Moving from data to action – Finding meaning in numbers

New direction: Population health

As healthcare systems shift from the fee-for-service model to managing health across a population of patients, hospital quality managers’ work using quality indicators and other data is moving to front and center of the evolution.

“From a payers’ standpoint, there are initiatives underway where their payment is based on the ability to reduce utilization and keep a population healthier,” says Ken Gross, PhD, MPH, principal at Quantitative Innovations in Pennington, NJ, and an adjunct lecturer at the University of Pennsylvania in Philadelphia.

“That’s a different focus for hospitals when, in the past, their population was anyone who walks through their doors,” Gross says.

A technological change that likely will come of this evolution is that electronic tools soon will be able to do the work of collecting and analyzing data, which now is being done by quality managers and preventionists. When this shift occurs, quality managers and preventionists will be able to use their time in quality improvement projects and prevention work, says Richard Platt, MD, MSc, professor and chair of the Department of Population Medicine at Harvard Medical School in Boston, MA. Platt also is the executive director of Harvard Pilgrim Health Care Institute in Boston.

The role of quality managers will change in the near future — in three-to-five years — with much more emphasis on the health of populations and keeping people healthy, says Keith Kosel, PhD, MHSA, MBA, vice president of VHA-UHC Alliance.
director of the Center for Applied Health Services Research, UHSC, in Dallas. Kosel, Platt, and Gross will be speaking about turning raw data into effective action at the National Association for Healthcare Quality (NAHQ) National Quality Summit, held May 11-12, 2016, in Dallas.

“Someone has to say, for example, ‘There’s a high incidence of asthma in the community, and here are the things we need to do to keep asthma patients from coming into the emergency room,’” Kosel explains. “That’s a natural function for a quality person: They understand that kind of data; they understand what you need to do to keep people healthy.”

This focus is a slight shift for quality managers because it moves them from considering only data in the hospital to paying attention to what’s happening in the community — both before and after patients are hospitalized, he adds.

“There is a need for quality people to pay attention to things — not abandoning quality, but to start seeing them shift emphasis and spend more time looking at quality in outpatient and ambulatory settings and keeping people healthy in the community,” Kosel explains. (See story on quality managers’ role in population health focus, page 3.)

Platt, Kosel, and Gross offer the following practical suggestions for how quality managers can prepare for the population health shift while managing their current roles:

- **Narrow down focus in data collection.** The information quality managers collect should be relevant, sufficiently timely, and complete enough to guide some kind of action, Platt says.

  “I’m very respectful of the fact that quality managers have a long list of items that people tell them are high priority,” he says. “But there are a couple of ways to slice this: For things that are the highest priority, do you currently have the appropriate tools to identify areas where you invest resources, and if you don’t, what would it take to create them?”

  Once you have your high priority list, determine the most efficient way to collect these data, Platt adds.

  “Is it possible to use a single platform?” he says. “This is much more appealing than creating or gaining access to a separate set of tools.”

- **Offer data collection for the hospital’s community health needs assessment.** Under the Affordable Care Act (ACA), nonprofit hospitals are required to do a community health needs assessment to report on what needs are uncovered, Gross says.

  This requirement is necessary for the hospital to maintain its tax-exempt status, and it must be conducted at least once every three years, or there will be financial penalties.1

  “Most hospitals don’t know where to begin,” he says. “So they leave it to their legal departments or their marketing departments to hold focus groups, talking with people about health in the community.”

  A better and more useful solution would be to take a data-driven approach, and this is where a health system’s quality manager can help, Gross says. “Hospitals have lots of data that reflects the health of the community population, and it’s all in their claims data.”

  For instance, many people go to the emergency room for asthma treatment, and a quality manager could collect claims data on where these patients live, identifying any geographic hotspots for asthma, Gross suggests.

  Since the sole purpose of claims data is collection for billing purposes,
it is free from the open-ended text and notes found in electronic health record data. Plus, every hospital collects claims data the same way and it’s not vendor specific, Gross explains.

“Claims data contains demographic information, including date of birth, address, clinical information, and financial information — all in one place,” he says. “All of these together shed a lot of insight on population health.”

• Understand financial implications. While financial implications generally are viewed by hospital leadership, it’s important for quality managers to connect the dots behind safety and quality measures and financial outcomes, Kosel suggests.

