed, then all other rooms go through the 5S process.

"All of the rooms are the same, with the same experience and expectation in every space," Selig says. "It's one of the foundational things of Lean that is really important because it makes sure there is no waste or expired products or items that are not used."

The process also makes employees more efficient in their work, giving them more time to spend with their patients, Selig adds. To sustain the reorganized rooms, the 5S process is followed through daily observations. "At the end of every shift, someone does an observation," Selig says.

Someone observes the operating room, using a map of where everything should be and how it looks to make certain all items are returned to their proper place. Employees receive hands-on, written, and visual instructions on how to conduct these daily observations.

For instance, there are pictures hanging in each room. These pictures show where the sharps bin is located, where the trashcan sits, where a container of pens goes, as well as where everything else is located. The pictures can be photos of the actual items or illustrations printed from online sources. Selig says staff should be able to reset a room at any time using these visual cues alone.

"There's a parking space for everything," Selig says. "That's the way we learned it, and we're doing this across our organization." Another way Selig helps his staff stick to the 5S process is with another phrase: "Trust the process."

"Change is so hard," he acknowledges. "It can be such a frustrating thing because people get stuck in their comfort zone, whether you like it or not or believe in it or not."

Part of maintaining sustainability is measuring results. The University of Kansas Health System collects data on the number of rooms that are not reset correctly and the number of times a standard work process is not followed, such as whether people signed their names to documents, as required.

"We look at the process, whether the result was there or not," Selig explains. ■

Research: Prehabilitation Can Improve Post-Op Outcomes

The authors of a recent investigation found that when patients participate in a prehabilitation program, there can be benefits related to shorter length of stay and lower total episode payments after surgery.[1]

Usually, procedures are scheduled around the surgeon's timeframe, says **Michael Englesbe**, MD, FACS, professor of surgery and liver transplant surgeon at the University of Michigan.

Surgeons and centers put a lot of effort into ensuring patients completed the required lab tests and other assessments, but less effort is put into empowering patients to be part of the outcome of their care, Englesbe says.

"We do a couple of tests. The next time surgeons have time in their schedule, we schedule the surgery," he says. "Instead, we could be empowering patients to exercise, to have their own outcome."

Scheduling surgery should include the time patients need for prehabilitation before the procedure. "We hashed out the idea that the timing and surgery should be centered around the patient," Englesbe says. "We should develop programs to prepare patients."

The University of Michigan Medicine program has been following this philosophy for more than seven years. The program also has been studied for several years in Michigan with a partnership across the state.

Other research has revealed benefits to prehabilitation programs, too. For instance, one recent study of prehabilitation programs to improve exercise capacity before gastrointestinal cancer surgery revealed the programs improve exercise capacity, but do not affect length of stay or rate of postoperative complications.[2] The authors of another study found that a prehabilitation exercise program in spinal stenosis surgery patients resulted in improved preoperative ranges of motion, leg pain intensity, lumbar extensor muscle endurance, and walking capacities.[3]

"Now, prehabilitation is standard of care at my institution," Englesbe says. "Prehabilitation seems to be good for patients. It's good business, and it costs payers [and] Medicare less money."

There are four components to the University of Michigan prehabilitation program:

• **Smoking cessation.** "We try to help every smoker to quit smoking, and we are not always successful," Englesbe says.

• **Exercise/activity.** Patients monitor their exercise activities, including tracking steps. The program encourages patients to increase their number of steps every day, starting with 30 days before the procedure until the day of the procedure.

"Some people can't walk and can do other activities," Englesbe says. "But they should have a specific time designated every day to do some activity in anticipation of the operation."

This component includes nutrition. Patients are encouraged to improve their perioperative nutrition. Initially, patients met with a dietitian, but that proved too costly to be sustainable.

• **Incentive spirometer.** The program provides training on how to use the incentive spirometer machine, which helps patients take deep breaths to open their airways. The idea is to prevent fluid or mucus from building up in the lungs. Patients like using the machine, Englesbe notes. "We're not sure of the data on this, but patients like it, so we accepted it in our program," he adds.

• **Positive psychology.** The program focuses on positive psychology or stress management to help patients bring an optimistic mindset to their operation.

Often, patients are anxious before a surgical event. Positive psychology can help them take some control of that. "Anxious patients don't do as well," Englesbe notes.

The program focuses on teaching visualization and provides reading materials. Other techniques can include helping patients set goals of care, identify the best positive outcomes, practice deep breathing exercises, and other stress management methods. "We've created a pragmatic program, largely designed in partnership with patients to see what they need," Englesbe reports.

Starting a prehabilitation program in a surgery center faces a buy-in challenge among physicians: "It's hard to change behavior and clinical practice among doctors," Englesbe acknowledges. "If you do something fancy with a bunch of technology, it gets complicated really quick."

