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Study: Public reporting gaining 'long overdue respect' for quality managers

Solid data are best way to obtain resources

If you were frustrated by a lack of compliance with core measure requirements by medical staff members, would your hospital's CEO get involved? In general, do you feel you are getting more respect from clinical staff?

Public reporting of quality data has given quality professionals more power and attention in myriad ways, according to a new study. Quality professionals surveyed reported explicit inclusion of quality improvement priorities in the hospital's formal strategic planning, and hospital leadership accepting defined responsibilities for reviewing performance data.[1]

There is no question that public reporting has helped quality professionals, says **Jon Rahman**, MD, chief medical officer at St. Vincent Health, part of the Ascension Health System, which has 16 facilities throughout central Indiana. "Over the last three years, there has been a tremendous change, both in the board rooms and with senior leadership and management, on the issue of patient safety," says Rahman. "Obviously we're all interested in quality outcomes. The national awareness has been a real help to us."

Interestingly, half of quality officers reported that it was "easier to lobby management for resources," but respondents also said that resources were not adequate. There is growing evidence, however, that quality professionals have more power to obtain resources than they may realize. "The national focus on quality reporting certainly means that there will be a long-term mandate for hospitals to invest in their kind of expertise," says **Hoangmai H. Pham**, MD, MPH, the study's lead author and senior health researcher at the Washington, D.C.-based Center for Studying Health System Change.

"This is great professionally, as long as it's backed up with adequate resources to get the job done — and as long as the job is manageable and facilitates true quality improvement, rather than getting in the way," she says.

Overall, researchers noticed a sea change in the way quality is viewed by organizations. "We got the distinct impression that quality leaders were finally starting to enjoy long overdue respect from clinical staff," Pham reports.

Clearly, quality professionals are leveraging reporting requirements to demand more resources. "But the reality is that, though reporting and QI have become higher priorities for hospital leadership, hospitals still only spend a miniscule proportion of the operating budget on these activities, compared to say, facility expansions or marketing new specialty service lines," says Pham.

However, one could argue about whether they should spend more, since there is no compelling evidence that individual or combinations of reporting programs improve quality, adds Pham.

Several of the quality professionals surveyed said that they simply pointed out to their CEOs and boards that they couldn't guarantee accurate reporting to the Centers for Medicare & Medicaid Services (CMS) without more staff to collect and process the data. "Usually, citing CMS was the most effective mechanism, because of the payment leverage," says Pham. "They got more resources, but not many of them thought they got enough resources."

Senior leaders champion quality

Quality reporting has always been a part of the quality professional's job, but what has dramatically changed over the past 10 years is the amount of data being asked for by a large number of different sources, says **Jan Brewer**, PhD, RN, director of quality improvement at Mission Hospital in Mission Viejo, CA. "Often, the data are similar but have enough differences that 75% of the work must be repeated on each of the databases," she says.

Quality professionals have had to seek out electronic means to gather the data, but the majority of the data still are collected by a hand review of charts, says Brewer. "The requesting sources do not seem to be aware of how much time is involved to gather this data," she says. "They are also not cognizant of how much time is required to analyze and format the data for reporting. A major challenge is to use the data in a meaningful way to make care better."

A major stumbling block is that quality is not viewed as direct patient care. When streamlining and efficiencies are being looked at, therefore, one of the first areas considered is the quality department. "Senior leadership has to be a champion for quality, not only for it to function well but to thrive," she says. "The needs and requirements for data continue to grow, and the need for resources grows at the same time."

The reality, however, is that at the same time data collection loads are constantly increasing, hospitals also are challenged to be fiscally responsible, Brewer notes. When she realized that an additional FTE was needed to comply with data collection requirements created by California's CHART Initiative and CMS, she set about compiling data to clearly demonstrate this need.

First, Brewer quantified the time required to gather, review, and input data per patient chart. Next, she analyzed all the different requirements

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for each of the databases the organization reports to and placed all the resources required in a grid format. "Now, when new databases come forward, we can estimate how many patients will be needed, the time required to gather and enter data, and put a resource 'price tag' on the database," says Brewer. For example, the average time per chart for a typical database is one hour. If 200 patients are required, then 200 hours of work will be required.