For example, the Centers for Medicare & Medicaid Services (CMS) penalize hospitals with high rates of poor outcomes and rehospitalizations on an increasing list of indicators. “Quality folks are in the best position to understand those trends and to identify data of what’s going on,” Kosel says.

“They can recommend alternative practices to put in place to reduce patient falls and those kinds of things, and that’s the most important role for hospital quality managers,” he adds.

Here’s an example of how this can work: A California hospital’s data showed high numbers of people admitted to the emergency department (ED) for acute alcoholism, Kosel says.

Hospitals EDs often can be so overcrowded with non-emergency patients that ambulances carrying people with serious conditions are diverted to other facilities.2

Ever worse, from a financial and quality perspective, ED crowding leads to higher rates of patient morbidity, mortality, and readmissions.3

“When they looked at community data and broke it down by ZIP code, they realized a lot of cases were coming from around sports venues,” he explains. “People were getting inebriated to the point of requiring some medical attention, and they were brought to the ER, which is an expensive stop versus taking them home and giving them a cup of coffee.”

So the hospital opened up a halfway shelter where EMS could bring drunken patients to be seen by a nurse and nurse practitioner until they were sober enough to return home. The entire solution cost a fraction of the cost of taking the same people to the emergency department and left ED beds available for seriously ill and injured patients, Kosel adds.

Quality managers can use data to find similar causes and possible solutions for pediatric asthma cases and other health problems within their communities.

“In today’s world, quality is about prevention. We want high-quality care and to make sure patients are not being harmed,” Kosel says. “But the longer-term role of quality management is trying to understand the health of the community and to focus more on prevention.”

REFERENCE

SOURCES
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Quality management’s role evolves as hospitals shift to population health

Focus should be clinically relevant data

The U.S. health system’s new transition to a population health model has resulted in healthcare systems and payers adjusting to new kinds of contracts and payment reform. Fee-for-service is being phased out and replaced with the concept of providing quality care for a population as cost-effectively as possible.

“Population health was initially created for the purposes of responding to new kinds of payment contracts,”
says Neil Wagle, MD, MBA, medical director of Patient Reported Outcome Measures/Quality, Safety & Value at Partners HealthCare in Boston. Wagle also is an associate medical director for Partners’ Population Health Management.

“Instead of fee-for-service, we’re paying for taking care of a population,” Wagle adds. “That incentive in fee-for-service of doing more and more is jacking up the cost of healthcare.”

Shifting to a population health focus requires a global budget and quality metrics, Wagle says.

The Affordable Care Act (ACA) has incentivized the creation of accountable care organizations (ACOs) and other healthcare models based on population health. More than three-fifths of the U.S. population lives in a primary care service area with an ACO, although about one in five people are treated by an ACO.1

Studies also show that only 4% of healthcare spending is for encouraging healthy behaviors, even when these same behaviors account for half of an individual’s ability to stay healthy.2,3

The role of quality managers in this transition is essential, says Sreekanth Chaguturu, MD, vice president for Population Health Management at Partners HealthCare in Boston.

“Quality people are incredibly important for this because we cannot reduce cost at the expense of quality,” Chaguturu says. “We have to show that quality is being maintained or improving, and what we need to do is build out registries of quality measures.”

Quality departments should measure quality data alongside cost data, and quality best practices would be maintained through monitoring and an incentive program, he says.

Registries would make it possible to track patients, ensuring they receive 100% of recommended preventive services, he adds.

“We’d make sure patients get all of the care they need and have the highest quality chronic disease management for cardiovascular diseases, coronary artery, diabetes, hypertension, asthma, and other chronic and highly prevalent conditions,” Chaguturu says.

What is changing for quality managers is what is being measured, Wagle notes.

And from a healthcare organization’s perspective, provider incentives are shifting to both quality and cost-effectiveness.

“We’re measuring total medical expense and measuring quality in a different way,” he says. “This is extraordinarily challenging because what you’re measuring and incentivizing really matters; both are management tools.”

The old system has hospitals talking about how much revenue a department or provider is generating, and for some providers it’s difficult to change this approach and philosophy, Wagle notes.

The cornerstone of population health management is using data and evidenced-based practices to reduce total medical expense. “One strategy that has been proven in trials is focusing on the sickest patients,” Wagle says.

“They’re accounting for a disproportionately huge percentage of cost,” he says.

