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The Source

FIRST QUARTER 2018
VOLUME 13 | NUMBER 1

THE VALUE OF A SEAMLESS INTEGRATION

How John Doll and his RWJBarnabas Health team transformed supply chain operations before, during and after a merger

HealthTrust Member Recognition Award Nominations DUE MARCH 12 See page 46

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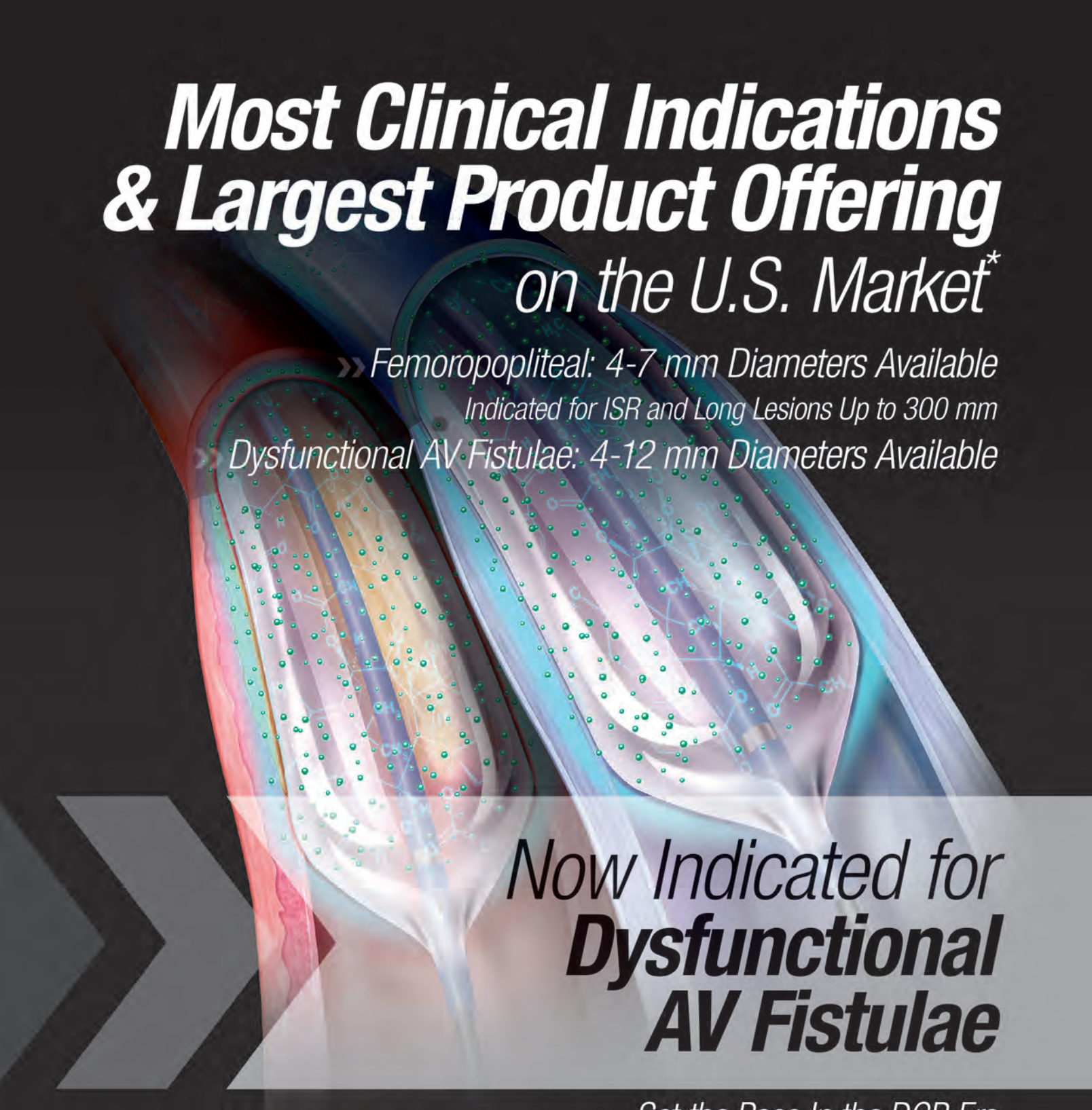

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Photography by Steve Hockstein

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Proclaiming resolutions in anticipation of a new year is an annual tradition many of us take part in. You don't have to look far for advice on goal setting to encompass any aspect of life, whether at work or at home.

Has your organization set its goals for the new year? What's your role in achieving them? Have you set personal and professional development goals for 2018?

Growing Personally & Professionally

To assist with personal and professional development for staff within its member facilities, HealthTrust is pleased to offer complimentary continuing education opportunities in a variety of disciplines. Visit www.healthtrustpg.com/education and share the site with others in your facility or health system to take advantage of live and on-demand webinar opportunities, many of which offer free CE credit.

We also are pleased to publish this magazine as a resource—continually rated a valued benefit of membership by our readers in quarterly surveys. Thank you to our supplier community for its continued support of this publication through paid advertising. Visit *The Source* online at www.healthtrustsource.com. (The password and username can be found at the bottom of the homepage on the HealthTrust member portal or email thesource@healthtrustpg.com to request them. Want to receive a hard copy? Check your HealthTrust PASS profile and make sure *The Source* magazine is selected within your preferences. Contact customer service for assistance.)

Organizational Growth & Improvement

If performance enhancement in supply chain management, clinical operations, or labor management and productivity made your organization's to-do list for 2018, we can help.

HealthTrust's inSight Advisory Services recently launched a set of Performance Capability Scorecards to assist health systems in understanding their current practices and capabilities in these three areas, as well as compare them to the practices of other industry-leading health systems. The complimentary scorecard service ultimately helps members accelerate their efforts to improve operational performance and financial health.

And, of course, we're always here to provide guidance on enhanced contract compliance and other purchasing initiatives designed for members to obtain maximum value from HealthTrust's med/surg, commercial products, purchased services and pharmacy portfolios.

Simply reach out to your account director to find out how HealthTrust can collaborate with you to meet the 2018 goals you've set.

The Year Ahead

In early February, we are excited to welcome **John J. Young**, M.D., as our new chief medical officer. He previously served as national medical director for LifePoint Health, leading strategic initiatives related to quality, patient safety, scope of services, performance measurement and clinical operations across the system's 71 hospitals. As HealthTrust CMO, John will advance a clinically integrated supply chain agenda in support of the clinical and financial outcomes critical to our member providers' success as well as continue to grow our Physician Advisors Program. You will hear from John regularly through this magazine, beginning with the second quarter edition in early May.

On March 1, Prime Healthcare and its 45 hospitals and affiliated facilities throughout 14 states will join HealthTrust for group purchasing and supply chain optimization. As part of our collective, we look forward to collaborating with their team and sharing best practices to advance close working relationships between physicians and other caregivers essential in the selection of high-quality products, reducing operating costs and enhancing patient outcomes.

2017 in Review

Along with a competitive market assessment, industry research and feedback from member business reviews, results from HealthTrust's annual member satisfaction survey are utilized as part of our planning process for each new year. As we reflect on 2017, I wanted to share the results of the annual survey that was offered in the third quarter. While we are pleased with the survey results overall, we acknowledge there is always room for improvement. Acting on some of the feedback also becomes part of individual department initiatives for 2018.

More than 800 members responded to the 100-question survey, with 87 percent indicating they believe HealthTrust provides a superior value in the marketplace.

While all nine areas covered by the survey saw increases in their individual scores, areas rated the highest were HealthTrust advisory boards, account management and customer service.

The 2017 survey responses revealed HealthTrust's highest Net Promoter Score (NPS) to date. The NPS is a customer loyalty measurement and ours has seen a steady improvement since the member satisfaction survey began in 2008.

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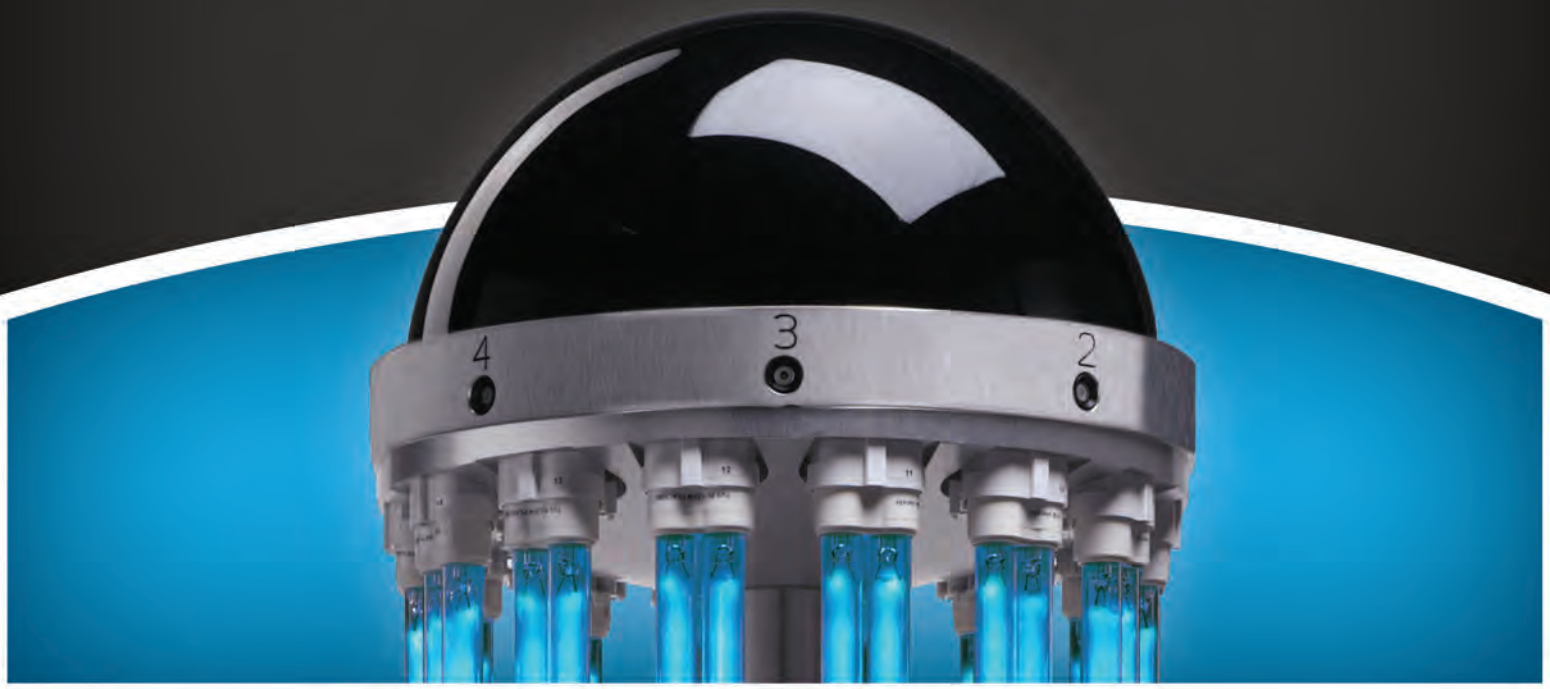

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SOURCEBOOK

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Antimicrobial Stewardship Goes Mainstream

In July 2016, the Food and Drug Administration (FDA) issued a safety alert on the serious side effects associated with quinolones, a class of antibiotics that includes ciprofloxacin and levofloxacin. These drugs are convenient in many ways, notably because they treat a broad range of infections and are effective both intravenously and orally. But they have a debilitating and permanent impact on tendons, muscles, joints, nerves and the central nervous system. The drug class is also associated with a higher risk for *Clostridium difficile* (C. diff) and the emergence of antibiotic resistance in *Staphylococcus aureus* and other bacteria.

With a robust antimicrobial stewardship program already in place, Jersey City Medical Center, a member of RWJBarnabas Health, was able to respond immediately, launching an awareness campaign that included clinician education materials, a lecture series and, the campaign's pièce de résistance, "Save the Quinolones" pins worn on the lab coats of antimicrobial stewardship team members.

"I underestimated how much wearing a pin around the hospital would get people's attention," says **Steven Smoke**, PharmD, BCPS, clinical pharmacist and co-chair of Jersey City Medical Center's antimicrobial stewardship program. "The pins were very effective as conversation starters, which was precisely the goal. We wanted clinicians to know that quinolones should be reserved for cases where alternative treatment options don't exist."

At the start of the campaign, quinolones were the most-used class of antibiotics at Jersey City Medical Center. The results are still preliminary, but Smoke estimates the campaign has helped cut usage of quinolones by half and made a small dent in the number of methicillin-resistant *Staphylococcus aureus* (MRSA) cases. This year, Smoke's team is launching a similar awareness campaign, dubbed "Why PPI?" for proton pump inhibitors, usage of which has been linked to diarrhea associated with C. diff.

A Regulatory Requirement

Clinician education like the kind being carried out by Smoke's team at Jersey City Medical Center is one of seven required elements in the Joint Commission's antimicrobial stewardship standard, which went into effect in January 2017. The standard, which largely mirrors national guidelines created by the Centers for Disease Control and Prevention, also requires hospitals to elevate antimicrobial stewardship as an organizational priority, assign a multidisciplinary team to oversee the program, develop and utilize various protocols to aid in antimicrobial stewardship, and collect, analyze and report data on the effectiveness of the program.

Jason Braithwaite, PharmD, MS, BCPS, senior director of clinical pharmacy services for HealthTrust, says meeting these requirements is proving difficult for some hospitals, especially smaller ones. Challenges include finding physician leaders who have an interest in antimicrobial stewardship and educating frontline clinicians, who may not be hospital employees.

By and large, the most common challenge facing antimicrobial stewardship programs is tracking metrics beyond the basics. Guidelines from the Infectious Diseases Society of America recommend hospitals track defined daily dose per 1,000 patient days.

But the Joint Commission is pushing hospitals to start incorporating more outcomes-based metrics, such as rates of C. diff, adverse events, morbidity and mortality. The problem for hospitals lies in both IT limitations and the inability to decisively attribute a clinical outcome to antimicrobial stewardship.

"Facilities have some good ideas about what outcomes would be important to track, but the ability to track them is more difficult than they thought," Braithwaite says.

Jersey City Medical Center's Smoke is keeping track of both antibiotic use and C. diff rates as part of its antimicrobial stewardship program. Over a one-year period, antibiotic use dropped 8 percent; however, the decrease in C. diff rates was not statistically significant. And, the question remained: Was the 8 percent drop in antibiotic use due to the antimicrobial stewardship program or something else?

"Any kind of outcome has so many variables that drawing definitive conclusions will always be hard, especially in a hospital setting where a randomized controlled trial simply isn't feasible," Smoke says. "We're forced to rely on before-and-after studies. They can't tell us something with certainty, but they're the best tool we have to demonstrate what happened."

Smoke says it's important to take the time to conduct before-and-after research with every antimicrobial stewardship initiative. "It's

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Life moves us

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natural to want to quickly move on to the next one, but if you don't demonstrate the value of a specific initiative, you'll struggle with justifying it down the road."