Some payers might provide incentives for physicians to focus on prehabilitation, but this trend is in its early stages. Payers need to see more evidence that the program can save money, which is what Englesbe's research shows.

"No one would argue this isn't good for patients, but the study also shows it saves money," he says. "We work with a payer in Michigan to incentivize physicians or hospitals to do the work; we don't pay them all that much, but it's enough to change the practice." For instance,

the study showed that patients who went through the program received care that was $1,500 cheaper. These savings were attributed mainly to the reduced need for nursing home care, Englesbe says.[1]

Patients also enjoy the program because it gives them a way to be empowered and participate in their care.

"We're working hard to develop this program across the state of Michigan and beyond," Englesbe says.

A national model that is similar in its practice and goals is Strong for Surgery, developed by the American College of Surgeons. *(Editor's Note: To learn more about this program, please read this article from the January 2019 issue of* Same-Day Surgery*, at this link: http://bit.ly/30WwgJt.)*

"In the future, prehabilitation for surgery will be the standard of care, but it takes a long time to get there," Englesbe says. "The point is that the more we can do to prepare patients for their operations physically and psychologically, the better." ■

REFERENCES

1. Mouch CA, Kenney BC, Lorch S, et al. Statewide prehabilitation program and episode payment in Medicare beneficiaries. *J Am Coll Surg* 2019; Dec 5. pii: S1072-7515(19)32217-3. doi: 10.1016/j.jamcollsurg.2019.10.014. [Epub ahead of print].
2. Lau CSM, Chamberlain RS. Prehabilitation programs include exercise capacity before and after surgery in gastrointestinal cancer surgery patients: A meta-analysis. *J Gastrointest Surg* 2019; Nov 25. doi: 10.1007/s11605-019-04436-1. [Epub ahead of print].
3. Marchand AA, Suitner M, O'Shaughnessy J, et al. Feasibility of conducting an active exercise prehabilitation program in patients awaiting spinal stenosis surgery: A randomized pilot study. *Sci Rep* 2019;9:12257.

Transitional Service Nurse Case Manager Can Help With Post-Op Pain

Pain management after surgery can improve with a coordinated care approach that includes the use of a transitional pain service nurse case manager, according to best practices developed by the George E. Wahlen Department of Veterans Affairs (VA) Medical Center in Salt Lake City.

This model can improve coordination, improve patient satisfaction, and reduce postoperative opioid dependency, says **Michael J. Buys**, MD, anesthesiologist and section chief for acute pain service at the George E. Wahlen VA. In light of substance use disorders, there is a need for surgery centers to continue to coordinate and manage patients' care after surgery, Buys says.

"The way it usually happens is patients visit with surgeons in their office, and there's a discussion of post-op pain, but there is not coordinated care to address increased risk or concern [of opioid use]," he explains. "Surgeons and the anesthesiologist would manage pain at the operative time, then the surgeon writes a prescription for post-op pain."

Within a few weeks after surgery, the surgeon is no longer involved in the patient's pain management. If patients need help with their pain, they go to their primary care provider or the ED.

"What happens, and not for an insignificant number of patients, is they continue to receive opioids, and that may persist for years after their surgery," Buys laments. "We felt there was a need for better pain coordination, and we could do a better job. Maybe we could intervene and stop chronic opioid use, so we developed the transitional pain service in January 2018."

The transitional pain service includes pain experts, including a nurse practitioner, psychologist, nurse care coordinator, and an anesthesiologist. Based on internal data, the VA found that prior to the program, about 6% of postsurgery patients developed chronic opioid use after orthopedic surgery. After the program, none did, Buys reports.

"For people, who were opioid-naïve ... prior to surgery, we made sure they didn't develop opioid dependency after surgery," he says. "Historically, 5% to 13% of opioid-naïve patients, prior to surgery, have their surgery and then get opioids after surgery and never get off of them. Years later, they're still getting prescriptions for opioids."

Nearly half of patients who already were chronic opioid users prior to surgery were completely off opioids within 90 days after surgery. Half of these who continued using opioids had reduced their use by an average of 50%, Buys says.

There was anecdotal evidence that patients were pleased with the case management approach. "I've run into three veterans who I've taken care of. They stopped me in the hall to give me a hug or high five, telling me what a difference it has made to them to feel that someone cares for

them," says **Kimberlee Bayless**, DNP, FNP-BC, APRN, nurse practitioner in acute pain service and director of transitional pain service at the VA.

Warm handoffs help. "We provide coordinated care of patients to get them where they need to be," Buys says.

For instance, the patient might need to see a mental health provider or a chronic pain doctor. "We actually go with patients to their primary care provider [PCP] appointments," Buys says. "We're there for the first postsurgical visit to help the [PCP] understand what happened, what our goals are, and what our plan is so we're all on the same page."