Once Brewer had this data, she was able to make her case to administrators and add an additional FTE to the quality/outcomes team. "I showed the executive team how much it costs — not in money, but in time," she says. "Senior leadership responded to the analysis and allowed a new full-time person to be added to the department."

As for compliance, senior leadership involvement from both administrative and medical leadership are critical, says Brewer. At Mission Hospital, physicians have championed various causes for better compliance with quality indicators. For example, one chairman sent personal letters to physicians who were not compliant with orthopedics surgical antibiotics start and stop times. "We'd been challenged by that for years," says Brewer. "Physicians would tell us that was not their standard of practice, and they had practiced for 25 years with good results."

The chairman followed up with face-to-face meetings for the two or three physicians who remained outliers, and compliance improved. To address medication reconciliation, another physician attended all the major medical staff executive meetings to explain the importance of this process. "Another physician is championing the [Surgical Care Improvement Project] indicators, and is working closely with nursing and physicians to establish systems and urge compliance," reports Brewer.

At. St. Vincents, a survey to assess safety culture measures how associates perceive the attention of leadership to patient safety and quality. "Our scores have increased significantly because we have strong support from both our Ascension leadership and our local leadership here at St. Vincents," says Rahman.

The hospital has patient safety forum meetings, which are attended by board members, with presentations to underscore the importance of quality initiatives. "I think most lay board members understand finances, marketing, and strategic planning, but looking at quality and patient safety data are a challenge for them," says Rahman. "Often, they don't know what questions to ask. We have to help them, because ultimately they are the ones who are going to drive the organization's patient safety and quality performance."

Next year, the organization will link compensation of senior executives to measures including mortality, patient satisfaction, financial targets, and associate satisfaction.

In addition, teams at all the individual facilities, comprised of the chief medical officer, chief nursing officer, and quality professionals, will be asked to submit plans for how to get core measure compliance at the 95% target range. "At some point in time, the federal government is going to put the hospital's compensation at risk based on core measures. So in a sense, we are just getting ahead of the curve," says Rahman.

Is quality affected?

An important question is still unanswered: Are public reporting programs really improving the quality of care that patients receive? "The jury is still out," says Pham. "And no one has done the science to help hospitals decide which programs would work the best."

When tied to dollars, reporting has spurred compliance with public reporting requirements, acknowledges **Virginia Bynum**, PhD, senior vice president at Sioux Valley Health System in Sioux Falls, SD. "But I am not sure a case can yet be made that the reporting improves quality of care, outcomes for patients, or the ability to obtain quality resources," she says.

The first indicators for reporting were mostly process measures, and it is only recently that the measures have related to outcomes, Bynum adds. "Process measures are much easier to achieve and also less controversial than outcome measures, where physicians often argue that the required outcome is not best practice," she says.

Several factors affect the ability to obtain quality resources in addition to reporting, including location of facility, size, readiness of physicians, the "quality savvy" of the CEO, the abilities of and confidence in the quality leadership team, and dollars available for expansion of any resources including quality, says Bynum.

"The way to be more respected by health care leaders is to provide good, solid data," advises Bynum. "Give comparisons that make sense to your facility, and stay abreast of everything that

is happening in the field."

Quality professionals should consider asking for additional data from sponsors of public reporting programs, argues Pham. "Quality leaders should really 'push back' a bit, to demand that program sponsors put forth some real data on whether reporting is actually affecting the level of quality of care," she says.

This point is more relevant for programs that are not as "voluntary," such as some state reporting programs, CMS, and Joint Commission, says Pham. "When there's the threat of payment cuts or loss of accreditation, hospitals don't have much of a choice in terms of deciding to participate or not, based on evidence that doing so will improve quality of care," says Pham. "So it seems reasonable to ask these types of sponsors what analyses they are doing to assess impact on quality over time."

Documenting that scores improve is not enough; you have to control for factors such as temporal trends and interactions with other reporting programs. "The latter, in particular, has not been done by anyone, to our knowledge," says Pham.

Disconnect between quality and IT

"Obviously, quality is not capital intensive, but there has been a greater degree of conversation and support relative to purchasing items such as computerized physician order entry [CPOE] and electronic health records," says Rahman.