At Jersey City Medical Center, antimicrobial stewardship initiatives started in the last year include:

- Requiring physicians to enter a reason code with every new antibiotic prescription
- Providing selective reporting of antibiotic susceptibility to prescribers to show the narrowest-spectrum effective agents
- Creating an internal antimicrobial resource website for clinicians
- Using rapid diagnostic testing in the laboratory to more quickly identify the optimal therapy
- Focusing on the social and cultural factors that impact the prescribing of antibiotics

New Therapies Available

In 2012, the FDA created a fast-track pathway for new antibiotics, leading to the approval of a variety of antibiotics for multidrug-resistant bacteria in the past few years. Since 2015, three combination antibiotics—Zerbaxa (*ceftolozane/tazobactam*), Avycaz (*ceftazidime/avibactam*) and Vabomere (*meropenem/vaborbactam*)—have been approved to treat complicated intra-abdominal and urinary tract (including kidney) infections. While the introduction of these drugs is helping providers feel some measure of relief, Braithwaite cautions that antimicrobial stewardship remains crucial.

"These drugs need to remain niche drugs," he says. "We cannot use them on every patient, not daily, not even weekly. We must reserve them for times when first-line agents fail. If we instead start overusing them, we'll again be facing a resistance scenario where we don't have a lot of good options to treat an infection."

As new therapies come to market, HealthTrust uses its clinical advisory board review process to determine which, if any, should be added to contract.

"We're doing that now to decide if we want to narrow choice [to one or two of the new combination antibiotics] to drive maximum cost effectiveness, or bring on all three," Braithwaite says. "Because of the nature of resistant infections, it's hard to predict which ones will be needed and when, so contracting for all of them may end up being our recommendation." ●

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Organizing the Chaos

Six Ways to Make Your CODE BLUE Team More Cohesive

A 60-year-old patient—who was awake and talking to her visiting daughters earlier in the day—suddenly begins to turn purple and loses consciousness. After checking for a pulse, the patient's nurse determines the patient is in cardiac or respiratory arrest and calls a code blue. An alert goes out over the public address system, and a team of critical care professionals from across the hospital springs into action. An ICU physician, anesthesiologist, two critical care nurses and a respiratory therapist rush in to begin resuscitative efforts, shocking the patient with an automated external defibrillator and giving her a shot of epinephrine. The patient is successfully resuscitated, and everyone breathes a sigh of relief.

Though it sounds like an episode of a TV medical drama, code blue scenes like this are something every hospital needs to be prepared for. In real life, it can be challenging to coordinate a rapid, organized response involving a divergent team in the midst of tumultuous circumstances. But creating a well-oiled code blue machine can—and does—save lives.

"A code blue is a very chaotic time," says **Beverly Shields**, RN, MSN, CCRN, director of critical care and medical-surgical services at Franklin, Tennessee-based Community Health Systems. "Facilities should be able to expect organized, yet controlled chaos. It just takes a lot of preparation and practice."

Ready to make your code blues run more smoothly? Follow these guidelines:

1 **Look to the leader.** While each member of the interdisciplinary team has the requisite skills to care for the patient, code blue team members are typically unaccustomed to working with each other. That's why one of the most important ways that facilities can prepare for emergency situations is to designate which person will be the leader when a code occurs, Shields says, and make sure that person is assertive enough to command the attention of the team. In many cases, the emergency physician or ICU physician who is present at the time will take charge—but it's crucial to ensure that everyone knows the drill upfront.

A board member of the American Academy of Emergency Medicine (AAEM), **Andy Walker**, M.D., is semiretired and now practices emergency medicine in a locum tenens role. He frequently doesn't know the nurses or respiratory techs when he responds to a code on an inpatient unit, but as the emergency physician on duty, he sees it as crucial to take control and firmly assert himself as the code leader.

"The rest of the team needs a leader, so I identify myself clearly and loudly when I enter the room," Walker says. "I want to gather some background information as quickly as possible, so I simply ask, 'What's the story?'"

While Walker has rarely found team cohesion to be a problem, challenges occasionally emerge that keep the code from running as smoothly as possible. In those cases, "the leader must quickly remedy the situation," he says. "Sometimes the room is too crowded and noisy due to bystanders who have no role in the code, so I ask those without a code-related job to leave. Or someone who does have a code-related job is talking constantly and loudly, and I have to kindly ask that person to quiet down. If I am about to bring in a member of the patient's family, I remind team members to be circumspect about their comments and behavior."

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Continued from page 12

2 Define roles and delegate. Think through the different tasks that must be done for a successful code blue and assign each one to a specific professional. "Designate who will be responsible for making sure the defibrillator is turned on and who will do the charting," Shields says. "Those things need to be decided before you ever have a code."

Each member of the team provides a different perspective and skill set that other team members should be aware of, so everyone knows what to expect. "Having predetermined, well-defined roles adds efficiency to the process," says **Laura Reed**, MSN, RN, CCRN, vice president of critical care and neuro services at Reston Hospital Center in Reston, Virginia. "In reality, we are able to hold one another accountable to be sure there are no gaps in the care and treatment of the patient."

3 Seek standardization. Look for ways to standardize your team's reaction to codes, says **Tom Tobin**, M.D., an emergency medicine physician and at-large physician director of AAEM. "Not all codes are the same, but limiting variation as much as possible will make the teams more effective. Similar to airline flight crews, two pilots who have never flown together can deal with significant malfunctions due to standardization of their responses and clear hierarchy. Unlike the mechanics of airplanes, humans have many more variations, so the standardization is more difficult and in some instances impossible. However, that doesn't mean we shouldn't apply those tools where applicable and practical."

It makes sense to help code blue team members rapidly access key pieces of the patient's medical history or condition, for example. "Too many times there is a significant delay in care because someone has to search through the medical chart to get key pieces of information," Tobin says. "It was difficult with paper charts and now it is even more difficult and time-consuming with electronic health records (EHR). Access to a cheat sheet of key patient data—whether on paper or within an EHR—is critical. EHRs should have a screenshot showing the key pieces of information needed during a code blue."

4 Schedule ongoing training. Code blue teams should regularly train and perform drills to ensure they are prepared for the real thing.

"You play like you practice," Reed says. "We do mock codes regularly with the expectation that each team member will participate as if it were real. Even though you may never work with some of the members of the mock team in an actual code, we all learn what to expect from one another. That experience gets translated into good performance during actual events."

Reston Hospital Center holds a mock code blue every other month. In the months in between, the hospital alternates practicing more diagnosis-specific codes, such as ones involving STEMIs (ST-segment elevation myocardial infarctions). While patient outcomes are positive, the teams are working toward increasing timeliness and efficiency.

5 Take advantage of technology. Innovative technologies continue to provide new ways of coordinating code teams and ensuring their effectiveness. At Reston Hospital Center, each code blue team member carries a corporate-issued mobile phone that sends alerts via text messaging whenever a code is called, Reed says. That provides a means to track response time.

Technology can also be used to evaluate the effectiveness of each code blue or mock code blue. For instance, some CHS facilities have defibrillators that, after use, provide instant reports on the effectiveness of chest compressions, Shields says.

6 Cement the lesson. The ideal time to process learning and prepare for the next code blue event is right after the last one. "Postcode debriefing is one of the most important steps," Shields says. "A debriefing should include everyone who was involved in the code discussing what went well and what didn't, and what each individual should work on. It's vital for continual improvement."

About a year ago, Reston Hospital initiated a formal debriefing after each code blue. It is overseen by a nursing supervisor—a fixed role during such events—using a form or script. The script was recently revised to check and make sure the team followed the algorithms for advanced cardiac life support. And, the instructions for how to print a code summary from the monitor/defibrillator are included on the back of each debriefing form.

"The summary was being forgotten, but it provides valuable information regarding the patient's heart rhythm and events that occurred during the code," Reed explains.

Team members are encouraged to offer feedback during debriefings. "The process is meant to be nonpunitive and a learning opportunity," Reed says. "We attach the debriefing form to each code documentation form. Having a formal debrief with a checklist ensures we are gathering this valuable information and learning from it." ●

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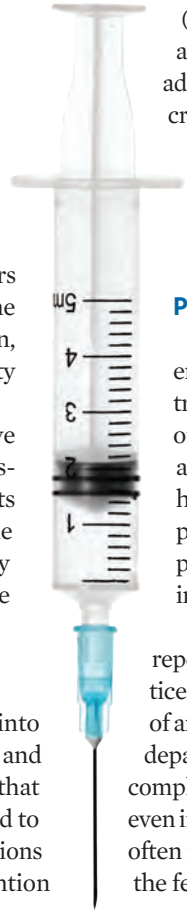

Getting stuck with a needle never feels good. But an accidental prick with a used needle or a cut from a scalpel can be especially harmful, even deadly. The Needlestick Safety and Prevention Act of 2000 made needle safety a priority in hospitals, but clinicians still need to be alert to the dangers and institute tougher safety protocols to prevent blood-borne illnesses. Supply chain professionals are part of the solution, too, and can back clinical teams by introducing reliable safety technology that healthcare providers will like and use.

"Patient safety is a No. 1 priority of HealthTrust when we choose contracts," says **Angie Mitchell**, RN, director of nursing services, "and our portfolio continues to grow." Experts from MYCO Medical and Cardinal Health—two in a long line of suppliers included in HealthTrust's vast patient safety portfolio—outlined some ways for facilities to up their game when it comes to sharps safety.

Multi-faceted Risks

Most healthcare professionals know that if they come into direct contact with a sharps device—defined by the Food and Drug Administration as a device with sharp points or edges that can puncture or cut skin—they could potentially be exposed to HIV, hepatitis and many other blood-borne pathogens, infections and diseases. The Centers for Disease Control and Prevention (CDC) estimates that every day, more than 1,000 healthcare workers in the hospital setting are injured with a needle or other sharps device. Of the injuries reported, most involve nurses, but accidents also happen to laboratory staff, physicians and housekeepers. The risks are considerable: According to the CDC, healthcare workers' chances of infection from a contaminated sharps injury are 1 in 5 for hepatitis B (if they're not vaccinated), 1 in 50 for hepatitis C and 1 in 300 for HIV.

The dangers come from use and improper disposal of sharps devices. (*See sidebar on page 17 for the CDC's list of common high-risk situations when it comes to sharps use.*) "A caregiver could receive an inadvertent needle stick during or following a procedure; an EVS employee could come in contact with an inappropriately disposed injection device; or a visiting family member could even be injured by a carelessly discarded sharps device," says **Tom Harkin**, global vice president of marketing for general medical products at Cardinal Health.

And as the use of heroin, fentanyl and other illegal drugs rises at an epidemic level, people taking used needles from hospitals (along with sharps disposal containers) and reusing them is a growing concern, Harkin adds. "In addition to the obvious adverse impact on society, this intentional act of diversion can create security issues with unauthorized individuals—whether patients, family members or even hospital staff without clearance—seeking access to needles throughout the hospital. It's essential that facilities invest in products with appropriate safety measures to decrease the risk."

Playing It Safe

To avoid the risks related to sharps injuries, hospitals are encouraged to develop a bloodborne pathogen exposure control plan, says **Sharon A. McNamara**, RN, past president of AORN (Association of periOperative Registered Nurses) and a MYCO Medical advisory board member. "Research has demonstrated that a risk reduction program that incorporates sharps safety devices and safe work practices with proper education and training can help prevent percutaneous injuries," she says.

That plan should include the adoption of a nonpunitive reporting system to encourage incident reports. "Standard practice today when someone is stuck by a needle is the completion of an incident report submitted to a hospital's risk management department," Mitchell explains. "The perception when someone completes this report is that he or she has 'done something wrong' even if the incident was unavoidable. As a result, these incidents are often not reported. A culture change is needed to try to eliminate the feeling of guilt or fear that people think you were at fault."

Medical equipment manufacturers now offer tools and equipment with extra safety controls, but some healthcare professionals resist change, McNamara admits. A health system is more likely to adopt sharps safety devices if the professionals who will use the devices have an opportunity to evaluate and select the ones that best meet their needs. That's where the experts on HealthTrust clinical advisory boards come in, adding the member voice to the GPO process for evaluating how certain devices might affect patient and worker safety.

Taking Advantage of Technology

Safety technology generally falls into one of two categories: passive or active. Passive safety devices don't require worker action for the safety feature to function. Examples include needles shielded or recessed in protective housing, hypodermic needles that automatically retract into the syringe after the injection is given, and needleless connectors for IV lines. Active devices, such as hypodermic needles for injections, needleless devices to access an IV port or blunt suture needles, require the user to initiate the safety feature.

SAFETY ON CONTRACT

Members have access to a variety of sharps-related safety products through HealthTrust's contract portfolio. Contracts are available for the following:

- Safety needles
- Syringes
- Blood collection devices
- IV safety catheters
- Safety huber needles
- Scalpels

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Among the important considerations are whether devices can be activated with one hand, and if they provide an audible or visual indication that the safety feature has been activated, according to **Sam Kumar**, president and CEO of MYCO Medical. Device features should also be easily understood, reliable and simple to use, and the safety elements should not be able to be removed or interfere with patient care.

Safe disposal containers are also required. "Facilities should look for products that utilize counterbalanced lids, which allow used sharps to drop horizontally into the container with no need to assist or push," Harkin says. "The lid should be designed to ensure that used sharps drop away from the user as they enter the container. Additionally, the lid should restrict hand access into the container and automatically close when full to eliminate the potential of overfilling."

Facilities that promote a culture of safety have fewer sharps injuries, according to the CDC. The characteristics of such a hospital include a shared commitment by management and staff to sharps injury prevention and leadership that encourages the prompt reporting of sharps injuries without punishment. ●

For more information, go to cdc.gov/sharpssafety.

STAY ON SHARPS ALERT

According to the Centers for Disease Control and Prevention, examples of high-risk situations using sharps include:

During patient care:
- Inserting or withdrawing a needle
- Inserting needles into IV lines
- Handling or passing sharps

Immediately after sharps use:
- Recapping a used needle
- Transferring or processing specimens

During and after sharps disposal:
- Disposing of sharps into proper containers
- Cleaning up after a procedure
- Sharps left on floors and tables, or found in linens, beds or waste containers

In hospitals, 80 percent of sharps injuries are due to the use of:
- Hypodermic needles/syringes
- Suture needles
- Winged-steel (butterfly-type) needles
- Blood collection needles
- Scalpels
- IV stylets

Many other devices, including ones made of glass, can also cause sharps injuries.

Tech for a Greener World

Electronics Purchasing & Recycling That Support Environmental Goals

It's difficult to imagine a day without electronics. Cell phones, tablets, computers, printers and everything in between infuse our personal and professional lives with convenience and productivity. Yet when their disposal is improperly managed, toxic materials in electronics such as lead, nickel, zinc, barium and chromium can endanger air, water and soil.

America generates more electronic waste than any other country, and only about a quarter of it gets recycled. The problem is not that products *can't* be conserved, repurposed or recycled—nearly 100 percent can—but, that so few are. For healthcare organizations looking to reduce their environmental footprint and implement sustainable policies, electronics management is an area that deserves your green team's attention.

Reducing electronic waste involves more than recycling batteries or ink cartridges. It requires seeking out products that are energy-efficient, sustainably designed and easily recycled—conserving energy while maximizing their lifespan. Yet most IT purchasers don't have time to sift through hundreds of products to find the greenest options.

Sustainable Choices Made Easy

Enter EPEAT, or Electronic Product Environmental Assessment Tool, a free online registry that equips buyers to support environmentally preferable purchasing initiatives. Launched in 2006, the global rating system makes it easy to find and select eco-friendly electronics by ranking products on a sustainability scale, which considers environmental attributes such as raw material extraction, design, packaging, repair and maintenance, energy conservation, and longevity.

The ecolabel currently includes products ranging from desktop computers to televisions to mailing machines. Over 65 manufacturers have registered their products with EPEAT, and the registry offers thousands of products across 42 countries. When purchasers buy EPEAT-registered products, they choose electronics that are longer lasting, less toxic, more energy efficient and easier to recycle.