As part of the warm handoff, Bayless will contact the PCP before the appointment and ask if she can join. "One thing that lends itself to our service nicely is that as a VA, we're a closed network, and veterans see providers all within the VA system," Bayless explains. "We have a video connect or telehealth, and I connect with the provider through the computer while sitting at my desk."

It did not take long for PCPs to become big fans of the transitional pain service because they liked that someone provides recommendations for care, Buys says. "They've been very receptive," he adds. "We take the time needed with the patient, and we have a relationship with the primary care physician."

Care coordination relies on a surgical team approach. The trust and communication between the providers has resulted in surgeons not renewing prescriptions for opioids when the transitional pain service team has explained the goals of tapering patients off opioids, Buys says.

"They reach out to us now," he says. "If they have a patient who might have surgery and is high risk, they'll reach out to us ahead of time before they fill a new prescription for opioids."

The transitional pain service team's most critical part involves personal interactions. "We have considered ways to do the service via apps and electronically, but I feel it would not be the same," he says. "The personal contact they have with us, and especially with our nurses, is important."

Hearing the case manager nurse talk about pain alternatives to opioids and the patient noticing the nurse is listening to his or her concerns is essential. "They trust us because they know the nurses are interested in them and care about their outcomes," Buys says.

"The No. 1 thing that is a success is a real relationship with surgical teams, nursing staff, primary care providers, and with patients," Bayless observes. "Each of those relationships is important to provide a successful patient outcome."

The team works together for a common goal, wanting what is best for patients. "I've had days where I had to use my entire day to take care of one veteran because that was what was needed," Bayless recalls. "If there's a veteran in crisis, we do whatever it takes to give the veteran what is needed."

This is why the success rates are high, she adds. "Veterans know that if they have a question about their pain, we'll answer that question and help them get physical therapy and other care," Bayless says.

(Editor's Note: For more information on this topic, please read this article from the August 2019 issue of our sister publication, Hospital Case Management*, on the Relias Media website: http://bit.ly/38zEppQ.)* ■

The Inner Workings of a Successful Transitional Pain Service Program

A transitional pain service nurse program that uses case management can help reduce opioid dependency and provide better pain management, following these techniques:

• **Identify at-risk patients.** "We try to identify patients on chronic opioids as soon as they're indicated for surgery," says **Michael J. Buys**, MD, anesthesiologist and section chief for acute pain service at the George E. Wahlen Department of Veterans Affairs (VA) Medical Center in Salt Lake City. Also, they identify patients with severe anxiety or depression and a history of active or prior substance abuse. These patients tend to struggle with pain after surgery, Buys adds.

• **Educate extensively about pain presurgery.** "We meet with patients to educate them about what to expect with surgery and pain after surgery," Buys explains. "We discuss pain medication and opioids and set up the expectation that opioids are only to be used for severe breakthrough pain."

Staff also educate patients on alternative pain treatment. Patients meet with the psychologist, who provides support with pain coping mechanisms, identifies underlying issues related to pain, and helps with nonpharmacological solutions and pain therapy.

"We don't do pain scores anymore," Buys says. "We talk about

pain function and how it's important to get rest to heal and to do physical therapy and, if they have thoracic surgery, to take deep breaths and cough."

The transitional pain service team's goal is to help patients understand they will not be pain-free right after a procedure. Still, opioids must be used only in the short term.

"If patients are struggling after surgery, we remind them what we told them before," Buys adds. "So much is going on, it's hard for patients to take it all in at one visit. We contact them and reinforce the education."

• Require opioid taper before surgery. The team helps patients taper opioid use before surgery. "We require a 50% reduction in opioids prior to doing surgery on them," Buys says.

At the time of surgery, the program includes a multimodal analgesic approach: preoperative Tylenol, anti-inflammatory medication, and Lyrica. Patients receive anesthesia and a nerve block during surgery, and then continue with a nonopioid multimodal medication after surgery.

"Opioids are for breakthrough pain," Buys says. "They should take opioids for severe pain, and then stop it, depending on the kind of surgery, usually 10 to 14 days after surgery."

• Provide consistent follow-up. After a procedure, the transitional pain care team calls patients two days after, one week after, three weeks after, and then monthly for three months. "We make the first call at two days after discharge, whether they're hospitalized or go home the same day," says **David Merrill**, RN, BSN, nursing care coordinator for transitional pain service at George E. Wahlen VA. "We feel like the second-day call and the seven-day call are extremely important. We provide an RN to phone the patient and answer questions about their post-discharge instructions. What we mainly find is what patients hear and what they're taught are not the same thing."

For instance, some patients will take their pain medication every six hours, regardless of whether they need it, instead of every six hours, as needed, Merrill says. "We give them education and guide them to a better outcome right from the beginning," he adds. "We're also successful in following up with questions they have."