One hospital in the system has CPOE with barcoding that's up and running, and other larger hospitals are in the early phases of implementation. "For our critical access hospitals, we are trying to find an economic solution so they can have electronic health records for their inpatient side," says Rahman.

Still, there is a major "disconnect" between quality measures and information technology (IT) systems, says Pham. "I can't overemphasize the importance of this," she says. "It is important to understand that this shouldn't be viewed as just inadequate IT systems — although that's clearly part of the story at many hospitals."

Quality measurement professionals also should take on responsibility for creating measures that are feasible and practical to collect data for, given the real physical constraints of even the best available IT systems, Pham stresses. "As long as this disconnect exists, hospital quality leaders will catch the brunt of bridging the gap," says Pham. "That's costly in both dollars and time, especially with the paucity of available medical informatics experts to consult. And, in some cases, it may just not be doable."

Reference

1. Pham HH, Coughlan J, O'Malley AS. The impact of quality reporting programs on hospital operations. Health Affairs 2006: 25(5);1412-1422.

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ACCREDITATION
Field Report

JCAHO 'backup' system goes to top during survey

Surveyors shared best practices

When Joint Commission surveyors walked into Sacred Heart Hospital in Allentown, PA, the hospital's "backup" system went into effect. For everyone not present, a backup person went into action who knew where all the relevant documents were.

"In most cases, the primary person did happen to be there, but when that wasn't the case, it

worked seamlessly," reports **Diane Horvath**, the hospital's JCAHO coordinator. Even the hospital's CEO, who was absent for the entire survey due to illness, was backed up by other members of the executive management team and spoke with the surveyors by phone. "The surveyors recognized that the CEO doesn't do all the work," she says. "They spoke on the phone about some of their findings and what their thoughts were, and that was fine."

Similarly, surveyors didn't necessarily expect staff to drop everything when they walked into a room. "They were accommodating and understood that they walk in cold and people have things to do," says Horvath. "If they needed to go to a floor and a staff person was involved in something, they would rearrange the schedule to accommodate that."

Best practices shared

Throughout the survey, surveyors shared best practices from other organizations, including a reappointment profile for credentialing of medical staff. "It included all the different pieces of medical staff quality — utilization, infection, pharmacy — all the things you want to evaluate. They told us we might want to consider implementing that because they feel it meets the intent of the standard," says Horvath. "We are looking at methods to easily collect all of the data."

Overall, staff were happy with the new survey process, reports Horvath. "It was hard for me as the JCAHO coordinator, but staff liked being continuously ready and not having to prepare for only six weeks prior to survey," she says. "They enjoyed the tracer methodology."

The surveyors made sure to trace patients from all of the organization's priority focus areas. "They were able to follow patients who were transferred when they visited the unit in the next level of care, such as from the intensive care unit to the medical/surgical unit," says Horvath. "The surveyors wanted to speak with staff, and our staff did a great job telling the surveyors what they do every day."

Surveyors assessed compliance with the Joint Commission's Universal Protocol while interviewing staff about surgical charts, looked for unapproved abbreviations everywhere, and looked at timeliness of critical test results and methods of ensuring accurate patient identification. "The data-use tracer was an interesting interview," says Horvath. "They focused a lot on patient flow in that interview and asked about quality data." Surveyors didn't focus on data presentation at all, she adds. "They saw how we collect and present data at our monthly performance improvement committee meetings and did not have any recommendations," says Horvath.

During the medication management tracer, surveyors asked a multidisciplinary group to pick a medication. "The group picked insulin, and they followed it from the time it is purchased until it is given to the patient," says Horvath.

During the environment-of-care interview, surveyors looked at disaster and emergency preparedness. "They asked what we would do in the case of a 9-11 type disaster," says Horvath. "They were interested in how we are involved in our local community. We have a great regional group that meets regularly, so they were happy with that."

One major change for the organization was that home care, hospice, and hospital were all surveyed together.