Each EPEAT-registered product receives a classification—bronze (green), silver (greener) or gold (greenest)—based on how many global sustainability standards it meets. Manufacturers also undergo ongoing verification to ensure electronics continually reach environmental benchmarks. When purchasers search the registry, they discover a wealth of green products to meet an organization's needs. (Many consumers consult the registry when deciding which electronics to purchase for personal use as well.)

Compared to their less sustainable counterparts, the number of EPEAT-registered products purchased since 2006 has eliminated 565,142 metric tons of hazardous waste from our planet's ecosystem, according to the EPEAT's website. Put another way, that's the weight of 56 Eiffel Towers. Choosing these products will also reduce millions of metric tons of greenhouse gases, conserve billions of kilowatt hours of electricity, cut down on water pollution and reduce material usage by millions of metric tons. (*See page 20 for the EPEAT-related benefits realized at one hospital system.*)

"EPEAT criteria address environmental, health and wellness issues associated with common IT products," says **Nancy Gillis**, CEO of the Green Electronics Council. She explains that it's an easy-to-use ecolabel for any organization, but it aligns especially well with hospitals.

"The Green Electronics Council supports healthcare systems in their procurement of EPEAT-registered IT products and their commitment to the health and safety of the users of these products, as well as the workers who make these products," Gillis says. "Healthcare systems recognize that using sustainable IT is not only good for people, but it's also good for the planet."

HeathTrust contracted manufacturer products located on the EPEAT Registry because of their Energy Star certifications include HP Inc. (**Contract No. 7589**) and Dell (**No. 7593**). These products are available for purchase through contracted distribution partners CDW Government LLC (**No. 2500**) and Insight Direct USA (**No. 7581**). The distribution partners can assist members in specifying products on the EPEAT Registry that support the member's sustainable initiatives.

A Greener Life Cycle

Purchasing green electronics is just one step toward sustainability. Equally important is managing these products through end of use. "Look for products designed for longer life cycles with lower energy consumption," says **Cathi Coan**, CEO of Techway Services, an electronics recycler founded by Coan in 2004 in Dallas, Texas. Techway is a

Continued on page 20

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HealthTrust Contract #2537

Continued from page 18

HealthTrust diversity supplier (**Contract No. 005303**).

Users can also extend a product's life through upgrades and maintenance instead of replacement. However, when ready to replace, there are three ways to avoid waste: 1. giving or selling it as-is to someone else; 2. finding a buyer or purpose for its component parts; or 3. partnering with an e-waste recycler. Conversely, unregulated disposal of electronics not only increases waste, but it also potentially leaches toxic materials like lead and mercury into the environment. Coan recommends partnering with a reputable electronics recycling firm to guarantee "proper and environmentally friendly disposal of end-of-life electronics while meeting all security requirements to protect sensitive patient and employee information."

By using these best practices, hospitals save costs by reducing energy and the need for new products. Sustainable electronics management also benefits the environment by reducing waste, greenhouse gas emissions and toxic chemicals, as well as cutting down on the use of natural resources. ●

EPEAT Benefits

According to the Green Electronics Council, the 129,219 EPEAT-rated IT products purchased by Kaiser Permanente in 2016 yielded the following cost saving and environmental benefits:

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or

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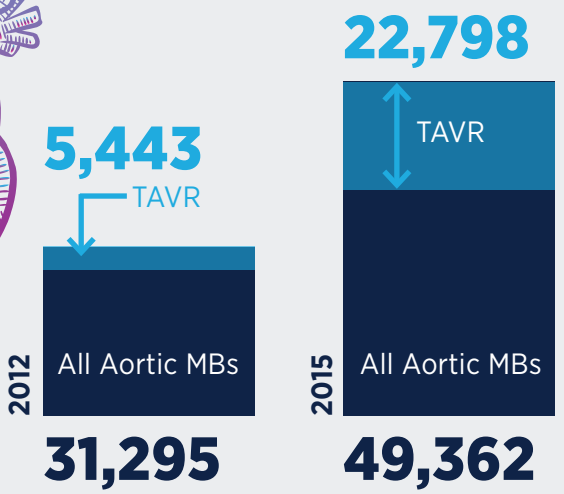
1. Rosen M, Bauer JJ, Harmaty M, *et al*. Multicenter, prospective, longitudinal study of the recurrence, surgical site infection, and quality of life after contaminated ventral hernia repair using biosynthetic absorbable mesh: the COBRA Study. *Annals of Surgery*. 2017;265(1):205-211.
2. W. L. Gore & Associates, Inc. *Clinical Performance with Staple Line Reinforcement. Scientific Literature Analysis (n = 4689 patients)*. Flagstaff, AZ: W. L. Gore & Associates, Inc; 2013. AP6010-EN3.

Products listed may not be available in all markets.

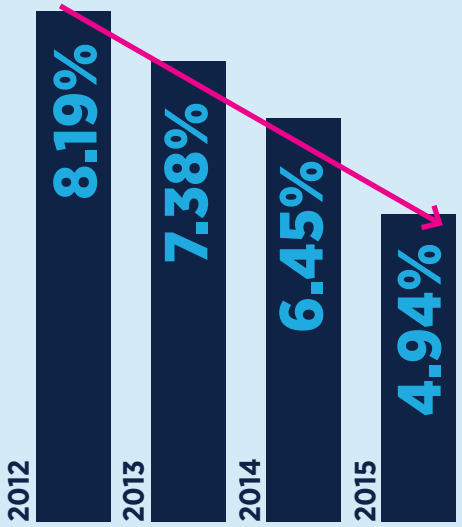
AORTIC VALVE REPLACEMENTS IN MEDICARE BENEFICIARIES (MBs) ARE INCREASING.

TAVR accounts for the majority of growth in aortic valve replacement.



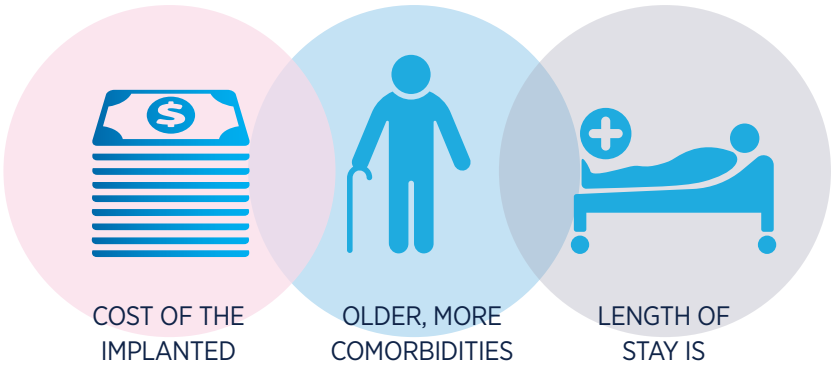
TRENDS IN 30-DAY MORTALITY RATES

Mortality rates and complication rates for isolated aortic valve replacement (AVR) have improved significantly.



TOP REASONS FOR COST DIFFERENCE

TAVR costs 8.5 to 10 percent more than surgical AVR with tissue or mechanical valves in Medicare beneficiaries, respectively. The majority of the cost difference occurs during the index hospitalization. This may be due to implant cost and older patients with more comorbidities in the TAVR group. The length of stay is actually shorter for TAVR.



Total cost and length of stay were significantly higher among Medicare beneficiaries who had a permanent pacemaker (PPM) implantation during their index admission for TAVR; however, there were no significant differences in mortality rate, readmission rate, readmission days or days to first readmission during the 12-month follow-up period.

OVERALL, PATIENTS WHO RECEIVE A PPM WITH THEIR TAVR HAVE SIMILAR 12-MONTH OUTCOMES, BUT THEY COST SIGNIFICANTLY MORE DURING THEIR INDEX HOSPITALIZATION.

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Medical errors like these get a lot of attention and, unfortunately, they aren't isolated incidents. Each year, more than 400,000 American deaths can be partly attributed to avoidable medical errors, according to a 2013 estimate published in the *Journal of Patient Safety*. In 2008, the most recent year studied, medical errors cost the nation $19.5 billion, most of which was spent on extra care and medication, according to the *Journal of Healthcare Finance*.

Continued on page 26

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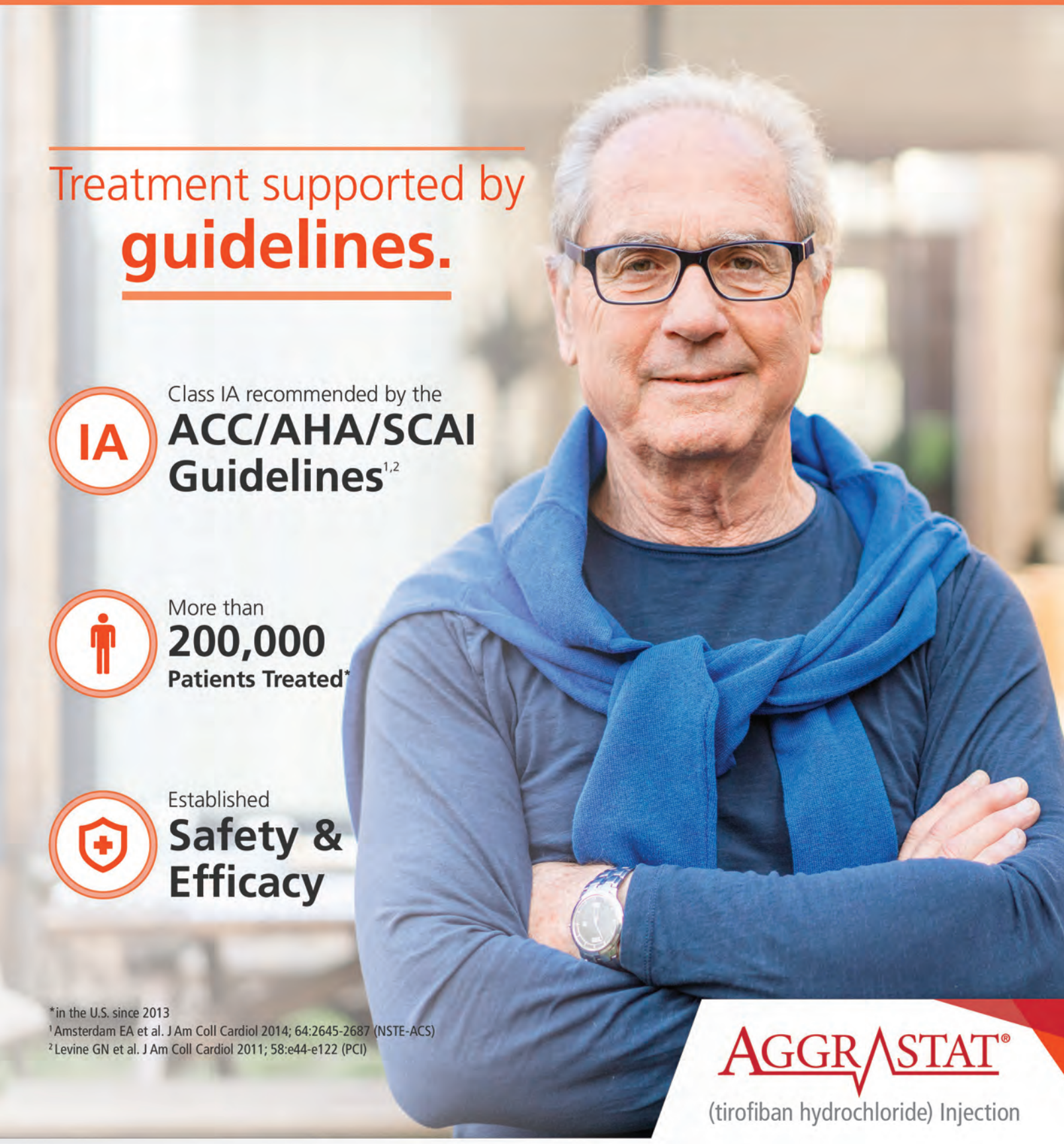

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[1] Amsterdam EA et al. J Am Coll Cardiol 2014; 64:2645-2687 (NSTE-ACS)

[2] Levine GN et al. J Am Coll Cardiol 2011; 58:e44-e122 (PCI)

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Continued from page 24

But healthcare professionals are instituting plans and protocols to prevent medical errors and ensure patient safety throughout episodes of care. And, many of these same precautions are just as important in safeguarding healthcare workers.

RECOGNIZING THE RISKS

Preventable healthcare errors include mistakes at the treatment level as well as diagnosis errors. The Agency for Healthcare Research and Quality (AHRQ) has studied the frequency and scope of medical errors, as well has how to prevent them. According to the agency's *Chartbook on Patient Safety*, which was part of its 2017 National Healthcare Quality and Disparities Report, the most common medical errors in hospitals include:

- Adverse drug events
- Pressure ulcers
- Venous thromboembolism
- Healthcare-associated infections, including catheter-associated bloodstream infections, catheter-associated urinary tract infections, surgical site infections and ventilator-associated pneumonia

> A new AHRQ toolkit highlights the "warm handoff" between two members of a healthcare team. "Not only does this transparent care handoff engage patients and families in the communication, but it allows all parties to hear what is being said."
>
> **Jeffrey Brady**, M.D., MPH, director of AHRQ's Center for Quality Improvement and Patient Safety

In ambulatory settings, however, errors most frequently occur during diagnostic workups, notes **Jeffrey Brady**, M.D., MPH, director of AHRQ's Center for Quality Improvement and Patient Safety. According to the Institute of Medicine, at least 5 percent of all U.S. adults who receive outpatient care each year will experience a diagnostic error. The AHRQ is updating its toolkit to help prevent miscommunication about the results of lab testing in medical offices, and it is also funding research to better understand how these errors happen in order to prevent them.

"Healthcare is complex, and many factors—human, technological, organizational—can contribute to mistakes," Brady says. "For example, poor communication during patient handoffs, including those between clinicians and between practices and settings, can lead to patient safety threats."

Medical errors might also stem from a changing regulatory environment for new products and supplies, or a lack of user training, says **Suzan Brown**, MS, RN, manager of value analysis and nursing associate director of the Medical Simulation Center at WellSpan Health. Absent supply chain standardization, clinicians might be wholly unaware of recalled, backordered or otherwise unavailable products. "It's challenging to make sure all the key players have a voice in product selection and then to keep everyone apprised of the related product changes."

DEVELOPING BEST PRACTICES

Many accrediting bodies and professional organizations provide recommendations, guidelines and position statements that facilities can use as the basis for developing and adopting protocols to help prevent medical errors, says **Angie Mitchell**, RN, director of nursing services at HealthTrust.

"It's key to integrate these protocols into employee orientation and yearly competency reviews, as well as provide ongoing education for staff," Mitchell says. "Standardizing processes facilitates consistent and effective care, and can go a long way toward reducing errors. From a HealthTrust clinical and contracting perspective, we maintain current knowledge of these accrediting bodies' recommendations and work to ensure we have products on contract that will support members' successful implementation of these protocols."

The AHRQ conducts research and produces tools to help hospital teams improve key elements of quality and safety. It recommends that facilities establish standard definitions and techniques for measuring "never events," defined by the National Quality Forum as "errors in medical care that are clearly identifiable, preventable, and serious in their consequences for patients, and that indicate a real problem in the safety and credibility of a healthcare facility." The AHRQ also advises facilities to increase transparency when reporting errors and develop collaborative approaches to preventing them, Brady adds.