Quality managers can collect data to identify these target populations by collecting metrics that include specialty care data and patient-reported outcome measures (PROMs). The goal is to move metrics to clinical relevance, which would make data useful and more likely to convince providers to make desired changes, Wagle says.

“When the measures are flawed, providers — myself included — may find a way to explain away performance data, saying it’s a problem with the measure and not with them,” he explains. “As we get more clinically relevant measures, we get more buy-in from physicians.”

Measures with clinical relevance include real-time data, capturing the entire population, more sensitive and specific denominator/population inclusion, using electronic sources and claims data, and allowing for clinical exceptions, such as terminally ill patients and patients who are intolerant to therapy, he says.

Using clinically relevant measures, Partners HealthCare achieved successful outcomes in the following ways:

• within three years of its Pioneer ACO Initiative, the organization reduced spending by 2.7%, saving $21.6 million during the third year, and

• there were significant improvements in diabetes control, lipid control, colonoscopies compliance, and blood pressure control.

Other benefits included a philosophical alignment with providers, more actionable, real-time, and accurate data, which fueled competition between doctors, clinics, and hospitals, and better overall performance — even as the covered population grew.

“It takes an incredible commitment to obtain the best data,” Wagle notes.

While quality managers are limited by their health system’s electronic record’s data limitations, there are a few practical steps they can take to improve their metrics, Wagle says.

These actions include the following:

• **Move to real time feedback.**

“Take the existing measures, as flawed as they are, and make sure they’re as close to real-time feedback as possible,” he suggests.

“Putting numbers in front of people about their individual performance will change their behavior, and it’s especially effective if you do variation reporting,” Wagle says. “Show them: ‘Here’s where you are and here’s where your colleagues are.’”

Within six months of receiving this feedback, any low-performing
physician’s numbers will improve, he adds.

• **Use patient-reported outcome measures.** “Patient-reported outcomes measures are a huge component of how we should be measuring in the future,” Wagle says. “These measures capture a totally different aspect of care than what we’re usually measuring.”

• **Answer data complaints.** “Three years ago, my primary answer to complaints was, ‘You’re right — we have to change the way we’re measuring it,’” Wagle says. Then, follow-up those words with these: “Yes, these measures are flawed, but in today’s market these are table stakes. If we can’t show that we can do these basic steps — however flawed they might be — then it’s difficult to convince the marketplace that we’re a high-quality provider,” he says.

REFERENCE:
1. Wyman O. ACO update: accountable care at a tipping point. Published by Leavitt Partners; April 2014.

SOURCES
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## Quality department evolution to deeper data, more efficient action

**Front line managers receive data directly**

Health system quality departments are beginning a transformation from the oversee-everything focus of past years to a more efficient process in which quality managers provide support, while allowing front line leaders to analyze and act on data.

Traditionally, it has been the quality department’s job to identify, prioritize, and provide resources to process improvement processes, says Gayle Sandhu, MS, FACHE, corporate senior director, quality assurance, Scripps Health in La Jolla, CA. Sandhu spoke about data and the business case for improvement at the 2015 Hospital Quality Institute Conference, held Nov. 11-13, 2015, in Sacramento, CA.

“Everything was managed through the quality department, and that led to year after year of incremental improvements,” Sandhu says.

But that model is falling behind with the need for clearer, faster, more actionable data. Instead, quality departments are moving toward a model in which data that is most useful is directed to the front line manager for analysis and action, she explains.

“By providing feedback directly to the front line manager, we are able to accelerate the pace of change,” Sandhu says.

Meantime, the quality department can provide support around process insights and managing for daily improvement and workflow redesign, she adds.

“This is a more efficient and respectful environment for managers,” Sandhu says.

Scripps Health developed a model for structuring this new philosophy toward quality management, calling it, “Inch Wide Mile Deep.” It includes medical management, performance improvement, quality assurance, and risk management/regulatory/infection control.

“In the past, quality leaders operated in one mile wide and one inch deep — a little of everything, but not a lot of any one thing,” Sandhu says. “Now, we’re shifting into being a coach with knowledge and expertise.”

From the quality assurance perspective, this model means that quality managers give data directly to the front line managers, placing them at the front and center of understanding what is happening in their units, she explains.

The quality department has identified six insightful value-adds to the process change. They include the following:

- **Inch-wide, mile-deep thinking.** “That’s a philosophical model for the quality department itself,” Sandhu says.