Usually, the team will know if the patient is struggling by the third week after surgery, he says. "If we see a patient not yet coming down or tapering off opioids, appropriately, then we'll involve one of our nurse practitioners or consult the clinical psychologist for help, as well as Dr. Buys," Merrill explains. "We meet weekly as a group to talk about the case and to understand where patients are."

The calls and follow-up continue. Those with chronic opioid use are contacted more frequently. "If they're struggling with pain and not off opioids, we call them weekly," Buys says. "If they're off opioids, we follow up with them at least monthly."

Initially, the transitional pain care program was for orthopedic patients undergoing total joint procedures. "After we saw the success we had with these patients, we brought in surgical specialties, any elective surgery," Buys reports. "It's a mixture of inpatient and outpatient surgery."

• Meet weekly to discuss cases. "From the very beginning, we established a weekly interdisciplinary pain board meeting to talk about pre-op patients and post-op patients," says **Kimberlee Bayless**, DNP, FNP-BC, APRN, nurse practitioner in acute pain service and director of transitional pain service at the George E. Wahlen VA. "We talk about pain plans and discuss the post-op patients that have not started to taper medications at that 21-day postsurgery."

The team also discusses patients who report chronic pain. For instance, some patients who come in for total knee replacement might also experience chronic back pain, she notes. "We address other pain complaints for them," Bayless explains. "Anesthesiologists, certified in chronic pain, have started to address what other modalities and medication could help with pain, without opioids."

The team talks about provider appointments for which the transitional pain service team needs to be involved, Bayless adds. Sometimes, the team might make suggestions to primary care providers about interventions that could help patients.

"We have developed a dashboard that helps with our tracking patients and providing care coordination," Bayless notes.

(Editor's Note: For more information on this topic, please read the June 2019 issue of our sister publication, Case Management Advisor*, at this link: http://bit.ly/2RHOF8I.)* ■

COMING IN FUTURE MONTHS

- Safety focus helps reduce serious adverse events
- Improve staff communication through PEARLS
- Approach cost reduction as quality improvement
- Learn about surgical attire guideline changes

Reducing Surgical Stress for Patients

By Stephen W. Earnhart, RN, CRNA, MA
CEO, Earnhart & Associates, Austin, TX

Ordinary people do not understand what surgeons do every day. They do not see other people's guts and blood, see them naked and completely reliant upon drugs, hooked to machines to keep them alive and bring them back from the seeming brink. The general public may be terrified of what we see every day. That terror is completely normal to laypeople, and we must become more adept at recognizing it, minimizing it, and dealing with it. Most of us fear the unknown. What happens in surgery to millions of people every day is unknown, ergo, terrifying. From the simplest procedure to the most complex operation, it is difficult for the layperson to understand. Let us all try to help our patients deal with it by reviewing what you already know and hopefully follow.

• **Patient education.** Use your website to give patients a tour of your facility. Create a staff member video that walks through the registration desk with a simulated patient. Explain what happens there, how long it takes, who will greet patients, what they need to have with them, and what forms they need to sign (and what those forms mean). Do not ambush your patients with these unknowns when they walk in your facility for a procedure.

From there, the video could guide patients into pre-op where a staff member explains the process. This would include who the patients will meet, what the staff will ask them, and what clothes need to come off (many patients are afraid they have to take off their underwear; some do, some do not — explain that). Use the video to inform patients they will meet someone from anesthesia, that a nurse will ask them questions, and that their surgeon will review the procedure, including marking the surgical spot on the body. Let patients know they will have an opportunity to use the bathroom before the procedure if they need it (a serious concern for older patients). Also, inform patients that it is not uncommon for them to be in pre-op for a period until their room is ready.

In the video, include footage of a stretcher wheeling into the operating room. Describe the temperature (cold, but patients can have a warm blanket if they want). Film the operating room with masked and gowned staff moving around and instruments clanging in the background. Explain to patients that they most likely will see the same anesthesia provider they saw in pre-op.

Near the end of the video, include footage of staff wheeling a faux patient into PACU. Briefly explain that once they arrive, a new team of professionals will attend to patients and prepare them to go home. Let them know their loved ones will be able to join them there and learn how to help them when they arrive home.

If you cannot put this video on your website, consider playing it on a loop on the TV in your waiting area. If you cannot do that, consider asking patients to come to the facility a few days before surgery. Introduce patients to the staff and provide as much information about the door-to-door experience as possible. You also can direct patients to YouTube to watch the video, or you can send a link to the video by email or text. The technology is there — take advantage of it.

• **Your facility.** Ensure the driving directions to your facility are clear. Nothing raises patient anxiety more than getting lost and frustrated by poor directions.