For example, use of AHRQ's Comprehensive Unit-based Safety Program in more than 1,000 hospitals nationwide led to a 41 percent reduction in central line-associated bloodstream infections. The agency is collecting stories about how healthcare organizations are using AHRQ tools and resources to improve care. "These cases

Continued on page 28

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Continued from page 26

demonstrate the impact of applying healthcare research at the local level, where patients actually receive care every day," Brady says.

A new AHRQ toolkit on patient and family engagement highlights the "warm handoff" between two members of a healthcare team. The intent is to demonstrate that effective clinical communication is taking place. "Not only does this transparent care handoff engage patients and families in the communication, but it also allows all parties to hear what is being said. This provides an opportunity to clarify or correct information or ask related care questions—a key component of a patient-centered practice."

In 2016, WellSpan Health established a Clinical Equipment Review Team (CERT) to serve as the authoritative body for ensuring that clinical equipment is put into use only after it has been fully vetted by team members and all preparations have been made for its use, cleaning and maintenance, Brown says. The team's tasks include staff training on disinfecting and cleaning requirements, identifying any preventive maintenance requirements, and ensuring the proper tagging and inventory of the equipment.

Over the past year, the team has been vital to standardizing care and reducing errors. "The CERT process makes sure that all potential users get to review the equipment or reusable item," Brown says. "We make sure that everything is complete—including staff education—before the product is used."

For instance, WellSpan implemented a policy that all requests for new products or free items provided in a clinical trial must go through its value analysis process. "There are three RNs on the value analysis team, and we review each product to make sure it is safe to bring in," Brown says. "If the product is free and part of a clinical trial, we ensure it goes into the system on a no-charge purchase order in case of a recall. We can also monitor results of the trials."

While it has taken significant time to implement the CERT process, Brown says most employees have adjusted and understand the intention of the program. "We take the time to do the right thing when instituting these kinds of safety measures," she says, "because we have to make sure a product is safe and people are educated before we start using it."

PRIORITIZING EMPLOYEE SAFETY

Ensuring patient safety also means prioritizing the safety of staff. "Practitioners infected with a transmissible pathogen can potentially infect a patient," says **Sharon McNamara**, RN, past president of AORN (Association of periOperative Registered Nurses). "The cost to the patient or practitioner can be admittance or extended hospital stay, loss of work, financial and emotional stress, chronic illness, and possibly even death. This can impact both a hospital's bottom line and its reputation."

Traditionally, hospital staff have been among the employees

most susceptible to illness and injuries. For instance, U.S. hospitals recorded an average of 6.8 work-related injuries and illnesses for every 100 full-time employees in 2011—almost twice the rate for private industry as a whole, according to the Occupational Health and Safety Administration (OSHA).

The OSHA figures show that nearly half of injuries to hospital workers are caused by overexertion or bodily reaction when lifting or moving patients. To combat these motion-related injuries such as lifting, bending or reaching, growing numbers of facilities are instituting safe patient handling programs that can have a protective effect on both employees and patients, Mitchell says. Such programs provide education on proper body mechanics, as well as devices that assist in moving, transferring or repositioning patients with minimal push or pull effort.

Recommendations for safe patient handling often suggest the purchase of equipment such as mounted lifts or slide sheets that make patient transfers easier, as well as policies and patient assessment tools to help minimize the need to lift patients. When Cincinnati Children's Hospital implemented such a program, it reduced lost time by 83 percent in three years, according to OSHA. (A lost-time accident is an OSHA recordable incident that results in an employee being unable to work a full assigned work shift.) Tampa General Hospital reduced patient handling injuries by 65 percent and associated costs by 92 percent after it installed mechanical lifting equipment. **S**

PATIENT SAFETY RESOURCES

Agency for Healthcare Research and Quality: www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/pstools
American Society for Clinical Laboratory Science: www.ascls.org/patient-safety-resources
American Society for Healthcare Risk Management: www.ashrm.org/resources/patient-safety-portal/ps_resources.dhtml
Institute for Safe Medication Practices: www.ismp.org
The Leapfrog Group: www.leapfroggroup.org
National Committee for Quality Assurance: www.ncqa.org
National Patient Safety Foundation/Institute for Healthcare improvement: www.npsf.org
National Quality Forum: www.qualityforum.org

EMPLOYEE SAFETY RESOURCES

Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health: www.cdc.gov/niosh
HealthTrust Workforce Solutions: healthtrustpg.com/workforce
Joint Commission's Improving Patient and Worker Safety: www.jointcommission.org/improving_patient_worker_safety
Occupational Safety and Health Administration's Worker Safety in Hospitals site: www.osha.gov/dsg/hospitals

STRENGTHENING YOUR IP SQUAD

HCA Healthcare, LifePoint Health and other HealthTrust members tackle hospital-acquired infections with a team approach

At the end of 2017, the Centers for Medicare & Medicaid Services (CMS) released the latest data on its Hospital Acquired Condition (HAC) Reduction Program. As the name suggests, the aim of the program is to reduce hospital-acquired conditions like methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (C. diff.) and catheter-related urinary tract infections. CMS is assessing a 1 percent penalty this fiscal year on all hospitals (about 750 in all) that fall in the bottom quartile of the total HAC score distribution.

According to an analysis by *Kaiser Health News*, 336 hospitals that lost money a year ago were spared in 2017. That means more than 400 hospitals are facing another round of penalties.

Improved patient safety is its own reward for the large number of HealthTrust members actively working to standardize infection prevention best practices across their hospitals. Read on to learn from two of them.

Continued on page 32

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GETTY IMAGES

ALL HANDS ON DECK

The network of HCA hospitals and care sites is vast, stretching across the United States and to the United Kingdom. Despite its widespread geographic reach, it has a unified, focused battle plan against C. diff.

The C. diff bacterium is highly contagious and potentially lethal. Left unchecked, it can spread quickly, wreaking havoc in patient rooms and hospital corridors. Older patients or those with multiple chronic conditions are particularly at risk. According to the Centers for Disease Control and Prevention (CDC), almost 10 percent of patients 65 and older who contract healthcare-associated C. diff don't survive.

Given these sobering statistics, HCA set out to lower the rate of this infection among inpatients. After three years of collaboration among medical, surgical, radiology, nursing, environmental and pharmacy departments, in 2016 HCA rolled out a toolkit detailing a specific set of procedures for combating C. diff at its hospitals.

The collaborative effort has already paid off: From 2015 to 2017, the incidence of C. diff infections dropped by 20 percent in HCA hospitals systemwide.

"It was a project requiring leadership and coordination from many stakeholders across all of the departments that impact infection prevention," says **Jackie Blanchard**, assistant vice president of infection prevention at HCA. "Without stakeholders, you don't have buy-in. Without buy-in, you don't have results. That is a lot of upfront work, but it benefits us in the long run."

LAST YEAR THE CDC ANNOUNCED A DECLINE IN C. DIFF RATES—WHICH DROPPED 9 TO 15 PERCENT BETWEEN 2011 AND 2014—AND ATTRIBUTED IT TO ANTIBIOTIC STEWARDSHIP AND MORE RIGOROUS CLEANING STANDARDS FOR HOSPITALS, TWO AREAS OF EMPHASIS IN HCA'S TOOLKIT.

ZEROING IN ON ANTIBIOTIC STEWARDSHIP

Last year, the CDC reported that C. diff rates in the United States are on the decline, dropping 9 to 15 percent between 2011 and 2014, after year-over-year increases the previous decade. It attributed the improvements to antibiotic stewardship and more rigorous cleaning standards for hospitals, which are two areas of emphasis in HCA's toolkit.

To dramatically reduce the spread of C. diff, hospital staff limits the number of antibiotics prescribed to patients. Antibiotics can upset the balance of bacteria in the intestines, allowing C. diff to run rampant, damaging the lining of the intestinal wall. This causes symptoms such as severe diarrhea, abdominal pain and fever.

Early detection and isolation is another priority. New patients exhibiting the telltale bowel symptoms of C. diff are isolated even before screening test results come back to eliminate any risk of the infection spreading to other patients.

Staff is extra vigilant about cleaning and disinfecting all surfaces and scrupulously follow good hygiene practices.

"Hospital staff must also wear gowns and gloves when entering the room, and visitors are encouraged to do the same," Blanchard says.

UTILIZING TECHNOLOGY

LifePoint Health, a Brentwood, Tennessee-based system of 71 hospitals across 22 states, has devised a comprehensive, data-driven approach to protecting patients from infections. "Our focus on infection prevention has grown tremendously over the years," says **Tracy Louis**, infection prevention director. "We have found that collaborative learning and sharing best practices among the different facilities net the greatest reductions in infection rates."

Transparency also is key for LifePoint Health. Its facilities are able to monitor the number of infections occurring within specific units of the hospital through the use of the CDC's National Healthcare Safety Network database as well as case mix administrative claims data. Hospital leaders, including the hospital infection preventionist, monitor and analyze this electronic data for opportunities to improve processes and patient outcomes.

Continued on page 34

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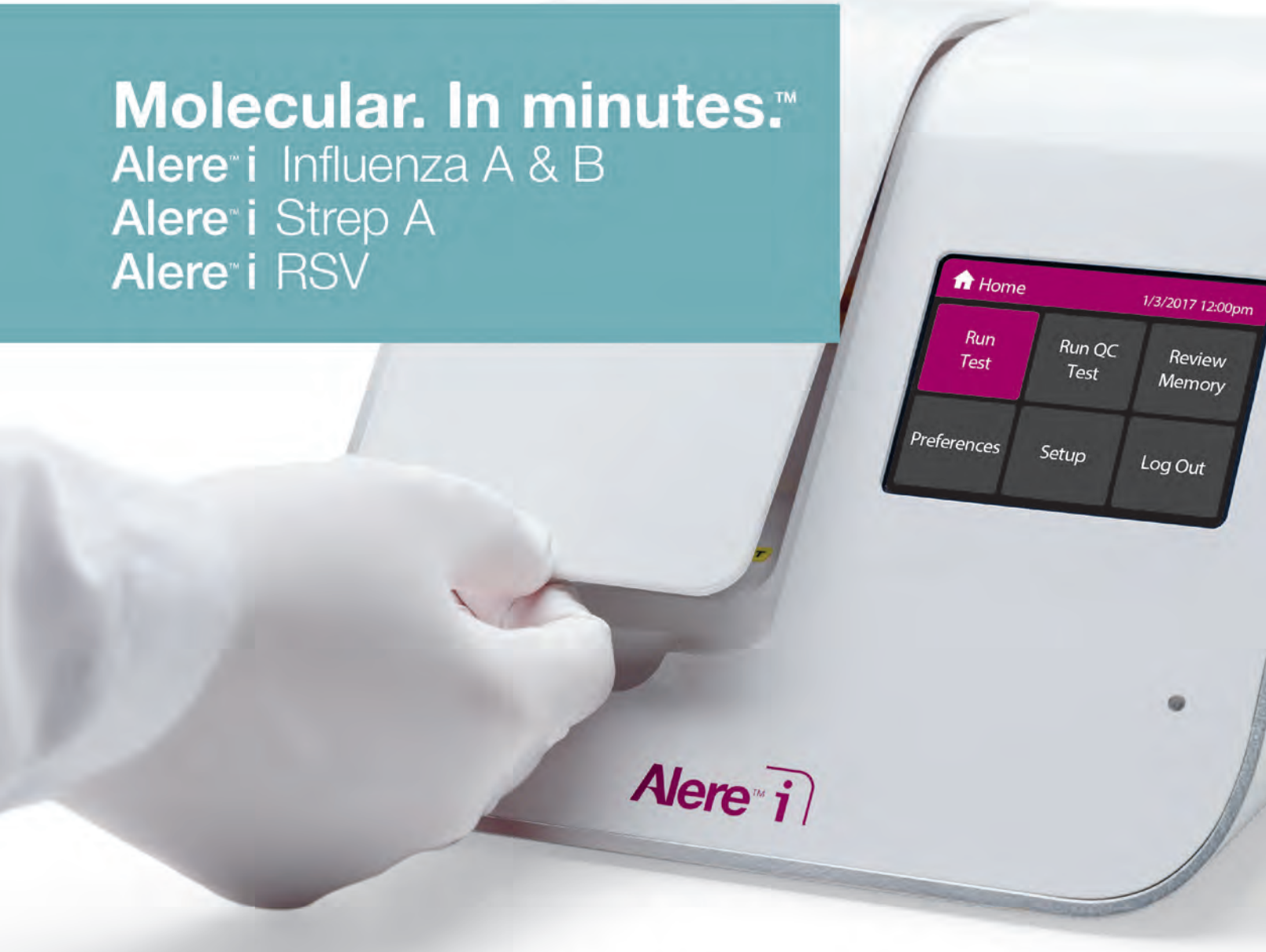

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All LifePoint hospitals utilize a data-driven approach to improving quality and patient outcomes. Each facility has access to its own infection surveillance and billing data to determine how many days it has successfully prevented specific types of infections. The hospitals share this information across hospital units in a variety of ways, including posting on message boards, internal newsletters, electronic screensavers and daily communication.

"Visually displaying the number of infections keeps the staff engaged," says **Cindy Chamness**, vice president, quality operations.

LifePoint hospital infection preventionists utilize a number of communication tools to optimize their effectiveness as leaders and subject matter experts in infection prevention. The LifePoint intranet, specific specialty email distribution lists, and collaborative learning in a web-based environment provide opportunities for infection preventionists to communicate with peers at other LifePoint hospitals and affiliates.

"This allows best practice sharing between LifePoint hospital staff and brings a sense of support and camaraderie to the infection prevention community," Louis says.