"This was a change for us, and we saw how one survey can affect the others," she says. Quality professionals took full advantage of the opportunity to challenge any findings that they didn't believe were representative of the care provided. "You do have ten days to clarify any things they found that were not right. It's a lot of work, but it's well worth it," says Horvath.

Use of unapproved abbreviations was one finding that was challenged successfully. "In the survey process if they find two uses of unapproved abbreviations, that's an RFI. But you can go back and do a clarification based on the methods they give you. If you can prove it, you can get it overturned," says Horvath.

JCAHO requires that you use a specific formula for doing the reports, using its sampling criteria and records no more than 30 days before survey occurred. Quality professionals at Sacred Heart spent a week auditing 70 charts and immediately sent the results to JCAHO. "We got a response in about a week, and the RFI was overturned," says Horvath. "You can't challenge them onsite, but surveyors were very clear that we had the right to clarify any of their findings after they leave."

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Peer review: What you can do to avoid lawsuits

Are your organization's conducted in good faith?

Does your organization's peer review committee have any ulterior motives? Are any of the members in competition with physician colleagues who are being investigated? Or are there financial incentives of some sort that could interfere with the objectivity of the committee?

Hospital bylaws must be very clear regarding peer review processes, says **Carole La Pine**, MSA, CPMSM, CPCS, director of the credentialing department at Saint Joseph Mercy Health System in Ann Arbor, MI. Medical services professionals should work with the bylaws committee or medical executive committee to ensure that peer review hearings are conducted in good faith, she adds.

At Saint Joseph Mercy, the quality committee's role is to conduct or coordinate evaluations and investigations relating to medical staff initial appointments, reappointments, and delineated clinical privileges. But once an investigation results in an adverse action, the fair hearing process needs to be implemented, says LaPine. The organization utilizes access to excellent physician leadership as well as legal counsel, she says. "I believe our medical staff bylaws and policies and procedures are well done and would prevent costly lawsuits," she adds.

The organization's medical staff bylaws require the following:

- Members of the hearing committee shall not have actively participated in the consideration of the matter involved at any previous level.
- The committee shall not include any individual who is in direct economic competition with the affected individual or any individual who is professionally associated with or related to the affected individual.
- The application or member shall have the right to challenge the appointed committee members for cause.

"This makes it clear that competitors will not be involved in the hearing and that the member has the right to know in advance who will be serving on the committee," says LaPine.

Hospitals need to ensure that members of their medical staff are involved in activities to measure, assess, and improve organizationwide performance, says **Nilda Conrad**, MBA, CPMSM, CPCS, assistant vice president for medical/surgical/pediatrics and professional affairs at North General Hospital in New York City. The goal of peer review is to establish an objective evaluation of medical practice in order to assess a physician's competency, she says.

"Adverse evaluations may have a negative effect on a physician's privileges, their medical staff membership, and would have far-reaching repercussions, not to mention possible loss of their license to practice, malpractice actions, and possible criminal actions brought forth against them," says Conrad. For this reason, hospitals should follow a very specified, consistent, balanced, timely, and ongoing peer review process.

The hospital must be careful that none of the appointed members of a peer review committee are in direct competition or conflict with the practitioner under review, says Conrad. "Those appointed to take part in the review must be seen as objective and with no interest in the matter whatsoever," she says. Peer review must be conducted "in good faith" and without undue influence or pressures. If in doubt as to the biases of members of their own medical staff, hospitals should obtain an external reviewer, says Conrad.

There are other circumstances in which the hospital should seek an external peer review process, such as when a procedure is new to the institution or where there is a conflict of interest with members in a service and the institution seeks an unbiased review. "In this case, external experts must be sought to participate in this process, in order to reduce the risk to the institution," Conrad says.

To ensure that your organization's process is objective, use an internal process for your own committee reviews to improve performance. But for cases with possible conflict with others in the same specialty or competition for the same patients, use an external peer review process of experts from outside your institution who would be better able to remain unbiased and provide their expert findings on a matter, without the possibility of personal gain, says Conrad.