Make sure the waiting room drips with a sense of security by keeping it neat, clean, smelling fresh, and staffed with receptive, smiling faces. At the end of each day, a staff member should walk through the waiting room to ensure it is in order for the next morning.

Minimize the patient's arrival time before surgery. No one wants to feel their time is wasted and disrespected by waiting an unreasonable length of time. A benchmark goal from arrival to OR should be 45 minutes.

• **Discharge.** The patient and their accompanying family or friends cannot wait to leave. In their haste to escape, recognize patients will hear or retain little of what you tell them. Give them detailed written information that includes a phone number they can call to ask questions after they get home. Hopefully, someone from your facility will follow up with a phone call that day (ideally) or within a few days after discharge.

Patients talk about their experiences to other people and on social media. Be sure you look your best when they speak of you. ■

(Earnhart & Associates is a consulting firm specializing in all aspects of outpatient surgery development and management. Address: 5114 Balcones Woods Drive, Suite 307-203, Austin, TX 78759. Phone: (512) 297-7575. Fax: (512) 233-2979. Email: searnhart@earnhart.com. Web: www.earnhart.com. Instagram: Earnhart.Associates.)

SAME-DAY SURGERY

PHYSICIAN EDITOR
Steven A. Gunderson, DO, FACA, DABA, CASC
CEO/Medical Director
Rockford (IL) Ambulatory Surgery Center

NURSE PLANNER
Kay Ball, PhD, RN, CNOR, CMLSO, FAAN
Professor of Nursing
Otterbein University
Westerville, OH

EDITORIAL ADVISORY BOARD
Stephen W. Earnhart, RN, CRNA, MA
President and CEO
Earnhart & Associates
Austin, TX

Ann Geier, MS, RN, CNOR, CASC
Vice President
Clinical Informatics, Surgery
SourceMedical
Wallingford, CT

John J. Goehle, MBA, CASC, CPA
Chief Operating Officer
Ambulatory Healthcare Strategies
Rochester, NY

Jane Kusler-Jensen, BSN, MBA, CNOR
Specialist Master, Service Operations/
Healthcare Providers/Strategy
& Operations
Deloitte
Chicago

Mark Mayo, CASC, MS
ASC Administrator
Associated Surgical Center
Arlington Heights, IL

Roger Pence
President, FWI Healthcare
Edgerton, OH

Sheldon S. Sones, RPh, FASCP
President, Sheldon
S. Sones & Associates
Newington, CT

Rebecca S. Twersky, MD, MPH
Chief of Anesthesia
Josie Robertson Surgery Center
Memorial Sloan Kettering Cancer Center
New York City

Interested in reprints or posting an article to your company's site? There are numerous opportunities for you to leverage editorial recognition for the benefit of your brand.
Email: reprints@reliasmedia.com
Phone: (800) 688-2421

Discounts are available for group subscriptions, multiple copies, site licenses, or electronic distribution. For pricing information, please contact our Group Account Managers:
Email: groups@reliasmedia.com
Phone: (866) 213-0844

To reproduce any part of Relias Media newsletters for educational purposes, contact The Copyright Clearance Center for permission:
Email: Info@Copyright.com
Phone: (978) 750-8400

CME/CE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.

2. Log on to **ReliasMedia.com** and click on My Account. First-time users must register on the site. Tests are taken after each issue.

3. Pass the online test with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.

4. After successfully completing the test, your browser will be automatically directed to the activity evaluation form, which you will submit online.

5. Once the completed evaluation is received, a credit letter will be emailed to you.

CME/CE QUESTIONS

1. **In August 2019, the Centers for Medicare & Medicaid Services issued a proposed rule to remove which surgery from the inpatient-only list?**
   a. Brain surgery
   b. Total hip arthroplasty
   c. Shoulder replacement
   d. Total knee arthroplasty

2. **Devised to improve healthcare for older adults, what are the Institute for Healthcare Improvement's 4Ms?**
   a. Mental health, Mobility, Medication, Mass (BMI)
   b. Movement, Muscle health, Medication, Mental health
   c. Medication, Mentality, Mindfulness, Measurements
   d. (What) Matters, Medication, Mentation, Mobility

3. **Prehabilitation programs can help surgery patients improve which outcomes?**
   a. Exercise capacity, preoperative ranges of motion, walking capacities
   b. Breathing volume, postsurgery pain, cognitive alertness
   c. Rehabilitation, return to work
   d. Infection rate, activities of daily living

4. **According to the American Society for Quality, what are the five S's used to organize workspace?**
   a. Space, Select, Store, Send, Standardize
   b. Sell, Store, Size, Scrub, Sustain
   c. Sort, Set in order, Shine, Standardize, Sustain
   d. Select, Size, Store, Sell, Sort

CME/CE OBJECTIVES

After reading *Same-Day Surgery,* the participant will be able to:

- identify clinical, managerial, regulatory, or social issues relating to ambulatory surgery care;
- identify how current issues in ambulatory surgery affect clinical and management practices;
- incorporate practical solutions to ambulatory surgery issues and concerns into daily practices.