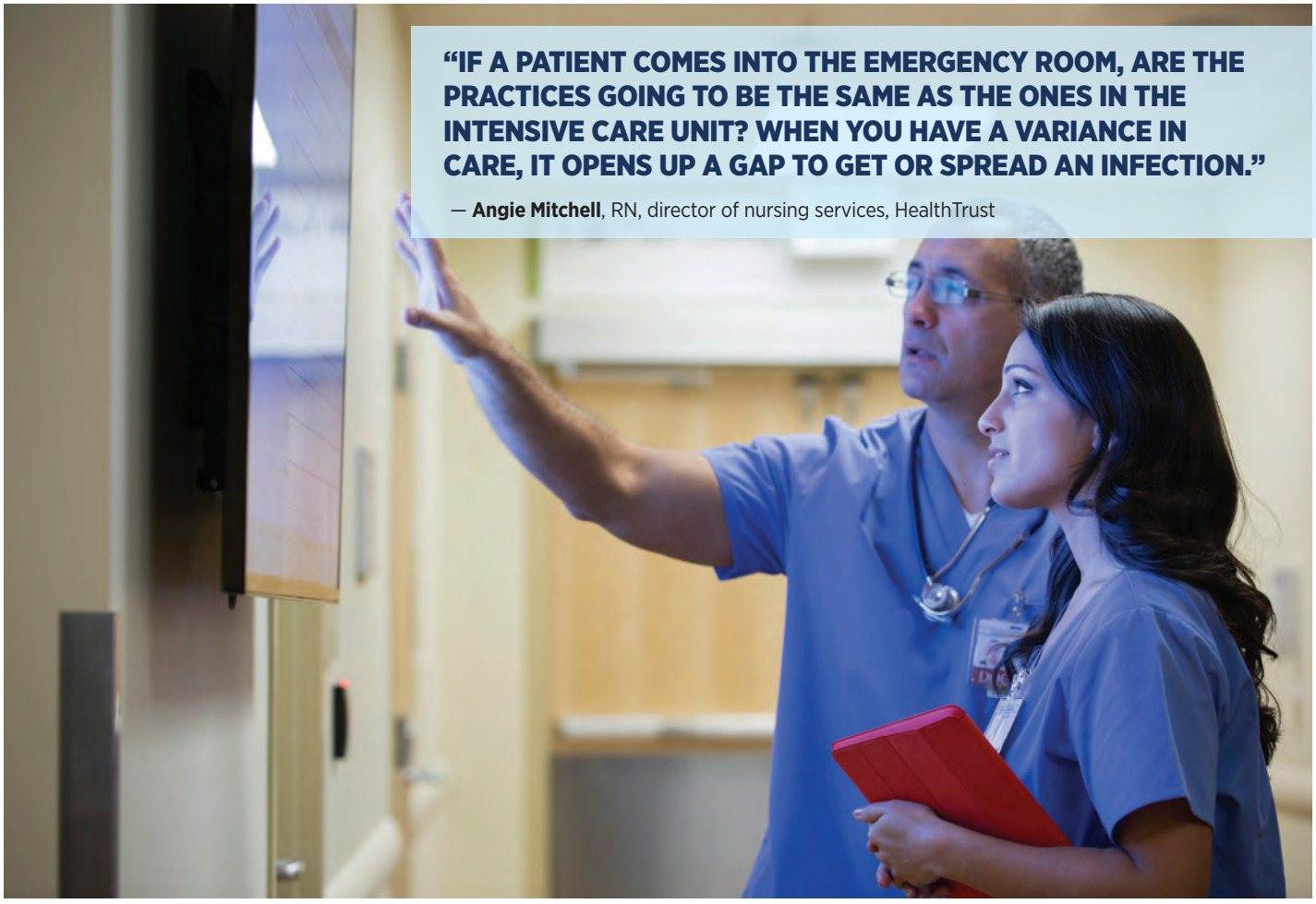
STANDARDIZING CARE

The key to reducing infections is standardizing care, says **Angie Mitchell**, RN, director of nursing services at HealthTrust. "If a patient comes into the emergency room, are the practices going to be the same as the ones in the intensive care unit? Are the clinical and housekeeping staff using the same cleaning agent? When you have a variance in care, it opens up a gap to get or spread an infection."

To standardize care, hospitals often use bundles—a specific set of evidence-based practices, usually endorsed by the CDC or a professional organization, which have been shown to improve patient care and clinical outcomes.

Multiple studies support the use of bundles in reducing infection rates. A 2016 review published in *Lancet Infectious Diseases* found that central line-associated bloodstream infections in ICUs decreased from 6.4 per 1,000 catheter-days to 2.5 per 1,000 catheter-days after implementation of central-line bundles. A 2015 meta-analysis published in *Surgery* found that the use of a bundle during colorectal surgery resulted in a lower surgical site infection rate—7 percent versus 15 percent in patients where the bundle wasn't used.

Some hospital systems take the extra step of assembling supplies into kits to standardize infection prevention best practices. LifePoint hospitals, for example, provide staff with central line dressing kits containing two pairs of gloves. "It's a simple reminder to change out gloves," Louis says. "It makes it easier to do the right thing."



"IF A PATIENT COMES INTO THE EMERGENCY ROOM, ARE THE PRACTICES GOING TO BE THE SAME AS THE ONES IN THE INTENSIVE CARE UNIT? WHEN YOU HAVE A VARIANCE IN CARE, IT OPENS UP A GAP TO GET OR SPREAD AN INFECTION."

— **Angie Mitchell**, RN, director of nursing services, HealthTrust

GETTY IMAGES

THE MOST EFFECTIVE METHOD OF CONTROLLING INFECTIONS IS ALSO THE SIMPLEST—ENCOURAGING EVERYONE WHO COMES IN CONTACT WITH PATIENTS TO WASH THEIR HANDS BEFORE ENTERING AND AFTER LEAVING HOSPITAL ROOMS.

Standardizing both supplies and processes makes a hospital safer for everyone. As Mitchell says, "You want to know that no matter where patients go, whether the third or sixth floor, the process of caring for them is the same."

THE SIMPLEST METHOD

Of course, the most effective method of controlling infections is also the simplest—encouraging doctors, nurses, techs, housekeepers and everyone else who comes into contact with patients to wash their hands before entering and after leaving hospital rooms.

"Even in our admissions materials, we invite patients and family members to remind caregivers to wash their hands to further increase accountability," Chamness says.

There are also high-tech ways to remind healthcare providers to wash their hands, including monitors with sensors that indicate movement of the lever that releases soap. Some are tied to an employee's hospital badge and measure the amount of alcohol on the person's hands. "The light turns green, and it will capture the hand hygiene before and after the employee goes into a patient's room," Mitchell explains.

But there's a catch: "They aren't perfect, and many of them can be tricked or fooled," she adds. "When you read the clinical commentaries, these sensor devices are most effective if they are accompanied by positive culture change in the facility. All of the widgets in the world aren't going to compel caregivers to hold up their end of the deal unless they're committed and encouraged to do so."

A non-technology option is to use employee surveillance—stationing an unobtrusive person near a sink, she says. The person will observe and record which employees wash their hands thoroughly and who rushes through the process or walks by the soap dispenser.

HealthTrust consults its advisory boards when making decisions about supplies designed to reduce the chances of infection. Before putting such items as disinfectant wipes and antimicrobial dressings on contract, it wants to ensure all relevant research is thoroughly explored. **S**

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TAKING A STAND

HOW YOUR ORGANIZATIONAL CULTURE COULD BE AT RISK

The public usually views healthcare workers as compassionate caretakers who offer aid to the sick. However, the work life of nurses, lab technicians, physicians and other healthcare providers may look a little different behind the scenes. Reports show that bullying, as well as other forms of workplace violence, can exist in every area of the hospital. It is a problem in healthcare that can have serious ramifications on productivity and patient care. Consider these examples:

- An experienced nurse ignoring a new nurse's questions, embarrassing her publicly for her lack of knowledge, or refusing to show her how to do a certain task
- A physician berating a technician in front of a patient
- A patient physically shoving transport staff

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AGAINST BULLYING

Bullying goes by a lot of names and covers a broad range of actions. The Workplace Bullying Institute defines it as "repeated, health-harming mistreatment of one or more persons (the targets) by one or more perpetrators." This abusive conduct can take the form of verbal abuse; threatening, intimidating or humiliating behaviors; or work interference, which prevents work from getting done. When the bully and the victim are on the same level, as in situations where a nurse bullies another nurse, the act may be called horizontal hostility or lateral violence. There are also situations where superiors bully their subordinates and where patients bully hospital staff.

One nurse, who asked to remain anonymous, described a few examples of bullying during her decades-long career. One event, however, stood out as more threatening than the others.

"I once worked with a physician who was clearly breaking a lot of rules and endangering patient safety. It wasn't just one behavior—it was a variety of behaviors, and I had spoken to him about this previously. Unfortunately, most conversations ended with him screaming at me.

"One afternoon, I addressed the fact that he wanted to allow someone to observe a surgery who didn't have any business being there," the nurse continues. "This was the incident that broke the camel's back. The physician was so angry that I was questioning him, he picked up a glass filled with ice water and threw it at my head. My staff observed the incident and ran into the dressing rooms because they were afraid of the physical threat."

As in the situation this nurse describes, sometimes verbal abuse can escalate, leading to physical violence or the threat of it. According to the National Institute for Occupational Safety and Health, workplace violence is characterized by "violent acts, including physical assaults and threats of assault, directed toward persons at work or on duty." According to the U.S. Bureau of Labor Statistics, from 2011 to 2013, U.S. healthcare workers suffered 15,000 to 20,000 injuries related to workplace violence every year. Violence can come from frustrated patients, family members and visitors, or from other clinical staff, and it's a more common source of injury in healthcare than in other industries.

HOW COMMON IS WORKPLACE HARASSMENT AND VIOLENCE?

Almost every year since 1999, nursing has ranked No. 1 in Gallup's annual poll of Honesty and Ethical Standards in Professions. This makes bullying in nursing and other clinical professions all the more surprising. In 2013, the Institute for Safe Medication Practices surveyed 4,884 healthcare workers, including nurses, pharmacists, physicians and quality management staff, about workplace violence and harassment. The results showed that 77 percent of respondents had encountered other clinical staff who had a "reluctance or refusal to answer questions or return calls." On top of that, 68 percent experienced "condescending language or demeaning comments," and 18 percent of respondents had objects thrown at them.

Research shows that not only is bullying common in healthcare, but it also has serious consequences. Forty-five percent of nurses have been verbally harassed or bullied by other nurses, says an RNnetwork study. The survey also found that 41 percent of nurses were verbally harassed or bullied by managers or administrators, and 38 percent reported verbal harassment or bullying by physicians. More than half of the nurses who reported harassment at work were considering leaving the profession altogether.

"Bullying can take all kinds of forms," explains **Angie Mitchell**, RN, director of nursing services at HealthTrust. "It could be nonverbal communication, such as the lack of willingness to help a coworker who needs assistance with a patient. Or it could be more obvious—like mocking or even verbal abuse. What's key is that the definition of bullying is in the perception of the person who bears this type of behavior. So, what may be perceived by some as an unsafe workplace environment may not be perceived by others that way."

Regardless of how it is defined, bullying can have major implications for hospitals and other healthcare organizations. In one large healthcare facility, up to 70 percent of nurses left their jobs after being bullied, reports *American Nurse Today*. On top of that, about 60 percent of new RNs quit their first job within six months of being bullied, and abusive or humiliating encounters caused one in three new graduate nurses to consider quitting nursing entirely. In a

> "There's a direct link between bullying and poor patient outcomes. Staff gets distracted by a strong personality or derailed by a bully, and it takes their focus away from providing quality care."
>
> — **Patrick Beaver**, chief nursing officer at East Cooper Medical Center

study published in the *International Journal of Environmental Research & Public Health*, 38 percent of 284 U.S. healthcare workers surveyed reported psychological harassment. According to the *Journal of Nursing Management*, research has found a strong correlation between bullying and the turnover rate of healthcare staff.

Hiring and training new staff is costly. A literature review in the *Journal of Nursing Management* estimates that the cost of replacing a nurse is $27,000 to $103,000. And research by the Society of Human Resource Management indicates it can take about 42 days to fill a position.

Plus, hospital systems lose valuable institutional knowledge when a staff member leaves due to bullying or dissatisfaction with the workplace environment.

"If you're not happy at work, you're not going to do the best you can do," Mitchell says. "If you're refusing to be a collaborative team member, somebody else is going to have to do that work alone. Then you risk injury to the patient as well as to your coworker. It casts a horrible cloud over the entire department."

A 2017 study published in the *International Emergency Nursing Journal* suggests that standing by during incidents of bullying, maintaining the status quo and retaliation in a hospital setting can all lead to more bullying and a decline in patient care.

"There's a direct link between bullying and poor patient outcomes," adds **Patrick Beaver**, chief nursing officer at 140-bed East Cooper Medical Center, a Tenet Healthcare facility based in Mount Pleasant, South Carolina. "Staff gets distracted by a strong personality or derailed by a bully, and it takes their focus away from providing quality care."

WHAT TRIGGERS BULLYING IN HEALTHCARE?

While seasoned clinical professionals may tell you that bullying has always been present at patient care facilities, some experts believe it's on the rise, likely because of health policy changes putting massive financial pressures on the healthcare system.

BULLYING'S IMPACT ON EMPLOYEE PRODUCTIVITY AND SATISFACTION

Hostility in the workplace creates a toxic environment that harms the targeted party, observers and, potentially, patients. Here are a few ways that bullying affects employee productivity and satisfaction:

➔ **Health problems.** It's stressful to be the target of bullying—or to simply witness workplace aggression. Many bullying victims and onlookers suffer from stress-related health issues, such as nausea, headaches, depression, anxiety and even substance abuse problems.

➔ **Unsafe working conditions.** Bullying interferes with team morale and effective employee training, communication and collaboration. If a nurse withholds information or refuses to assist a colleague, major errors can occur that harm patients or otherwise lower the quality of their care, and put clinicians at risk for injury.

➔ **Absenteeism and high turnover.** Victims of bullying either quit showing up to work or walk off the job at high rates. This leaves hospitals with the financial burden of hiring and training new staff members.

Reimbursement reductions, in particular, can lead to overworked clinical staff and necessitate pay cuts at hospitals—both of which can create a high-stress atmosphere conducive to verbal abuse and an unpleasant, unsafe working environment. In some cases, nurses or lower-level clinicians or healthcare technicians become victims of bullying by physicians or managers because of the power structure created when assembling care teams.

"Stressful job demands can lead to bullying," Beaver says. "Healthcare professionals are dealing with life and death, and there may be fewer resources available to help them. Across clinical disciplines, caretakers are spending less face time with patients than they once did." While certainly not an excuse for bad behavior, he adds, all of this could be making bullying "more prevalent."

Adding to caregivers' stress are difficult working conditions such as the inability

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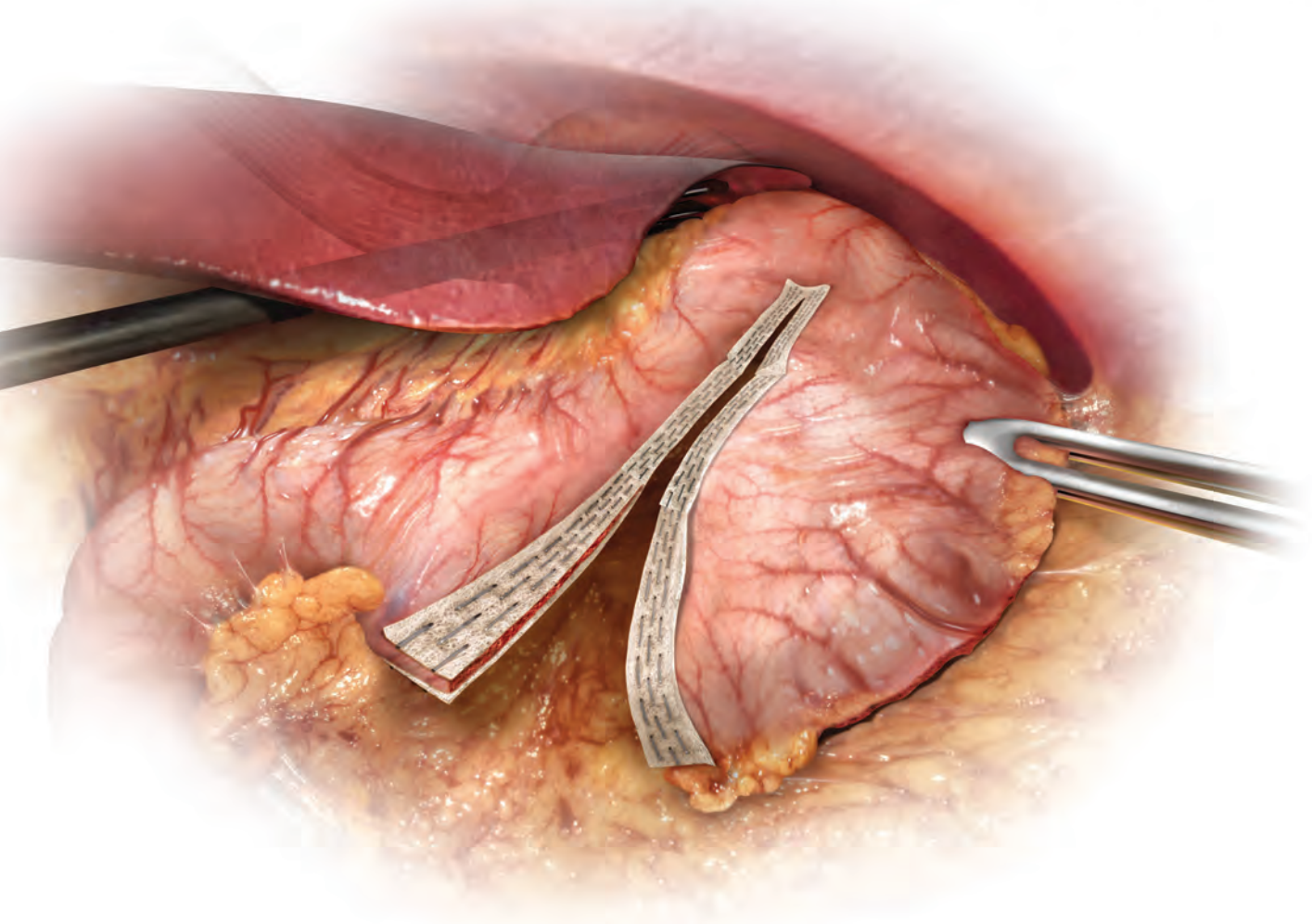

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to take breaks during long shifts, limited supplies, pressure to rush patient care, and scant recognition of nurses' skills and contributions to the clinical team. Nurses can be left feeling overwhelmed and stressed, and pass along those negative emotions to colleagues. Bullying in healthcare has been prevalent for so long that many nurses have come to accept it as part of the job.