It is the professionals involved in supporting the medical staff leaders — medical staff affairs or quality management staff — who must ensure that the appropriate process is followed, says Conrad. At North General Hospital, medical affairs professionals guide and support the medical staff leaders

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PATIENT SATISFACTION PLANNER™

Patients at this hospital have a 'ticket to ride'

Hand-off problem addressed with form

A new program at Doctors Hospital in Coral Gables, FL, helps move patients seamlessly from one department or unit to another, helping address the challenging issue of handoffs. Patients get a "ticket to ride" whenever they leave their hospital room — be it a transfer to another unit or a roundtrip down the hall for an X-ray. With checklists for tests, procedures, and nurse's observations, the new peach-colored form helps relay patients between staffers.

Pat Blanco, RN, MPH, CHE, CPHRM, the risk manager at Doctors, first learned of this approach on the National Patient Safety Foundation listserv. "Someone mentioned they were using it, or planning to use it," she recalls.

Blanco felt such a vehicle was important because "patients are handed off so many times throughout the day without a real opportunity to give information and ask and have questions answered."

The classic example, she says, would be a patient going to radiology who is a fall risk — but that information has not been communicated to the technician. "So the tech takes the X-ray, leaves the patient on the table, and comes back and finds the patient on the floor," Blanco suggests.

Committee creates forms

The technician, she explains, "Will not go through a four-inch chart to find this information. Nurses have a Cardex, and so forth, but when a patient is handed off, what really is needed is that opportunity to give information." The fact that this is one of the Joint Commission's National Patient Safety Goals, she notes, was naturally an important driver in the initiative.

Blanco put together a handoff committee, which started to meet in fall 2005. She jointly chaired the committee with the manager of one of the patient care units. The members of the committee were nurse clinicians from each unit and other parties Blanco felt had an interest in handoffs — i.e., the managers of radiology and respiratory therapy.

"We met about every two weeks," says Blanco. Using the PDCA (plan, do, check, act) rapid cycle approach, "We added a certain set of items, tried the ticket, then after two weeks clinicians would come back and say they needed some more information on the form or that some step was cumbersome and needed to be taken out."

At one point, for example, the committee felt it was important to note whether a patient was a monitor patient. "In the next cycle, it was added, but we noted that when we take the patient out of 'tele' to go somewhere else, you want to call the monitor tech to tell them they were leaving the floor."

The form kept growing, says Blanco. "At first, to indicate precautions, we would just check them off," she says. "Then, next to the box, we would put 'aspiration,' 'bleeding total hip,' or 'knee,' so we knew what kinds of precautions were needed."

It's still a short list, says Blanco, although it is more complete than it was. "We've met many times since the last change, and we have not had any need to add or subtract anything," she notes.

Blanco said she did not need to seek formal approval to institute the new system. "The director of nursing periodically attended our committee meetings and could have said something if she was opposed," she notes. "Since she didn't, we assumed we had nursing's approval."

In addition, the committee took the form "everywhere" — i.e., to a whole series of committees, include QI, as an informational measure.

How the form works

Blanco explains how the "ticket" works in practice. "If a patient needs to go to radiology, the floor calls and says, 'Bring down Mrs. Smith in room 3427, and call transportation.'

Transportation takes the ticket to the floor, finds the patient's nurse, and then fills out the ticket."

The nurse signs the form and the transporter signs the form. (Below the section where the nurse signs the form is a place for comments.) The nurse signs both her name and phone number, so if a radiology tech gets the ticket and does not understand something, he knows exactly who to call. "That's part of the National Patient Safety Goal — to have the opportunity to ask questions and to have those questions answered," Blanco notes.

When the patient leaves radiology and goes back to the room, there is a section for the tech to make comments — such as, "IV infiltrated'' or "We could not do the test because the patient was too nervous."

The tech signs his or her name and the transporter signs it again and then sends it back with the patient. The nurse who receives the patient has to sign it again, because the ticket goes back to transportation.

The ticket is used "whenever a patient travels," says Blanco. It's good from midnight to midnight. If a patient travels a second time during the 24-hour period, on the next trip there is a place for the nurse to put additional comments, and the transporters bring back the same ticket.

The earliest version of the ticket was used in November 2005. As of this March, the staff started using the current version.

The staff reaction has been very positive, Blanco says. "They realize its importance," she says. "Transportation knows they can't move a patient without a ticket. Even if a nurse did not want to use it, they would have to do so, but they realize there is a lot of information that should be communicated on some patients when they leave the floor."