Quality department leaders often are called to manage more than data and quality improvement. They might also have these roles: regulatory management, patient improvement, staff and/or patient safety, readmissions, clinical care outcomes, and other roles. But having one person or one department handle all of these responsibilities...
is inefficient, Sandhu notes. “You can’t be an expert in 10 things, so when we look at the model of designing the corporate office to support sites, each of us will take a small slice of that,” she says.

It’s difficult for healthcare organizations to make this philosophical and structural change, but it’s necessary to change structurally if they desire to improve outcomes and efficiency, she adds.

- **Empower front line leaders to solve problems and manage quality.** Putting front line managers into the feedback loop is a first step in empowering them, Sandhu says. “You have them write their own analysis and action plan, and then it extends resources of the quality department across more things so they become a really important support system,” Sandhu says. “It’s a work in progress.”

By empowering front line leaders, an organization can solve site problems more efficiently through what Scripps calls A3, solving site problems using value by design principles and tactics, including standard work, quick process observation, tiered huddles, and visual management boards.

“It’s a single approach to problem solving,” Sandhu says.

- **Prioritize initiatives through a simple model that people can relate to.** The simple model is a quality assurance pyramid hierarchy in which the base includes the tasks a quality department must do, such as patient safety measures, National Quality Strategy Measures, Centers for Medicare and Medicaid Services (CMS) Pay for Performance Measures and publicly reported measures, brand and reputation measures, and Leapfrog, Hospital Engagement Network, Patient Safety First.

The middle layer of the pyramid has the tasks that data suggests are important, including opportunities for improvement, regulatory deficiencies, and other items.

And the top of the pyramid has the things that quality managers want to do, including innovation and quality measures for new standard work.

“We categorize all the measures that we want to do,” Sandhu says. “If we’re not performing on the things at the bottom of the pyramid, then it’s important to have a conversation about how you can’t move onto the other things.”

Quality leaders are passionate about their work and they might be excited about starting a new project, but their data collection and focus must be prioritized, she adds.

Flitting from one task to another without prioritization results in incremental improvements at best and is not sustainable, Sandhu adds.

Scripps Health makes the priorities with input from physician quality leaders and senior leadership, she says.

- **Instill discipline in your data collection systems.** Typically, data is collected by nurses or other staff. They might use national definitions and worksheets, Sandhu says.

This method does not ensure consistency without a quality assurance process. For example, in collecting data about infection control, there can be disagreement over whether particular cases involve infection, she explains.

“You have to make sure your data is right,” Sandhu says. “The worst thing we could do is provide inaccurate data to our front line.”

The key is to ensure the accuracy of all data collected, which helps advance the goal of building trust among front line staff, she adds.

One way to improve data collection is to have people trained in data collection, including following the Centers for Disease Control and Prevention’s (CDC’s) National Healthcare Safety Network (NHSN) infection tracking system. The NHSN has definitions and guidelines for data collection. There are similar national resources that could help with other types of data collection, as well, Sandhu says.

“For safety indicators, there are coders who can pick up complications,” she notes. “You can engage with them and develop a relationship so they can understand the importance of their work.”

- **Consider a single approach to problem solving:** “We used the A3 method for problem solving,” Sandhu says.

A3 problem-solving is a performance improvement method that can be compared with lean thinking. It’s named A3 after the European metric equivalent to a standard paper size — an 11-inch by 17-inch paper, which is called A3.

A team has to solve a problem using a single page, Sandhu says.

“They use pencils and have to scribble on the paper, writing their thoughts and then presenting it to senior leadership,” she explains. “You quickly and clearly see the barriers to solving that problem.”

The idea is that when people have to write out answers instead of typing them into a computer, they will spend no time on making their answers look good and more quickly get to the bottom line, she adds.

“Our A3 paper has nine boxes and each has to be responded to,” Sandhu says. “When you run these by other leaders, the ideas start to mature, and you gain insights to processes and barriers.”

- **Efforts in transparency should mirror efforts to support your leaders.** This final strategy involves prioritization and assessing health system-wide performance.

Quality departments often struggle with decisions about whether and when
to retire certain data collection initiatives and when they have enough quality improvement projects, Sandhu says.

When a quality department begins to send data directly to front line managers, it’s important to send data that is useful and drilled down to its most actionable elements, she adds.