CHANGING THE CULTURE

For years, healthcare bullying has been widely tolerated because nurses have failed to report harassment, and nurse managers haven't followed up on bullying accusations. However, bullying has increasingly garnered public attention, prompting more patient care organizations to put protocols and programs in place to improve workplace culture and mitigate the risk of abusive behavior.

"The best counterattack is follow-through," says **Shaun McCamant**, chief nursing officer at HealthTrust Workforce Solutions. "Facilities need to get at the root cause of bullying, just like they would any other dangerous event, such as someone slipping and falling or a behavioral health crisis. Only then will we be able to prevent it with actions to improve the workplace environment for everyone."

Some health systems offer crisis prevention training programs for employees who work in high-stress areas such as the emergency or behavioral health departments. "This kind of training helps team members de-escalate potentially dangerous situations, whether with clinicians bullying each other, or patients or other hospital visitors harassing staff members," McCamant says. She uses the example of Alex Wubbels, a nurse in Salt Lake City, Utah, who was arrested in October 2017 for following hospital policy and refusing to let officers draw blood from an unconscious crash victim.

"Facilities are creating behavioral response teams to learn de-escalation tactics and go into those high-stress situations and help alleviate the crisis," McCamant adds.

In the 2013 Joint Commission publication, "Improving Patient and Worker Safety," civility was described as a precursor to a safe work culture where all patients and clinical staff are treated with respect. Education, such as annual compliance or ethics training for nurses and clinical staff, is one critical part of creating a healthier work environment. Nurse managers can also play a significant role in changing workplace culture by sharing information about incivility, establishing civility charters, implementing policies and rewarding civility, according to AORN (Association of periOperative Registered Nurses).

In addition, other members of the leadership team have a responsibility to enforce a culture of safety by establishing a system that doesn't tolerate bullying, where bullies are confronted, and bullying targets are supported.

"At East Cooper, we talk about bullying at annual training, but we also hold ourselves and our leaders accountable to address what's happening with staff," Beaver says. "The first step is getting staff to acknowledge that violence and bullying exist. Then you have to work to understand the catalysts. To improve workplace culture, you have to work through difficult circumstances and put procedures in place to prevent them from recurring. Then make sure your staff knows that leadership cares and is taking action to address their problems."

It's important to give employees the opportunity to express their concerns in a safe environment. The Agency for Healthcare Research and Quality offers a culture of safety survey that is widely used in hospitals, giving nurses, clinical staff and other employees the opportunity to anonymously and honestly express any concerns they may have about safety in the workplace.

"It's also about doing things to mitigate the stress," Beaver says. On rounds, Beaver offers small tokens such as candy bars or healthy snacks to break the monotony, celebrate team successes and let individuals know their efforts are appreciated.

"You have to assess what the frontline teams feel is a remedy," he adds. "We want our nurses to understand that it's OK to step away and take a deep breath when they feel overwhelmed. We believe it's important to get to know our people to build trust and create an environment where they feel comfortable coming to us and speaking openly." **S**

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IF YOU'RE THE TARGET

How do you differentiate between someone having a bad day at work and the actions of a bully? Some types of mistreatment or unkind actions such as eye-rolling, gossip or unfriendliness might be classified as workplace incivility but not necessarily bullying—which is meant to cause harm and happens over time, according to **Renee Thompson**, RN, a workplace bullying expert, author and speaker.

While each hospital will have its own specific protocol on dealing with workplace violence, here are some general steps to take if you are being bullied:

1. Document the situation. Keep a diary and record any incidents, witnesses and how the bully is taking a toll on your productivity and morale. This might help you diffuse your anger—or decide if you need to take the complaint public.

2. Talk to the person, if you feel confident and safe doing so. In some cases, you might be able to diffuse rude and upsetting behavior just by bringing it to the person's attention. There could be more going on behind the scenes than you realize.

3. Follow your facility's grievance policy. Inform your manager, or, if it's your manager doing the bullying, see your human resources representative.

If a patient or family member starts to threaten you, remove yourself from the situation immediately and contact facility security who should be experienced in de-escalation methods.

AHRMM CQO REPORT IDENTIFIES SUPPLY CHAIN AS A DRIVER IN POPULATION HEALTH MANAGEMENT

In 2017, AHRMM released the Cost, Quality, and Outcomes (CQO) Report on Population Health Management. The report was developed to:

- link supply chain to other aspects of healthcare,
- offer insights from healthcare thought leaders on the role supply chain can play in population health management, and
- showcase case studies with specific examples of how supply chain professionals have supported population health management initiatives within their own organizations

AHRMM's 2016 Board Chair, Mary Beth Lang, DSc, RPh, MPM, CMRP, EVP, Cognitive Analytics Solutions, Pensiamo, led the CQO report task force that included experts from the fields of healthcare supply chain, finance and value analysis. The task force examined the current population health management landscape to determine the impact these programs have on the financial health of hospitals, health systems and other health-related community organizations. Reaching out to these stakeholder groups, the task force identified healthcare organizations that had successfully implemented population health management programs and solicited their insights on best practices recommended for success.

Based on the research, the task force developed several guiding principles for others to employ when implementing population health management initiatives, including:

- Supply chain professionals serve as the primary source of data and analytics on which many population health management programs are measured.
- Supply chain acts as the "link" that ties together the various stakeholders from across the continuum of care, including clinicians, suppliers and distributors.
- Supply chain can be central to effective population health management with business case development that demonstrates how the approach or plan delivers value with lower costs, better patient care quality, measurable improvements in outcomes, greater revenue capture and/or a combination of these benefits.

Other key themes established:

Cross-functional collaboration drives improved results in care and cost: Successful population health management programs employ a holistic approach to health promotion and patient care, where internal and external healthcare providers and stakeholders are working together to improve the health of a defined population and the quality of healthcare in the community; supply chain participating in cross-functional collaboration is critical.

High-performing supply chain organizations enable a balance between cost and quality: In today's environment of value versus volume, successful population health management programs must balance cost and quality to deliver true value to a healthcare organization and its consumers/patients.

Supply chain leverages supporting technologies effectively: Technology is key to implementing, managing and sustaining most population health management programs where information sharing and communication between various parties is critical to improving the health of a population. While some hospitals and health systems are developing solutions internally, others are leveraging third-party solutions providers with expertise in this area.

Supply chain enables data-driven decisions: Many population health management programs require key stakeholders to change processes, behaviors, practices or products. Those leading these initiatives must be armed with robust, objective and scientifically based data and evidence that can be used to educate stakeholders on the need for change and secure their support for these changes.

Supply chain strategy aligns to IDN strategy: The business of healthcare and the delivery of care continue to rapidly evolve. A sustainable and scalable strategy has to align to an IDN's (integrated delivery network) overall strategy. Population health management initiatives implemented today must be designed to be sustainable and scalable over time—addressing not just current patient and consumer needs, but the anticipated future needs.

Because the definition of population health management is so broad and encompasses a wide range of programs—from bundled payments to community wellness—the task force worked to identify case studies that span six care domains in this report. Each of these examples demonstrates the invaluable role that supply chain professionals play in this emerging care model.

AHRMM is continuing to build a meaningful repository of case studies, tools and other resources focused on education and advancing population health activities across the healthcare field and healthcare supply chain. Please contact AHRMM at **ahrmm@aha.org** if you are interested in participating in this important initiative.

The Association for Healthcare Resource & Materials Management (AHRMM), a professional membership group of the American Hospital Association (AHA), is the leading association for the healthcare supply chain field.

AHRMM Association for Healthcare Resource & Materials Management
Advancing the Healthcare Supply Chain
A professional membership group of the American Hospital Association

CQO: The Future of Healthcare Supply Chain

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MEMBER SUCCESS STORY: In 2016, Barnabas Health merged with Robert Wood Johnson Health System to create RWJBarnabas Health. The newly formed system began transforming and consolidating its supply chain with help from HealthTrust. To date, its significant achievements include $53 million in savings.

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LEADERSHIP LINK: Good Samaritan Hospital physicians **William Ennen**, M.D., **Henry Kamali**, M.D., and **Felix Lee**, M.D., share how a standardized preoperative evaluation clinic helped the hospital achieve excellent results in coronary artery bypass graft (CABG) surgery.

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MANAGEMENT MATTERS: To improve the patient experience, hospitals should first look at their culture. **Jason Wolf**, president of the Beryl Institute, and **Lyn Ketelsen**, chief patient experience officer at HCA Healthcare, offer advice for making strategic, patient-centered changes.

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RWJBarnabas Health's 2017 HealthTrust Operational Excellence Award-winning team *Left to right:* **Paula Strollo**, vice president of supply chain consolidated operations; **Tracy Burrell-Hancock**, vice president of supply chain facility operations; **John Tomochek**, vice president of data management and analytics; **John Doll**, chief financial officer, **Bob Taylor**, senior vice president of supply chain, **Mary Twomey**, RN, BSN, vice president of clinical resource management, and **Phil Maneri**, vice president of sourcing and contracts. *Inset photo:* **Richard Hill**, vice president of supply chain integration

THE VALUE OF A SEAMLESS INTEGRATION

How RWJBarnabas Health transformed its supply chain operations before, during and after a merger

On April 1, 2016, Barnabas Health merged with Robert Wood Johnson Health System to create RWJBarnabas Health, New Jersey's most comprehensive healthcare system with 11 acute care hospitals, one behavioral health hospital, and a medical staff of more than 9,000 physicians. The move to consolidate was driven by the shared goals of advancing the health status of residents of New Jersey, furthering the academic mission of the legacy organization and the need to become more operationally efficient. The newly formed system looked to its supply chain leadership to drive a significant amount of operational savings, but that couldn't happen without considerable work to unite the disparate supply chains, including four different enterprise resource management (ERP) systems, electronic data interchange platforms, multiple distributors and varying approaches to value analysis.

One thing both legacy systems had in common was their membership in HealthTrust. RWJ Health System was a longtime member, and Barnabas Health had recently switched from a different GPO, in anticipation of the merger.

This shared experience allowed RWJBarnabas supply chain leadership to quickly utilize a variety of HealthTrust resources to help achieve supply chain integration.

Some specific initiatives involved establishing a single item master and data governance process; adopting a new electronic data interchange platform, ERP system and tracking tool for strategic sourcing initiatives; moving some back-office functions to a common shared services center; and realigning staff while amplifying the physician voice in critical product standardization initiatives.

"We wanted supply chain to function as an asset to the organization as opposed to a back-office service," says **John Doll**, chief integration officer during the merger. "The end goal is a highly functioning supply chain organization modeled after a mature HealthTrust structure, which not only has high compliance within the contract portfolio, but also a robust, value-add that includes the ability to analyze data, maximize contract performance and partner with clinicians."

While the transformation is not yet complete, RWJBarnabas Health has already achieved $53 million in supply chain savings—with the opportunity to save millions more while continuing to provide its clinicians and patients with the highest quality of medical supplies and devices.

STEVE HOCKSTEIN

KEYS TO A SUCCESSFUL TRANSFORMATION

→ THE NEED FOR BETTER DATA

1. Transitioning to one system. The first order of business toward achieving supply chain integration was collapsing the four disparate ERP systems, each with its own item and vendor masters, into one system. This process revealed thousands of incorrect, duplicative or missing item descriptions.

RESULT: An item master file a fraction of the original size with enhanced data elements.

2. Extensively cleansing the data. The legacy systems didn't have a centralized data management team accountable for maintaining the data. Item numbers were often recycled so manufacturer data was not in sync with distributor data. Some physician preference items were purchased as non-file or free-text so determining what was actually purchased in order to build the new system was difficult. During a six-month data cleanse project, HealthTrust advisors traveled to all 11 hospitals, talking one-on-one to as many clinical department heads and supply chain professionals as possible to discuss planned changes to item descriptions, the rationale for data accuracy, and to obtain their input and buy-in for the overall item-add process.

RESULT: Many items were updated to include correct descriptions, part numbers and UNSPSC classification.

3. Training staff in 11 sites. Educating staff across 11 sites and keeping the data clean was aided by a HealthTrust-developed playbook based on newly established business rules, including naming conventions for adding items to the ERP system going forward. A corporate office "command center" set up during the transition phase at each facility assisted in making sure products were ordered correctly using the new ERP system. Educational posters hang in areas of the hospitals where ordering takes place, and additional training occurs on an as-needed basis.

RESULTS: The benefits of having a consistent item master classification system include:

- ✓ Confidence in savings estimates
- ✓ Ability to quickly spot and valuate value analysis opportunities
- ✓ Ease of use for end users

→ OPTIMIZING OPERATIONS

The merger also required a variety of other changes to achieve optimal operational efficiency, including consolidating purchasing and accounts payable at a single shared services center.

1. Move to GHX. Almost a year after the merger, RWJBarnabas Health switched electronic data interchange (EDI) platforms to GHX, allowing buyers to seamlessly exchange an increasing amount of data, including both electronic purchase orders (POs) and invoices, with suppliers, and have real-time confirmations and acknowledgments to see where data was not aligned.

RESULT: Decrease in the number of invoice exceptions, earlier notification of those exceptions and an increase in the number of automated transactions.

2. Establishing new key performance indicators. Beginning 18 months post-merger, staff performance has been measured against three key indicators—requisition turnaround time, PO confirmation adherence and match exceptions—which are included in monthly operating reports. The initial target for PO confirmation adherence was 10 percent, but the group long ago exceeded that—even reaching the 90 percent mark.

RESULT: A higher level of buyer output and accountability.

→ UNLOCKING MORE SAVINGS

1. Savings from clinical supplies. The majority of the more than $53 million in supply chain savings has come from med/surg supplies. In anticipation of the merger, Barnabas Health became a HealthTrust member in 2015, which allowed for consistency in contract terms and commodity items across the entire health system and paved the way for an effective value analysis function as noted below.

RESULT: The savings on core med/surg supplies and services were immediate, with the legacy system saving more than $9 million in year one with better pricing on many of the exact same products it was already using.