The transporters, she continues, have been made to feel they are an important part of the team. "They are not just regarded as robots; they take responsibility for the patients, and they have been made to feel like they are important," Blanco observes.

It is far too early for quantitative proof the ticket has improved safety, "But qualitatively the nurses feel like if they are sending someone with critical information, it will be readily available to the receiver — and those receivers say they truly appreciate that, when they receive that patient, they have that information. They know if the patient is combative, if they are a falls risk, or if they need a specific amount of oxygen."

Since the receivers have to sign the paper as soon as they have received the patient, "This means they must do an immediate review of the patient," Blanco summarizes. ■

Facility uses Six Sigma to improve quality

Isolation management initiative earns recognition

New York-Presbyterian Hospital recently received top honors in two categories at the Global Six Sigma Summit & Industry Awards — "Best Achievement of Six Sigma in Healthcare" (sponsored by CIGNA Corporation), and the Platinum Award for "The Most Outstanding Organizational Achievement through Six Sigma." After a review by an independent, international panel of 14 leaders from business, industry, and government, New York-Presbyterian received the top award in the health care category and also took the Platinum Award for being the best overall of all seven category winners for using the quality methodologies to achieve major advances in patient safety, cost savings, innovation, and efficiencies. The Global Six Sigma Awards program received 65 entries from organizations based in India, Saudi Arabia, Singapore, South Africa, the United Kingdom, and the U.S. for the 2006 competition.

The 2,224-bed academic medical center is affiliated with Columbia University College of Physicians & Surgeons, and Joan and Sanford I. Weill Medical College of Cornell University.

The hospital's initial investment in Six Sigma was $8 million. In 2004, the first full year of the program, a savings of $47 million was realized from bottom-line expenses — a direct result of the Six Sigma initiatives. The 130 projects initiated that year included length of stay reduction, financial performance, and constraints in an increasing regulatory environment.

The facility's initiative in isolation management IT solutions was a key factor in its earning the awards, says **Michelle Evangelista**, RN, MHSA, a Six Sigma Black Belt at the facility. (New York-Presbyterian has more than 20 Black Belts on staff.) "We received a request to apply for the award, and we applied in the health care category," she recalls. "As we put together our application, we used the isolation management project

as a specific example of our Six Sigma programs."

The demand for isolation beds had been growing at New York-Presbyterian in response to the hospital's ability to identify patients who required isolated environments, as well as the increasing number of patients who were colonized with resistant organisms. In 2004, contact isolation bed utilization increased 25% for MRSA (methicillin resistant Staphylococcus aureus) cases and 27% for VREF (vancomycin-resistant Enterococcus faecium bacteremia) cases at locations studied, while isolation bed capacity remained unchanged.

The isolation bed placement data analysis for November 2004 to November 2005 demonstrated a 23% improvement in first bed assignment to a private isolation room. "We have also seen improvement in the percentage of patients transferred after first bed placement for isolation purposes, as well as the percentage of patients that were cohorted [placed in a room with a roommate that meets the policy for cohorting patients], and the percentage of patients isolated in blocked bed rooms [placing the patient in a semi-private room and blocking the other bed from use by non-isolation admissions]," says Evangelista.

Using the Six Sigma DMAIC (Define - Measure - Analyze - Improve - Control) process, staff identified an opportunity to improve and then gathered the "voice" of the customers (internal or external) to fine-tune the scope of focus to ensure a greater impact.

"We did a measurement system analysis, which we think is always critical; you have to know how good your data is," says Evangelista. "We looked at the critical factors that were impacting our ability to perform optimally, and it really came down to communication and staff training. That, in turn, drove the improvement initiative."

It became clear that the facility had to have a reliable, automated methodology to identify patients who would need isolation. "This population does not arrive with acute illness — which is easy to identify — but is transferred or returned to us and have been colonized, or had infections," explains Evangelista. "They are a little harder to identify."

Fortunately, says Evangelista, the hospital has a very strong epidemiology department. Once a patient is known to be positive, a staff member can go into a database established by the epidemiology department.