SDS ACCREDITATION UPDATE

Covering Compliance with TJC, AAAHC, AAAASF, and Medicare Standards

Focus on Preventing Medication Errors in 2020

Surgery centers could mark 2020 as the year to focus on quality improvement projects to prevent medication errors. Accreditation agencies have published information that can help.

The Accreditation Association for Ambulatory Health Care (AAAHC) recently released a benchmarking study about medication errors and medication reconciliation.[1] AAAHC notes that medication errors cost $21 billion in annual healthcare costs. There are 3.5 million physician office visits and 1 million ED visits that result from medication errors.

The AAAHC report authors noted many ambulatory healthcare organizations struggle with documentation as well as updating and verifying medication records, all of which contributes to patient complications and overall costs.

The goal is for surgery centers to document patients' allergies and sensitivities in medical charts consistently. The study revealed that 86% of charts included this documentation, according to **Belle Lerner**, MA, assistant director of the AAAHC Institute for Quality Improvement. About 65% of charts included documentation of patients taking the medication as prescribed, Lerner adds.

"The organizations voluntarily participate and submit 15 to 25 cases, and those are chart-reviewed," she explains. "Another key finding is in regard to changes of medications prior to a procedure. Eighty-one percent documented the number of days in which the patient was instructed to stop the medication, prior to the procedure, and 90% indicated the patient was instructed to resume any stopped medication post-procedure."

When a patient does not resume a critical medication, such as an antiplatelet or anticoagulant, repercussions can be life-threatening. The study revealed ambulatory facilities performed well with single-source medication documentation, with 99% achieving that goal, reports **Naomi Kuznets**, PhD, vice president and senior director of AAAHC Institute for Quality Improvement. "We were very happy to see levels of 99% for single-source documentation," Kuznets says. "The thing we were more concerned about was documentation of the number of days to stop medication prior to the procedure."

As surgery centers focus on preventing medication errors, one technique is to use a machine learning system that sends alerts when potential mistakes are identified. A recent study revealed that an automated system (MedAware) for identifying prescription errors can generate many clinically valid alerts that otherwise might be missed. More than 80% of the alerts were valid, while nearly 63% were considered of medium or high clinical value.[2]

"In this study, we assessed a novel solution to identifying prescription errors, mainly — but not only — in hospital settings," says **Ronen Rozenblum**, PhD, MPH, director of the unit for innovative healthcare practice & technology, Brigham and Women's Hospital in Boston, and assistant professor of medicine at Harvard. "Based on data, I believe this addresses a huge need in the area of prescription safety. We're talking about $20 billion annually in problems with prescription errors."

Current solutions to the problem mostly focus on rule-based, decision-support systems, working based on the indication and contraindication of medications.

"Looking at the big picture, we're entering an era where we'll see more healthcare organizations that use data and analytic tools to improve quality of care," he says. "We've heard of this big solution for a while, but we're reaching a tipping point of why using big data tools can do this."

The machine learning system works with big data analytics, identifying three outliers:

- **Clinical outliers**: Patients receive the wrong medication;
- **Time-dependent outliers**: Patients are prescribed the correct medication for a specific point in time, but later

when the patient's clinical situation changes the medication no longer is what is best for the patient;

• **Dose outliers**: The medication is correct, but the dosage is wrong for this particular patient.

Investigators evaluated more than 700,000 patients who logged at least one outpatient visit with a provider affiliated with Brigham and Women's Hospital or Massachusetts General Hospital within a two-year period between 2009 and 2013.[2]

The software system developed its algorithms through random selection and analysis of half the total patient population. The system generated thousands of alerts, including all three outlier categories. Most alerts were related to time-dependent outliers. The authors reviewed 300 alerts in depth. The machine learning system proved more accurate than the regular electronic alert system.

"Our study was retrospective, and we assessed whether our own homegrown system had flagged the alerts," Rozenblum explains. "We found that 68% of the alerts had not been generated by the existing system."

Rozenblum and colleagues also examined the economic cost of the healthcare system failing to prevent medication errors. They found there was a potential cost savings of $60.67 per alert, mainly because of the prevention of adverse drug events.

"We had a health economist on our team assess the potential cost savings, and we found it saved $1.3 million in healthcare costs just for this cohort," Rozenblum says. "Until now, we didn't have significant evidence-based data that show the clinical data and economic data for machine learning. Based on our study, it's a promising solution for healthcare that could save lives and also save money."