“We’ve built in a number of business rules around our data,” she explains. “It only hits the managers’ radar if an alert goes off.”

The information technology automatically screens data for trends that need to be looked at, saving considerable time over the old process of having an analyst run reports, analyze them, and then decide if there’s a performance issue, Sandhu says.

“So you can monitor hundreds of indicators and because of the analytic rules, you don’t have to worry about them,” she adds. “You are notified only if you need to pay attention.”

Dashboards or reports showing the data identified as an issue are visually simple and easy to understand, she says.

“We used principal of design to support the front line,” Sandhu says.

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Hospital’s sepsis QI program lead to drop in mortality rate

Sepsis mortality fell 20%

T
there are many good reasons for a quality manager to focus on sepsis data collection and quality improvement (QI), but the most important one is that patients — even those who were recently in optimal health — can die from sepsis if it’s not diagnosed early. Around 750,000 U.S. adults have sepsis each year, and 30% to 35% of them die from the condition.

Middlesex Hospital in Middletown, CT, had 41 patients with a sepsis diagnosis who died in 2013.1

Although the hospital’s sepsis mortality rate was below state and national rates, the hospital’s rapid response review committee decided to initiate a quality improvement initiative to reduce the rate and improve sepsis care, says Terri Savino, MSN, RN, CPHQ, core measure specialist, quality improvement coordinator, and trauma coordinator at Middlesex Hospital. Savino, in October 2015, received the Luc R. Pelletier Healthcare Quality Award by the National Association for Healthcare Quality (NAHQ) for her project to implement evidence-based sepsis guidelines for early identification and treatment of sepsis.

“We had three cases that we classified as serious safety events, relative to a delay in recognition and treatment of sepsis,” Savino says. “We thought there was an opportunity to improve our care.”

The QI project resulted in a 20% reduction of severe sepsis mortality, with the rate falling from 5.6% to 4.5% within one year. There were an estimated 25 lives saved during the first year after implementation and sepsis length of stay decreased 5% in one year.1

“We had a national speaker from New York come into grand rounds,” Savino says. “He recommended that we measure not just sepsis mortality, but all hospital mortality, and that we look at the number of sepsis diagnoses, and we did.”

When the sepsis committee reviewed the length of stay related to sepsis diagnoses, the committee saw that there was a 5% decrease in sepsis length of stay because of the improvements.

Making such a change requires stakeholder involvement, especially executive leadership sponsorship, she notes.

“We had our vice president of patient safety and quality with us at the meetings, and he fully supported it,” Savino says.

The first step involved creating an Interprofessional Sepsis Task Force that met weekly from September 2013, through February 2014. The task force included physicians and representatives from laboratory and pharmacy.

“First we looked at the literature,” Savino says.

The task force also reviewed data involving patient outcomes and safety. “Everything comes down to the patient,” Savino says.

But collecting data is only the beginning.

“If you collect all this data and don’t do anything with it, you won’t see improvements,” Savino says. “We give this data back monthly and quarterly to managers and staff.”

The task force recommended the hospital make these three major changes:

1. Use Surviving Sepsis Guidelines. The International
Guidelines for Management of Severe Sepsis and Septic Shock, updated several years ago, include details about screening for sepsis, treatment, supportive therapy, pediatric considerations, references, and future directions.

“We hadn’t updated our clinical pathway, so we wanted to make sure our pathway was updated, and we did that in December 2013,” Savino notes.

2. Hospital-wide sepsis education. The task force recommended educating nurses, physicians, and others on the signs and symptoms of sepsis and what needs to be done within three hours and within six hours, Savino says.

3. Early warning system for sepsis. The hospital’s electronic medical record (EMR) can be used to gather patient data continuously and provide an early warning system alert for sick patients at risk of sepsis. The nurse or emergency department physician receives an alert when the system finds the following risk factors:

- three signs of systemic inflammatory response syndrome (SIRS), or
- two signs of SIRS and one sign of organ dysfunction (sepsis).


Within a few months of the hospital implementing the changes, data showed improvement. In the most recent report for October 2015, the hospital had gone 20 months with zero serious safety events (SSE) related to diagnosis and treatment of sepsis. The last SSE was in February 2014, and there were the three SSEs in 2013.

“The other interesting data that came out of this, and which we were not expecting, was that we actually saw a reduction in our patients who were transferred to a higher level of care,” Savino says.