2. Standardizing distribution. The decision to standardize to a single med/surg distributor in April 2017 was driven by the potential for reducing distribution costs as well as continuing to build on the integrated platform through further standardization of par levels, distribution methods and product selection.

RESULT: An additional $3 million in annual savings with even greater enhancement in the ability to optimize supply spending across the entire health system.

While the transformation is not yet complete, RWJBarnabas Health has already achieved **$53 million** in supply chain savings—with the opportunity to save millions more.

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NOMINATIONS OPEN FOR THE 2018 HEALTHTRUST MEMBER RECOGNITION AWARDS

DEADLINE FOR SUBMISSIONS: MARCH 12

Nominations are being accepted for the 10th annual HealthTrust Member Recognition Awards, honoring outstanding performance and exceptional contributions in five key areas. Awards will be presented during the HTU Conference, July 23-25 in Nashville, Tennessee.

HealthTrust members and on-contract suppliers may submit nominations or members can self-nominate. The awards recognize individuals or teams who have gone above and beyond to deliver measurable results in the following categories:

- Operational Excellence
- Clinical Excellence
- Outstanding Member
- Social Stewardship (Sustainability, Diversity or Community Outreach)
- Pharmacy Excellence

The nomination process is now online at **http://survey.healthtrustpg.com/s3/2018MemberNomination**

Contact **HTUawards@healthtrustpg.com** with any questions.

Continued from page 45

"Physicians' perceptions of cost are driven largely by what medical device reps tell them. Once we've established the clinical equivalence of two products and contrast their cost, it is often eye-opening for physicians." —**Mary Twomey**, RN, BSN, vice president of clinical resource management, RWJBarnabas Health

3. Value analysis. Before the merger, Barnabas Health began a partnership with HealthTrust to enhance its value analysis program. This platform was created with the vision of accommodating the needs of the system post-merger and included the following elements:

- ✓ Establishment of a multidisciplinary value analysis team composed of the chief financial officer, chief medical officers, chief nursing officers, and clinical and non-clinical department directors
- ✓ Hiring hospital-level clinical resource directors to help identify facility-based opportunities to complement initiatives driven at the system level
- ✓ After the merger, standardization efforts and other initiatives designed to mature the value analysis process were implemented

RESULT: 50 percent of savings is attributed to the enhanced value analysis program.

RWJBarnabas Health recently formed 11 physician-led integrated leadership groups allowing supply chain to directly engage clinicians on initiatives involving clinically sensitive products, primarily expensive and implantable medical devices. Value analysis has been introduced most actively to the cardiology integrated leadership groups so far, as well as an ad hoc anesthesia group. The goal is to obtain physician support for standardization in three key categories.

"Physicians' perceptions of cost are driven largely by what medical device reps tell them," says **Mary Twomey**, vice president of clinical resource management. "Once we've established the clinical equivalence of two products and contrast their cost, it is often eye-opening for physicians—especially if a conversion means 20 percent savings for the organization."

Partnering with HealthTrust's inSight Advisory team helped RWJBarnabas Health mature its value analysis program, from a Level 2 (defined) to a Level 3 (systemized). It is evolving toward a model that includes a high degree of physician and nurse integration with an open line of communication with supply chain.

A SNAPSHOT OF SAVINGS

$53 MILLION

IN PARTNERSHIP WITH HEALTHTRUST, RWJBARNABAS HEALTH HAS ACHIEVED MORE THAN $53 MILLION IN SUPPLY CHAIN SAVINGS ACROSS SIX KEY AREAS.

"When it comes to introducing new devices at the appropriate rate and being more thoughtful about how they're utilized, we're striving for a true partnership between supply chain and clinicians," says **Bob Taylor**, senior vice president of supply chain. "That gives us leverage over the suppliers and also helps us bring consistency in levels of services across our health system."

RESULT: Launch of these structured value analysis teams allowed for some "quick wins" on product standardization initiatives—for 8 percent, or more than $8.7 million, in projected supply expense savings—most immediately in 10 product categories ranging from hard surface wipes to contrast media. The deeper involvement of the system's physicians also led to significant savings in medical devices and other preference items.

Ultimately, the value analysis structure enabled more than $50 million in savings while ensuring patient care was maintained or, in some instances, enhanced. ●

Additional initiatives have contributed to the successful supply chain integration at RWJBarnabas Health. For the complete story, please plan to read the executive briefing upon which this article is based. The briefing covers the foundational elements of data cleansing and governance, consolidation of systems and services, leadership staffing, operational improvements and more. The report will be made available on the HealthTrust public website as well as the member portal.

Preop Clinic Helped Good Samaritan Add a 'Star' to Its STS Quality Score

ISTOCK

Achieving the best possible patient outcomes is an ongoing challenge for cardiothoracic surgery programs around the country, and a stretch goal would be the coveted three-star quality award ranking from the Society of Thoracic Surgeons (STS). Roughly three-quarters of all participants in the adult cardiac surgery database maintained by STS rate two stars (average), and the remainder fall more or less equitably in the one-star (lower than average) or three-star (higher than average) category. Among HCA's hospitals nationwide, six—including Good Samaritan Hospital in San Jose, California—achieved three-star status for coronary artery bypass graft (CABG) surgery in calendar year 2016.

The STS star rating system for CABG surgery begins by assuming all providers are average, and then calculates if an individual hospital's composite score is significantly different from the majority in the middle across 11 process and outcomes measures approved by the nonprofit National Quality Forum. Pulling away from the pack is a notoriously difficult feat to attain and sustain, and the precise STS weighting formula is proprietary. Good Samaritan Hospital gives a large share of the credit to a standardized preoperative evaluation clinic (PEC) that is mandatory for all patients undergoing highly invasive cardiothoracic surgery.

It is not uncommon for patients to arrive at PECs (aka "surgery assessment clinics" or "perioperative surgical homes") with an undiagnosed or previously untreated condition, such as diabetes, obstructive sleep apnea, nicotine dependency or morbid obesity. PECs have repeatedly demonstrated their ability to identify potential uncontrolled medical issues earlier so that appropriate testing and mitigating treatments get initiated, heading off potential complications. That also translates into fewer last-minute "surprises" that can delay or cancel surgery. Multiple reports have also linked PECs to shorter hospital lengths of stay and improved patient satisfaction.

ABOUT THE AUTHORS

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Felix Lee, M.D., is medical director of the cardiac cath lab at Good Samaritan Hospital, as well as director of its monthly Cardiovascular Case Conference. He also serves as cardiovascular service line medical director for HealthTrust.

The hallmarks of PECs for patients needing CABG surgery include evidence-based testing, "optimization" of medical comorbidities, and management of surgery-related medications. Although PECs may be most cost effective at large tertiary care centers dealing with high volumes of medically complex patients for a wide variety of surgeries, the experience of Good Samaritan Hospital suggests that smaller community hospitals with a cardiothoracic surgery program can benefit both clinically and financially from such a clinic.

A PEC IS BORN

The cardiothoracic surgery program at Good Samaritan Hospital had plateaued for several years with an STS two-star ranking, despite multiple isolated attempts at improvement.

That all changed in 2014, when a task force of cardiac anesthesiologists created a physician-led PEC. In partnership with the department of cardiovascular services and the department of anesthesia, task force members first developed a standard, evidence-based guideline for preoperative testing and optimization, along with a clinical care pathway to help guide the care of cardiac surgery patients throughout the perioperative period. They volunteered their time to evaluate patients and coordinate a multidisciplinary workup that included assessments by primary care physicians, internists, cardiovascular specialists, pulmonary intensivists and others as needed.

The PEC assesses all cardiac surgery patients, as well as other high-risk patients scheduled for non-cardiac surgery, starting a week or more prior to their procedure. Staffing includes a physician anesthesiologist who sees patients on weekday afternoons, assisted by existing preoperative staff, and a full-time nurse practitioner.

RISK-SCORING PATIENTS

Most physicians are aware of the STS cardiac surgery risk calculator that "scores" a patient as being at low, intermediate or high risk of mortality and morbidities from a planned procedure. But in actual practice, physicians tend to rely disproportionately on their clinical intuition. To better educate physicians on the value of formal risk stratification, Good Samaritan Hospital hosted a series of conferences where the STS tool—available as a web- or smartphone-based application—was applied to medically complex cardiovascular cases. STS risk scores also became a mandatory part of patients' medical record, in full view of all providers along the care continuum.

Risk scores are derived from 33 differentially weighted clinical and demographic factors, such as surgery type and patient's age, gender, cardiac history and comorbidities. Patients falling in the intermediate- to high-risk range (upwards of 40 percent of the cardiothoracic surgery caseload) would then get focused attention on any medically addressable condition, such as uncontrolled hypertension or diabetes, chronic heart failure, obstructive pulmonary disease, renal insufficiency or anemia. Optimizing patients in this way helps ensure planned surgeries are done in a timely manner.

SPECIFIC TESTS AND INSTRUCTION

A study published in Surgery, Gynecology & Obstetrics estimates that more than 60 percent of preoperative tests ordered are in fact medically unnecessary. To help ensure that doesn't happen at Good Samaritan Hospital, physicians follow appropriateness guidelines contained in the Practice Advisory for Preanesthesia Evaluation of the American Society of Anesthesiologists (ASA). Doing so helps ensure all preoperative lab, imaging and stress studies—and subspecialty consults—are medically justified.

The ASA Task Force recommends that such tests be performed on a selective basis to guide or optimize perioperative management, and that the rationale be documented.

Following their preoperative evaluation, patients are given specific instructions on which medications to take or hold prior to surgery, based on established guidelines. Timing of fasting with explicit definitions for solids and clear liquids is emphasized, as well as where to come and what to bring on the day of surgery. Full preoperative instructions, in easy-to-understand language, are also printed out and handed to patients to reference through their care journey.

MANAGING EXPECTATIONS

The more involved and educated patients are about the natural progression of their

IMPACT OF THE PREOPERATIVE CLINIC ON CABG OUTCOMES AT GOOD SAMARITAN

	Before Preop Clinic	With Use of Preop Clinic in 2016
MORTALITY	5.60%	0%
MAJOR MORBIDITY		
Prolonged Ventilation	15.30%	4.30%
Permanent Stroke	4.20%	0%
Acute Renal Failure	2.90%	0%
Deep Sternal Wound Infection	0%	0%
Reoperation	7.80%	2.90%
INTERNAL MAMMARY ARTERY USE	98.60%	100%
PERIOPERATIVE MEDICATIONS		
Preoperative Beta-Blocker	87.30%	100%
Discharge Beta-Blocker	95.50%	100%
Discharge Anti-Platelet Therapy	90%	98.50%
Discharge Anti-Lipid Therapy	86%	98%

disease, and its symptoms and treatment, the more engaged they become in their care process. Mental preparedness assists in reducing their anxiety level. Good Samaritan Hospital's goal is to ensure surgical candidates know exactly what to expect from a procedure—what the operation entails, if they will experience any pain or discomfort (and how the hospital plans to minimize it), if cardiac rehab or a stay in a skilled nursing facility is anticipated, and when they'll be able to resume normal activities.

The hospital also seeks to learn their expectations of a full recovery, so it can clear up any misconceptions. Direct-to-consumer advertising, online research and conversations with friends, family and co-workers can all lead to mistaken beliefs.

Physicians address any and all questions patients and families may have so risks of the planned procedure are understood, as well as other treatment options that may be available. Any significant concerns are communicated back to patients' primary care physician or cardiovascular specialist. The value of patients' peace of mind during the preoperative phase of their care cannot be underestimated.

Good Samaritan's patient-focused perspective doesn't end with surgery. CareAssure, HCA's discharge program, utilizes a dedicated nurse navigator who makes patients' follow-up appointments and confirms their medications have been called or faxed in to the pharmacy before they leave the hospital, automatically refers them to cardiac rehab, verifies that medications have been picked up, and makes reminder phone calls about upcoming physician visits. The idea is to remove as many outpatient hurdles as possible so patients don't get needlessly readmitted.

Entire episodes of care—starting preoperatively and extending for months after surgery—get recognized all at once. Patients know exactly what is going to happen when. Because STS risk calculations get documented in their medical chart, patients and caregivers start having more honest conversations about recovery realities and prospects.

Good Samaritan has found that these personal touches help alleviate the stress surrounding a surgery. Patients and physicians also appreciate the care coordination and opportunity for open collaboration through improved communication.

BACK TO 'AVERAGE'

Good Samaritan Hospital achieved its 2016 three-star status over two years by improving all four of the major factors accounting for the STS CABG ranking—mortality, major morbidity, internal mammary artery (IMA) use and perioperative medication administration. (*See table on page 49.*) These improvements are due in large part to PEC.

In addition to improvements in patient outcomes, the hospital is realizing other benefits from the PEC. Among patients

CARDIAC SURGERY CARE PATHWAY AT GOOD SAMARITAN: THE PREOPERATIVE PHASE

EDUCATION AND TEACHING
- Baseline assessment (e.g., pre-illness abilities and discharge needs)
- "Preparing for Your Surgery" video, "Moving Right Along" booklet, incentive spirometer, continuous deep breathing, what to expect, Channel 41 (cardiovascular education)
- Preop clinic visit
- STS risk calculation added to history and physical documentation

DIET
- No solid food within eight hours of surgery and no water within two hours of surgery

DIAGNOSTICS
- Complete blood count, chemistry panel, type and cross for blood bank, and (if indicated) coagulation studies
- Urinalysis
- Screen for methicillin-resistant *Staphylococcus aureus*
- Electrocardiogram
- Chest X-ray
- Echocardiogram
- Cardiac catheterization
- Bedside pulmonary function tests
- Carotid Doppler test (looking for narrowing or blockages)
- Radial artery duplex ultrasound (if indicated)
- Five-meter walk test

MEDICATIONS
- Continue home meds as instructed
- Temporarily hold anticoagulants as instructed
- ACE inhibitors and angiotensin receptor blockers held for 48 hours
- Continuation of aspirin unless otherwise instructed
- Preop beta-blocker

TREATMENTS AND ASSESSMENTS
- Chlorhexidine shower night prior to surgery and morning of surgery; bed bath if on bed rest
- Surgery prep with clippers only (for hair removal)
- Preop weight on scale
- Blood pressure check on both arms; notify M.D. if difference >20 mmHg
- Patient on oxygen after premeds given
- Consent for all surgical procedures

EXPECTED OUTCOMES: Patient demonstrates use of incentive spirometer and continuous deep breathing, understands what to expect postop, and gets appropriate preoperative studies and medication management

seen in the clinic, compared to those who were not, physicians have documented a greater than 50 percent reduction in surgery delays and cancellations.

The last-minute cancellation of a surgery is a huge burden for patients and everyone involved in their care. Patients have already requested time off from work, coordinated with family members for transportation to and from the hospital, and made arrangements for their aftercare. Hospital schedulers have also made provisions for holding and staffing an operating room and postoperative care bed.

Maintaining three-star status is always a challenge, because the STS scoring system includes unplanned surgeries, when use of a PEC might not be an option, as well as planned ones. Patients admitted acutely, in poor health, do not always survive emergency surgery. Good Samaritan Hospital recently lost its STS three-star ranking by the smallest of margins, so it remains laser-focused on process improvements that will earn back the coveted third star. ●

HEALTHTRUST WEIGHS IN:

Building a Successful Preoperative Evaluation Clinic

Preoperative evaluation clinics (PECs) have also resulted in improved outcomes for patients undergoing hip and knee replacements. HealthTrust recently issued an executive summary on building a successful PEC to improve hip and knee replacement surgery outcomes. The summary is built on the experiences of three health systems—St. Luke's Medical Center (Boise, Idaho), Dartmouth-Hitchcock Medical Center (Lebanon, New Hampshire) and Intermountain Healthcare's Dixie Regional Medical Center (St. George, Utah).