Surgery centers already are trying to prevent medication errors, Kuznets observes, but not all organizations ensure patients receive sufficient instructions about stopping and starting medications before and after procedures.

"The chances are there will be some patients that end up in the hospital because they started their medication too early and bled," Kuznets says. "Or, they failed to start their medication on time to counter issues related to blood clotting, and ended up hospitalized."

Sometimes, surveyors are asked what to do about situations in which a physician's office has patient information about allergies, but that information is not included in the surgery center's records, Kuznets reports.

The answer is for surgery centers to check medications and allergies on the day of surgery instead of relying on the pre-op visit information. This is good practice regardless of whether the physician's information was shared with the surgery center, Kuznets offers.

"Things can change between when the pre-op evaluation is done and you get it within the center," Kuznets explains. "You should find out whether the patient discontinued the medication they were supposed to in a certain period."

AAAHC is focusing on medication reconciliation because this was identified as a high deficiency area in a quality roadmap report several years ago, Lerner notes.

"There are organizations that struggle with appropriate medication reconciliation. Although some do a pretty good job, we would like to continue monitoring it," Lerner adds. "We have several tools available for our organizations that struggle with medication reconciliation.

AAAHC offers a medication reconciliation form as well as a patient safety toolkit and an e-learning module that helps organizations institute best practices for medication reconciliation. *(Editor's Note: A blank medication reconciliation form can be viewed at: http://bit.ly/2unEBJY. The toolkit and module are available for purchase at: http://bit.ly/2tGofw3.)*

AAAHC's medication information includes best practices shared from the Agency for Healthcare Research and Quality (AHRQ). For instance, AHRQ provides a patient safety primer on medication reconciliation, which was updated in September 2019. The primer provides evidence-based data about interventions to prevent medication errors and lists challenges in achieving safety improvements via medication

AAAHC MEDICATION RECONCILIATION STANDARDS

These are the five medication reconciliation standards of the Accreditation Association for Ambulatory Health Care (AAAHC):

- Standard 4.D.4: Medication reconciliation performed;
- Standard 6.F.7: Entries in the patient's clinical record for each visit include, at minimum, any changes in prescription and nonprescription medication with name and dosage, when available;
- Standard 7.11.A.2.b: The written patient safety program includes processes to reduce and avoid medication errors;
- Standard 10.1.1.2.a and b: At minimum, health histories include current prescription and nonprescription medications and medication dosages, when available;
- Standard 10.Q.2: Patients are provided with written instructions for self-care before and after surgery/procedure, written instructions for discontinuation or resumption of medications before and after a procedure are provided.

reconciliation. *(Editor's Note: Much more information is available online at: http://bit.ly/2G4BZ6i.)*

Health systems likely will be the early adopters of big data analytics, but surgery centers and other providers may follow their lead soon, Rozenblum predicts. "The benefits outweigh the obstacles," he says. "It can work if you're really solving a big problem that's a real threat to patients' lives, and you're also saving money for an organization."

Market forces and a change in culture could hasten this adoption. Just as healthcare systems have evolved over the past decade by incorporating electronic medical record (EMR) systems, they likely will begin using machine learning systems to prevent medication errors and other adverse events.

"Fifteen years ago, not a lot had EMRs, and now a majority of health systems have EMRs," Rozenblum notes. "Now, we're moving from this generation of a rule-based system to a more sophisticated system that uses big data and predictive analytics. It's the next big jump, and we're one of the first to have evidence around that." ■

REFERENCES

1. Accreditation Association for Ambulatory Health Care. AAAHC publishes medication reconciliation benchmarking study findings. Published Dec. 12, 2019. Available at: http://bit.ly/2TMNA28. Accessed Jan. 22, 2020.
2. Rozenblum R, Rodriguez-Monguio R, Volk LA, et al. Using a machine learning system to identify and prevent medication prescribing errors: A clinical and cost analysis evaluation. *Jt Comm J Qual Patient Saf* 2020;46:3-10.

AORN Issues Statement on RN and Surgical Technician Orientation

The Association of periOperative Registered Nurses (AORN) recently issued a position statement about orientation that emphasizes teamwork, safety, and competency assessments in orienting perioperative RNs and surgical technologists (ST).

Titled "Orientation of the Registered Nurse and Surgical Technologist to the Perioperative Setting," the position statement suggests teamwork is an essential element in a successful orientation program. *(Editor's Note: This statement is available for download at: http://bit.ly/2FXkrZZ under the heading "Education & Orientation.")*

"Teamwork is essential in all facets of healthcare," says **Jan Davidson**, MSN, RN, CNOR(E), CASC, director of the ambulatory surgery division for AORN. "In the perioperative environment, it is essential that the entire surgical team function as a true team during a surgical procedure."