Including all patients — not just those with sepsis — transferred to a higher level of care, the percentage declined from 43.9% to 29.3% over a 12-month period, Savino says.

“Just by implementing all of our improvements, including the early warning system, we identify sicker patients faster,” she explains. “It’s not just sepsis, but it’s alerting us to all sick patients.”

Savino discovered this correlation when collecting data for the rapid response team. “Monthly, we look at the number of patients transferred to a higher level of care, and as I was reporting that data, a lightbulb went off,” she says. “I checked the data and saw that the transfers had decreased since we implemented the early warning system.”

The sepsis education required staff buy-in, and the committee used sepsis case studies to help engage staff.

“We told a story of sepsis,” Savino says. “It can sometimes be challenging; I try to get the front line staff involved because they are the ones out there caring for patients, and they’re the ones who can recognize changes.”

It helps to have nurse educators and staff nurses on the team educating staff. “They can add details and answer questions,” Savino notes.

One nationally known story involves the case of a 12-year-old New York boy named Rory, who developed sepsis after a cut from a fall in the gym, she says.

Savino highlights the importance of hospitals focusing QI efforts on sepsis with Rory’s tragic story: Within a few days of his fall, Rory had a fever, vomiting, weakness, and leg pain, which were misdiagnosed as stomach flu and pain from his fall. He was discharged from the emergency department, only to become sicker at home. By the time he returned to the New York hospital, it was too late as the infection had overwhelmed his body, killing him.

In another story, a patient who was seen in the ED after a drug overdose vomited, aspirated, and developed a lung infection. ED doctors and nurses were focused on treating the patient’s overdose and missed the earliest signs of sepsis, Savino says.

Once the sepsis changes were implemented, QI efforts focused on measuring success and making continuous improvements, as needed.

The hospital began to focus on a three-hour bundle in which medical staff would have to make sure that a list of actions were taken within three hours of the patient’s sepsis diagnosis.

As an incentive, nurses and staff who follow the three-hour bundle consistently receive a sepsis star, followed by a congratulatory email.

“Everyone wants to be on that list now,” Savino notes.

As of Jan. 1, 2016, the hospital will reward employees who follow the new sepsis core measures by the Centers for Medicare & Medicaid Services (CMS). These include a six-hour bundle that is a little more challenging, she says.

Also, the hospital is continuing with sepsis education for new staff and with reminders, including a Surviving Sepsis Campaign badge holder, for existing staff.

REFERENCE
1. Savino T, Connelly M, Cosentino D. Using technology to improve sepsis care. Poster published in 2015 by Middlesex Hospital, Middletown, CT.

SOURCE
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Health organization’s PI program speeds up multiple EDs

Rate of ‘not-seen’ drops in half

Hospital emergency department (ED) visits have increased by nearly one-third since the mid-1990s, and these high volumes have led to increased problems, such as overcrowded EDs and greater numbers of patients being diverted to other facilities or leaving without being seen, studies show.1

This is a problem that can be addressed with quality department leadership, as one health system demonstrates: Universal Health Services (UHS) of Delaware in King of Prussia, PA, helped 26 EDs improve their time to seeing patients, says Paula Antognoli, PhD, RN, project manager for performance and process improvement, acute care for UHS of Delaware.

The first step was to design a project about the overcrowding, looking at throughput metrics in the following increments:

• arrival to provider,
• provider to disposition, including turnaround time for lab and radiology, and
• disposition to discharge for patients going home or for disposition to admission for those being admitted to the hospital.

“We analyzed data to identify where opportunities existed,” Antognoli says.

“When we started down this path in 2012, we had 26 acute care facilities experiencing annual increases in ED volume at a rate of 3% per year,” she says.

“With that volume increase, leaving-without-being-seen issues plague all EDs, and we noticed our leaving-without-being-seen rate was well above 2%,” she explains. “Our goal was to achieve a rate of 1%.”

When patients leave without being seen by a clinician, they either go somewhere else for care or their condition might worsen by the time they return, and those are undesirable outcomes, Antognoli notes.

“It’s a question of patient safety and quality care,” she adds.

In addressing the problem, Antognoli and other process improvement leaders looked at the ED throughput in terms of phases. “We carved off the initial phase of when the patient arrives at your door until the time in front of a physician or advanced practitioner,” she says.