The best practices of the featured institutions focus on better collaboration among stakeholders to facilitate quality, evidence-based care, shared decision-making and patient engagement. Anecdotal information suggests the PECs decrease adverse events, reduce surgery cancellations and shorten length of stay.

The full executive summary is available for download in the clinical evidence section of the HealthTrust member portal. For access to a comprehensive Preoperative Clinic Evaluation Toolkit for Total Joint Arthroplasty, including flow chart, sample protocol, order set and risk assessment, contact HealthTrust's Vice President of Clinical Consulting and Analytics **April Simon**, RN, MSN, at **april.simon@healthtrustpg.com**.

PATIENTS FIRST

A patient-centered culture is at the epicenter of the patient experience

Thanks to government-mandated patient satisfaction surveys and the growing shift toward value-based reimbursement models, hospitals and healthcare organizations are rethinking the experience they provide to their patients. Today, they're taking cues from the hospitality sector and other industries where customer experience is best-in-class and focused on providing choice. By building state-of-the-art facilities and offering outstanding customer service and amenities that rival those of a five-star hotel—everything from private suites with flat-screen televisions and gourmet room service meals to massage therapy and designer hospital gowns—healthcare organizations are going the extra mile.

While research shows that enhanced amenities are important to patients, they encompass only a portion of a first-rate patient experience, says **Jason Wolf,** Ph.D., CPXP, president of The Beryl Institute, a global community of practice dedicated to improving the patient experience through collaboration and shared knowledge. According to its *The State of Patient Experience 2017: A Return to Purpose* benchmarking study, more than 85 percent of respondents say that quality, safety and service are part of the patient experience, along with the engagement of patients, families and employees.

CREATING A CULTURE OF CARE

Ready to rethink the patient experience at your hospital? Start by looking at the culture. "Many organizations miss the mark with patient experience because they try to implement tactics and strategies without actually looking at this underlying piece of the infrastructure," says **Lyn Ketelsen**, chief patient experience officer at Nashville, Tennessee-based HCA Healthcare.

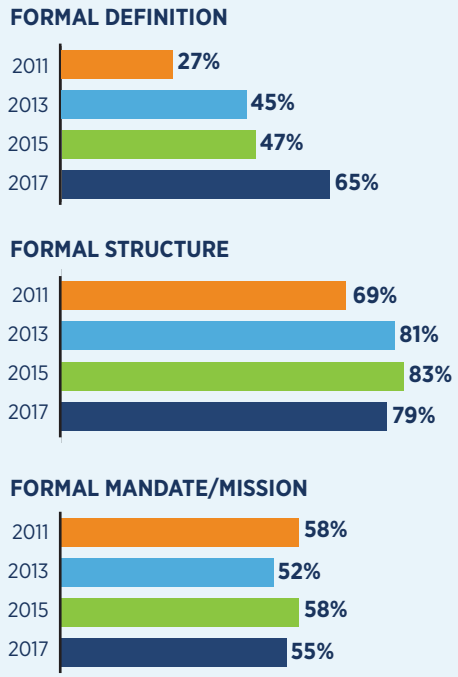
Here are a few strategic tips for making patient-centered changes to your hospital's culture:

1. **Commit resources to the patient experience.** An increasing number of hospitals and health systems recognize that the patient experience can't be left in the hands of employees with other responsibilities, making the position of chief patient experience officer (CXO) one of the fastest-growing roles in the healthcare industry, according to *Managed Healthcare Executive* magazine. Today, 58 percent of U.S. hospitals have a CXO, research from The Beryl Institute reveals. Plus, a modest but growing number of hospitals (35 percent) have dedicated patient experience teams of five or more employees.

Ketelsen, who was hired by HCA in February 2015, is the health system's first CXO. It is her responsibility to leverage best practices and collaborate with leaders across the enterprise to ensure patients at each affiliated hospital and facility receive the best care and experience possible, and employees are engaged and satisfied with their work.

FORMALLY DEFINING THE PATIENT EXPERIENCE

The number of U.S. hospitals with a formal definition and structure surrounding the patient experience has grown significantly over the years, according to The Beryl Institute's *The State of Patient Experience 2017: A Return to Purpose*.



GETTY IMAGES

"Without having a dedicated position, it's easy to lose sight of the goal to make the patient experience a strategic priority," Ketelsen says. "Having someone who brings subject matter expertise gives senior executives confidence that their investments in that area, especially given so many other important competing priorities, will have impact."

2. Engage your employees. Happy employees lead to happier patients. Employee engagement, according to The Beryl Institute's latest benchmarking study, is the fastest-growing objective of hospitals when it comes to improving the patient experience.

At HCA, an annual engagement survey asks employees how they feel about their jobs and measures satisfaction, Ketelsen says. "We take our findings from these evaluations to identify evidence-based practices and ensure our employees have the tools, equipment and information necessary to do their jobs," she says. This includes employee rounding, which gives them opportunities to have one-on-one conversations with their managers.

It's also critical to set clear expectations for employees, so they can steer their performance accordingly, Wolf adds. (A 2015 poll from Gallup revealed that only 50 percent of employees know what is expected of them.) Knowing job expectations will encourage employees to take ownership of their work. "Provide the skills for them to make the right decisions and understand the guardrails on their decision-making ability, whether it's changing a pillow or challenging a doctor in an appropriate way," Wolf says. Be aware of their chain of command and ways they can "manage up" if necessary.

3. Encourage empathy. Nurses are the engines that drive the patient experience, Ketelsen says. As frontline staff, they're often the ones holding patients' hands after they receive scary news or providing comfort to family members after a loved one passes. The way a nurse responds and reacts to these types of events is noticed and remembered by patients. In McKinsey on Healthcare's 2014 Consumer Health Insights Survey, respondents ranked nurse empathy over all other measures of patient satisfaction.

MEASURING THE PATIENT EXPERIENCE

When it comes to gauging the patient experience, many health systems turn to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, a 32-question assessment created by the Centers for Medicare & Medicaid Services. While the HCAHPS survey can highlight inefficiencies or areas that need to be improved, it should not be the only scorecard used to measure the patient experience, Ketelsen says.

At HCA, senior leadership additionally obtains patient feedback informally, Ketelsen says. "We make sure a nurse leader visits patients each day, and we also talk to a sampling of patients in the emergency department. Those are dynamic conversations that give us important insights. We also look at social media to see what current and former patients are saying online about their experiences with us."

Hospitals that make delivering a superior patient experience a top priority should see positive outcomes in the key areas healthcare organizations look to enhance their performance, Wolf adds. "From my perspective, when hospitals get the patient experience right, they see better clinical outcomes, improved financial viability and patient loyalty, and enjoy a reputation as a top care facility in the communities they serve."

See page 54 for a story on how LifePoint Health embraced patient and family advisory councils to improve the patient experience.

PATIENT EXPERIENCE OFFICER: A ROLE ON THE RISE

Fifty-eight percent of U.S. hospitals have hired chief patient experience officers, a few do little to nothing and others are assigning the responsibilities to various roles within their organizations.

TITLES	U.S. HOSPITALS		
	2013	2015	2017
EXPERIENCE OFFICER (CXO, Director, Manager, etc.)	22%	42%	58% ↑
CHIEF NURSING OFFICER (or equivalent)	14%	15%	11%
CHIEF EXECUTIVE OFFICER/ EXECUTIVE DIRECTOR ADMINISTRATOR	8%	4%	10%
COMMITTEE, TEAM, WORK GROUP OR MULTIDISCIPLINARY TEAM	26%	14%	6% ↓
CHIEF OPERATING OFFICER (or equivalent)	3%	4%	5%
INDIVIDUAL DOCTOR, NURSE OR OTHER CLINICAL STAFF MEMBER	3%	3%	2%
NO ONE IN PARTICULAR	1%	3%	0%

Source: The Beryl Institute

LifePoint Health Embraces Patient and Family Advisory Councils to Improve Patient Experience

Hospitals are always seeking new ways to engage patients and improve the hospital experience. They have been using patient surveys and online reviews for some time now to gauge their success. Increasingly, they are also creating patient and family advisory councils. Among them is LifePoint Health, a Brentwood, Tennessee-based health system that operates 71 hospitals around the country.

Patient and family advisory councils are groups of patient representatives and caregivers who meet regularly with hospital staff to offer opinions and help improve performance and operations. A 2015 study in the journal *BMJ Safety and Quality* found such councils in 38 percent of hospitals—a number that is expected to grow. According to the Institute for Patient- and Family-Centered Care, advisory councils lead to better understanding and cooperation among patients, families and staff, and they promote respectful partnerships between patients and healthcare providers.

Rusty Holman, M.D., LifePoint CMO

In 2014, LifePoint Health created its Patient and Family Advisory Board (PFAB). "The multitude of issues and trends in healthcare and community well-being mean that this board is relied upon more and more for strategic direction and patient advocacy," says LifePoint Health's Chief Medical Officer **Rusty Holman,** M.D. "For example, the growing presence of telehealth services represents a shift in traditional healthcare visits and presents an opportunity for patients and healthcare systems to discuss access, scope and experience of virtual interactions. LifePoint has also sought the advice and assistance from the PFAB in strategies to combat the national opioid crisis, and how best to involve patients and members of the community."

The LifePoint PFAB is now convening regularly with the organization's National Physician Advisory Board (NPAB) to address complex topics together.

"We are joining these groups to delve into issues such as palliative care systems, improving patient experience in the outpatient setting, and how to promote patient and physician involvement in community coalitions," Holman says. "The recommendations from our PFAB and NPAB groups prove to be invaluable additions to refining organizational strategy, improving quality and safety, and creating places where people choose to come for care." ●

FDA APPROVALS:
2017 in Review

HealthTrust's physician services team regularly reviews all U.S. Food and Drug Administration (FDA) 510(k) approvals and premarket approvals (PMAs) related to physician preference products and those used in a diagnostic setting.

The team documents the products and their descriptions, indications and predicate devices, then links that information to the FDA approval documents. This worksheet is then posted to the physician services page on the HealthTrust member portal.

From January to November 2017:

> 1,358 products were approved through the 510(k) process, with 305 in the orthopedic category, 232 in spine, 257 in cardiovascular, 340 in imaging and 224 in lab. The 510(k) process requires product bench testing and a claim of "substantial equivalence" to a product already on the market.

> There were 41 original PMAs. PMA products, which require clinical trials, follow a longer process than 501(k) products.

> The FDA issued 34 Class I product recalls (the most serious type) and 2,112 Class II recalls, defined as:

- Class I: Dangerous or defective products that predictably could cause serious health problems or death. Examples include food found to contain botulinum toxin, a label mix-up on a lifesaving drug or a defective artificial heart valve.
- Class II: Products that might cause a temporary health problem, or pose only a slight threat of a serious nature. An example is a drug that is understrength but not used to treat life-threatening situations.

FROM THE DESK OF ED JONES

Continued from page 4

By implementing the Net Promoter model, HealthTrust is working to increase our number of "promoters" (those who would recommend us) and decrease the number of "detractors" (those who would not recommend us)—monitoring how the strategic and tactical changes we've made over the last nine years have positively moved the metric.

We will continue to invest in the areas of technology, contract category expansion and implementation support. Progress will be shared through business reviews the account management team holds with members throughout the year.

Thank you for your confidence and trust in us. Here's to a great 2018!

Ed Jones
President/CEO, HealthTrust

WHAT'S YOUR BIG IDEA?

APPLICATIONS ACCEPTED MARCH 1 – MAY 1, 2018

SEEKING SCALABLE IDEAS FOR 2018 HEALTHTRUST INNOVATION GRANT

Nominations are being accepted March 1 – May 1 for the fifth annual HealthTrust Innovation Grant. The program is designed to sponsor and reward new scalable ideas from providers for advancing healthcare.

The grant is valued at $50,000, awarded as a $25K check and $25K in the form of HealthTrust service line support. The recipient will be announced during the 2018 HealthTrust University Conference, July 23–25 in Nashville, Tennessee.

The application process requires nominees to detail how they would use the money and HealthTrust service line support to implement a truly innovative initiative at their facility or IDN. The grant will be awarded to a team or department within a HealthTrust member organization (vs. an individual contributor) with a new idea for improving performance in one or more of the following areas: care delivery, health outcomes, population health, cost savings and operational efficiency.

From March 1 – May 1, submit applications online at: **http://healthtrustpg.com/InnovationGrant**

Note: *HealthTrust will not consider initiatives with limited impact or those unlikely to be replicated at other member facilities, nor nominations that merely endorse HealthTrust services, contracts or suppliers.*

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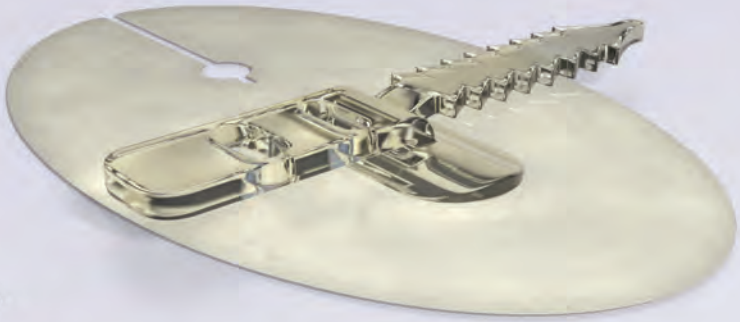

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Brief Summary: Prior to using these devices, please review the Instructions for Use for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

Indications: The Confirm Rx™ ICM is indicated for the monitoring and diagnostic evaluation of patients who experience unexplained symptoms such as: dizziness, palpitations, chest pain, syncope, and shortness of breath, as well as patients who are at risk for other cardiac arrhythmias. It is also indicated for patients who have been previously diagnosed with atrial fibrillation or who are susceptible to developing atrial fibrillation.

Contraindications: There are no known contraindications for the implantation of the Confirm Rx™ ICM. However, the patient's particular medical condition may dictate whether or not a subcutaneous, chronically implanted device can be tolerated.

Adverse Events: Possible adverse events (in alphabetical order) associated with the device, include the following: Allergic reaction, Bleeding, Chronic nerve damage, Erosion, Excessive fibrotic tissue growth, Extrusion, Formation of hematomas or cysts, Infection, Keloid formation and Migration. Refer to the User's Manual for detailed indications, contraindications, warnings, precautions and potential adverse events.

Precautions: Clinicians must log onto Merlin.net™ Patient Care Network to view transmissions from patients' Confirm Rx™ ICM. On Merlin.net™ PCN they can configure transmission schedule and enable or disable features on patient's myMerlin™ mobile app. Review of transmissions is dependent on the clinician and may not happen immediately following delivery of such transmissions.

Limitations: Patients may use their own or Android‡ or Apple‡ mobile digital device to transmit information from their Confirm Rx™ ICM using the myMerlin™ mobile app. To do so the device must be powered on, app must be installed, Bluetooth® wireless technology connection enabled and data coverage (cellular or Wi-Fi‡) available. The myMerlin™ app provides periodic patient monitoring based on clinician configured settings. Transmission data is resent if not sent successfully. However there are many internal and external factors that can hinder, delay, or prevent acquisition and delivery of ICM and patient information as intended by the clinician. These factors include: patient environment, data services, mobile device operating system and settings, ICM memory capacity, clinic environment, schedule/ configuration changes or data processing.

An Abbott mobile transmitter is available for patients without their own compatible mobile device.

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