For instance, the ST role is extremely important and respected, although STs might believe they are at a lower status than other professionals in the surgical suite. This impression can make them reluctant to speak up, even when they have something critical to contribute, Davidson observes.

"There should be no hierarchy in the operating room," she says. "Encouraging the entire team to call each other by first names, including physicians, tends to level the playing field. That may be one way to encourage open and honest communication."

AORN says in its position statement that orientation for a novice perioperative RN may be six to 12 months, and the orientation for a novice ST is up to six months. Orientation and training take time when conducted well.

"There is so much to learn when first going to work in the OR. Unfortunately, nursing students are typically not introduced to the OR during their clinical rotations in school," Davidson laments. "That is likely why it is so hard to find young nurses who have an interest in surgery."

The perioperative RN needs to understand anatomy, physiology, and the pathophysiology of patients' surgical conditions. They should understand normal lab values, different surgical modalities, proper positioning, instrumentation specific to the surgical procedure, other equipment used in the OR, and any operating suite risks.

"They should know how to troubleshoot if equipment malfunctions in the middle of the case," Davidson adds. "They must understand radiation safety, tourniquet safety, and laser safety."

A year is ideal for orientation; less than six months would be a mistake, Davidson suggests. "It would not be safe for the patient, nor would it be fair to the new perioperative registered nurse if they were turned loose in less than six months," she explains.

Training new nurses is challenging and costly, but necessary. "They cannot really be counted as a productive employee yet. That will show as a negative on your payroll for the period of time they are training," Davidson explains. "Be sure your physician owners are aware of that before you begin a new Periop 101 program."

Surgery center leaders also should understand productivity and its effect on patient satisfaction and the bottom line, Davidson adds. "Another critical piece of training for

a new nurse or surgical technologist is making sure they understand the facility's supply costs and utilization of block scheduling," she says.

AORN's position statement lists nearly 60 topics of education for STs and RNs. These fall under the categories of safety, physiological responses, infection prevention and control, behavioral responses, and health systems.

For instance, under the category of health systems, there is information about certification, career advancement, code of conduct, communication, and critical thinking. The behavioral responses category includes information about advance directives, advocacy, age-specific policies, cultural/population-specific policies, and others.

"There are many different cultures and religious beliefs that are critical for a perioperative nurse to understand," Davidson says. "For example, a patient who is a Jehovah's Witness generally will not accept blood or blood products. That is an important piece of information for everyone on the surgical team to know before the surgery."

Patients' cultural identification also can affect how they answer questions about pain and discomfort. For instance, people of Irish descent, as a group, tend to minimize their expressions of pain, according to Davidson.

"It is also true of many cultures ... that the patient's family must be the first to be told of a poor prognosis. The family then decides how much the patient should know," she says. "That would be important information for the surgical team to know and to allow the surgeon and patient an opportunity to have that conversation before surgery ever begins."

Body language differs by culture, too. "Some may see lack of the patient making eye contact as a lack of respect, embarrassment, or depression," Davidson says, while others may view that as showing respect.

> "IF A NEW RN OR ST TRAINS WITH DIFFERENT STAFFERS DAILY OR WEEKLY, THIS COULD LEAD TO CONFUSION AND BAD HABITS."

Likewise, some healthcare providers believe a light touch might demonstrate empathy to patients. But for patients who are Orthodox Jews, touching (outside of hands-on care) is prohibited.

STs and RNs also should learn about working with elderly patients. "Age-specific policies, procedures, and competencies are an extremely important part of operating room training," Davidson stresses. "There are age-related physiologic changes that occur during surgery that the perioperative nurse should know." One example is the assessment of an elderly patient for the risk of developing a pressure ulcer, using the Braden scale.

Informed consent also requires specific training. "The perioperative registered nurse must follow the policy and procedure of their facility and their accreditation organization's standard with regard to informed consent," Davidson says. "Some facilities do allow anyone on the surgical team to obtain the signature on the informed consent. Ultimately, the surgeon is responsible for knowing the patient's questions have been answered and the patient is capable of making an informed decision."

The AORN position statement also advocates for surgery centers to use a preceptor system when orienting new RNs. This practice is ideal for training purposes, Davidson notes.

"Have the new RN or ST partner with one particular person who will provide them with their orientation, training, and mentoring," she offers. "Most of us who work in the OR have a system we use consistently on all of our patients. It is generally methodical and deliberate so that no steps are left out."

A mentoring system that is not consistent can cause confusion. "If the new RN or ST has to work with someone different either daily or weekly, it can become confusing and may even promote some bad habits," Davidson warns. ■

Assess • Manage • Reduce
Healthcare RISK

Listen to our free podcast!

Episode 8: Hiring Unicorns in Healthcare: Overcoming Barriers to Effective Hiring

www.reliasmedia.com/podcasts

ROUNDS WITH RELIAS