“And we asked ourselves what were the steps for intake; which steps do we currently do, and what steps can we eliminate,” Antognoli says. “We wanted to take whatever wait time we could identify that was external to the process and eliminate it.”

For instance, external waste occurs when patients arrive in an ED and have a seat in the waiting room. One way to eliminate this is to have the patient immediately greeted by a nurse and taken back to a treatment space and reduce their wait time to see the physician, Antognoli says.

“Not every patient needs to have a bed. By using treatment chairs in a designated space, they feel equally cared for,” she adds.

The goal was to reduce the time frame from arrival to seeing a provider to less than 25 minutes, she says.

To make this happen, ED treatment space needed modifications: “We looked at the physical layout of the ED and reallocated physical treatment space to rapid medical exam areas where the patient is brought in and seated immediately in a chair, where a nurse could begin their lab work or get an x-ray,” Antognoli says. “Then a physician or mid-level practitioner can see them and discharge them from that space.”

The low-acuity patients are kept in the front of the ED to be discharged quickly. The rapid medical exam areas are self-contained and staffed with nurses, ED technicians, advanced practitioners, and registration clerks. The rapid medical exam area volume varies, based on the time of day with peak volumes — typically occurring between 10 a.m. and 10 p.m., depending on the communities they’re in, Antognoli says.

“For example, one ED in Bradenton, Florida, area sees 220 patients per day, and of that volume, one-third of their patients are treated in a rapid medical exam area without ever being admitted to a bed in the ED,” she adds.

Having so many patients who do not use ED beds helps to declutter an ED and lessens patient overcrowding, she says.

“Patients who are back in the ED beds are typically very sick and will require extensive work-ups, as well as admission to the hospital,” Antognoli explains.

“After the change, most of the health organization’s EDs began to see positive results. By the fall of 2015, the overall 26 hospital rate of people who left the ED without being seen had fallen to 1.07% — more than half the rate of where we started as a company,” she adds.

“We felt this project was about being a good steward for the business we’re in,” Antognoli says. “It’s important

in this day and age — particularly because patients coming into the ED are sicker than before and can’t be sitting around in waiting rooms,” she adds. “We tell our teams: ‘Everyone is a fast track patient, so everyone should be treated that way — seen quickly, assessed quickly, and given quality care as quickly as possible.”

**REFERENCE**


**SOURCE**

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### “Warm handoffs” can reduce hospitals’ readmission rates

**Collect data discharges, handoffs**

Newton-Wellesley Hospital in Newton, MA, improved its readmission rates through a quality improvement process that included measurements of “warm handoff” rates.

As a result, readmission rates fell and patient experience rates improved, says Bert Thurlo-Walsh, RN, MM, CPHQ, vice president of quality and patient safety at Newton-Wellesley Hospital. Thurlo-Walsh recently received the Rising Quality Star Award from the National Association for Healthcare Quality (NAHQ).

“We’ve been collecting warm handoff rates, including how many patients are discharged, whether the warm handoff was conducted and documented, the rate of completion by unit, and an overall aggregate,” Thurlo-Walsh says.

“We look at the overall readmission rate in 30 days for all causes, all payers, and we don’t drill down into individual areas,” he adds.

Unit-by-unit data is more challenging to measure because patients can be transferred from one unit to another, and it’s difficult to track them, he explains.

So the quality department looks at the overall readmission rate and disease-specific rates, such as rates for heart disease diagnoses, pneumonia, strokes, and chronic obstructive pulmonary disease (COPD), he says.

“If patients with those conditions are readmitted for any other reason, we look at that, as well,” Thurlo-Walsh says.

The following are some of the steps the quality department took to achieve positive outcomes:

- **Warm handoff.** “Our biggest focus has been nurse to nurse,” Thurlo-Walsh says.

  Communication needs to be fluid between the inpatient care nurse at the hospital and the skilled nursing facility (SNF) nurse.

  The hospital nurse should make sure the SNF nurse receives the patient’s paperwork before the handoff occurs. And they should speak, discussing interventions done in the hospital, antibiotics or other medications, and discharge instructions for the patient and family, he explains.

  The hospital’s discharge process should include the teach-back method to improve patients’ understanding of what needs to be done, he adds.

  “All of that information goes to the next provider of care,” Thurlo-Walsh says.

- **Making discharge phone calls.** “The discharge phone calls are when patients are discharged to their home with or without services,” he says. “They receive a discharge phone call from one of our staff nurses within 24 to 48 hours with specific questions around their care and transition to home.”

Nurses also ask about opportunities for improvement:

“How can we do better on our end, and would you like to recognize anyone for exceptional care?”

That last question is key, Thurlo-Walsh says.

“We believe in recognition and always want to do better,” he says. “We have a great service excellence program and want to recognize our staff that’ve done a good job because recognizing staff is key to keeping them happy.”

- **Improve communication.**

  “In relation to HCAHPS, nurse communication is the biggest driver of almost every other domain except physician communication and quality,” Thurlo-Walsh says. “If you do well with that, then almost all fall into place; in our service excellence program we link the two together now.”

  For instance, if patient surveys demonstrate quality nurse communication, then patients also rate pain management and medication communication higher, he adds.
Value-based purchasing (VBP) has added more weight to the role of quality managers in collecting data related to 30-day readmission rates. These readmission rates now affect a health system’s Medicare reimbursement, and the key is to look at data in a way that will highlight areas where improvements can have a positive effect on them.

One recent study shows that data from patient satisfaction surveys offer clues about changes that can reduce readmissions.1

“My whole angle to this [study] was to draw together the finance with quality and show how quality influences finance through readmissions,” says Jordan Mitchell, PhD, assistant professor of healthcare administration in the school of business at University of Houston Clear Lake in Houston, TX. “Value-based purchasing is influencing a lot of hospitals’ finance departments now,” he adds. “The way that’s determined is with process measures, outcome measures, and patient-reported measures.”

Mitchell theorized that patient-reported measures involving physician and nurse instructions would influence 30-day readmission rates and influence CBP. His study found that nurse communication, physician communication, and discharge instructions were significant in predicting lower readmissions with discharge instructions being the most influential.1

In other words, the higher the patient ratings of clinician communication and discharge instructions, the lower the 30-day readmission rates, Mitchell says.

The value-based purchasing incentive could be indirectly affected by lowering the 30-day readmission rate, which could be affected by improving provider communication with patients and discharge instructions, he explains.

“For future policy and practical implications, there needs to be a focus on patient-centeredness, especially with electronic health records,” Mitchell says. “Some of the times when hospitals put in electronic health records they will have a stand-alone system, and doctors will face a computer and not a patient; that kills patient communication.”

Future research should look into how doctors can more effectively communicate with patients without the EHR and data input getting in the way, he adds.

“Increasing communication and making sure patients know what to do on discharge are the two items that I think would have the most bang for the buck in lowering readmissions and increasing the value-based purchasing incentive,” Mitchell says.

Quality managers can use similar data to see if their own hospitals need a quality improvement project to improve communication and discharge instructions. For instance, the data Mitchell used came from a national dataset of the patient-reported Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) quality measures and medical readmissions.1

Mitchell used the following

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1. According to research cited by the NAHQ, what percentage of healthcare spending is directed at encouraging healthy behavior?
   A. 4%
   B. 9%
   C. 16%
   D. 28%

2. When a quality department identified a problem with sepsis cases, one of the performance improvement changes involved having the hospital’s electronic record create an early warning system alert for sick patients at risk of sepsis. Which of the following does the system look for?
   A. Three signs of SIRS
   B. Two signs of SIRS and one sign of sepsis
   C. All of the above
   D. None of the above

3. UHS of Delaware helped 26 EDs improve their time to seeing patients through a quality improvement project. Which of the following metrics were collected?
   A. The time it took for lab results to be returned to the ED
   B. Provider to disposition, including turnaround time for lab and radiology
   C. Mortality rate of patients in the ED
   D. All of the above

4. When Newton-Wellesley Hospital focused on improving readmission rates, which is one of the chief solutions?
   A. Improving warm handoffs and communication between the inpatient care nurse at the hospital and the skilled nursing facility (SNF) nurse
   B. Embedding a case manager into primary care practices to improve their overall population’s health
   C. Giving patients coupons for a fitness club, dietary program, and local entertainment venues when they achieved certain health metrics
   D. All of the above

“Quality managers could compare it with their own hospital, drilling down to their own hospital’s data and, more specifically, to patient level information in the electronic health record,” Mitchell suggests. “With EHRs there’s no excuse not to do that.”

REFERENCE:

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