The database has logic built into it and can be applied to specific organisms. Utilizing the hospital standards (based on CDC and other national guidelines), a treatment plan is then created for the individual patient according to those standards.

The database gets uploaded on a daily basis and feeds the registration system, she explains. "So, there is a field the bed assignment people can look at, and a code is generated. The patient is designated as either active or inactive. If you have been coded as active, the field is populated and the bed assignment person can see you've been colonized, and according to our rules, you require isolation."

The facility, she adds, also has a pre-admit tracking system that interfaces with the database, "So we can look at it in both ways."

To sustain and institutionalize project results, a reporting mechanism was developed in the control phase of the Six Sigma process to integrate and include isolation management measures in the hospital's Intranet site. This involved the creation of a new portal so that the epidemiology department can take this success even further. "Now that we've achieved a certain level of compliance, they will build it into their processes to monitor if they are maintaining gains or improving upon them," Evangelista says.

To date, she adds, "We have maintained this [improved] level of performance." ■

APNs ensure patients move through the continuum

Nurses lead the care management team

Case management is a collaborative process at Edward Hospital in Naperville, IL, with advanced practice nurses leading a team that includes utilization managers, social workers, and staff nurses.

Having the advanced practice nurse lead the care management team helps ensure that patients receive optimal care in a timely fashion and move quickly through the continuum, says **Patti Ludwig-Beymer**, RN, PhD, administrative director for education and research at the 300-bed regional health care provider.

"From my perspective, after being in nursing for 33 years, advanced practice nurses can move the patients along faster because they have pre-

scribing authority and can write orders, clearing the way for patients to be discharged in a timely manner," she says.

The hospital, which achieved the prestigious Magnet Award for nursing, has been using the practice model for more than 10 years.

"Advanced practice nurses are extremely knowledgeable about patient needs and patient care. Over the past year, as we have focused on the core measures data, the case management piece of the advance practice nurses role has increased. We believe that our hospital is forward-thinking and has the best-educated people possible providing patient care," she adds.

The advanced practice nurses have a collaborative practice agreement with physician groups that allows them to write orders and discharge patients from the hospital under the guidelines of the practice group under which they work. They collaborate with the treatment team on patient care and work with the utilization staff to monitor length of stay and documentation.

"The model is rich in dollars, but it's also rich in knowledge. The advanced practice nurses bring a lot of talent to the table, and they can move the patients quickly through the health system. They are well trusted by the physicians, who treat them just like a colleague," says **Lynn Wagner**, RN, MS, CNAA, administrative director for critical care and the medical-surgical units.

The advanced practice nurses are the frontline care providers for patients in the hospital. If the bedside nurse has a question or sees that a patient has a problem, she calls the advanced practice nurse on her team, who may order medications or tests or call in the cardiologist if necessary, adds **Lynn Cochran**, RN, MS, director of cardiovascular inpatient services.

"As a piece of their role, they serve as physician extenders. They can clinically manage the patients, write orders, and work with their physician partners," Cochran says.

All members of the care management team are in constant contact all day about the patients and the discharge plan, she adds.

"The utilization review staff are in frequent contact with the advanced practice nurse and the physicians to ensure that the patient is moving through the continuum smoothly," Cochran says.

Because they are in the charts and at the patient bedside all day long, the advanced practice nurses know from daily practice what the barriers are to getting patients through the system, Ludwig-Beymer says.

They serve on the team that examines ways to streamline the patient throughput process by ensuring that tests results are back in a timely manner and that patients with the potential to be discharged get a high priority on the list, Ludwig-Beymer adds.

The multidisciplinary team meets weekly to discuss patients who have been in the hospital for seven days and look for obstacles that need to be overcome for the patient to be discharged.

When a patient is ready to be discharged, the advanced practice nurses are on the floor and can write the discharge orders, eliminating delays in discharge, she adds.

The advanced practice nurses have worked with the rest of the hospital staff to standardize treatment regimes so that every patient is treated under evidence-based guidelines, Ludwig-Beymer says.

One advanced practice nurse works with the emergency department to educate the ED staff on patient protocols and to make sure that standing orders for cardiac and pulmonary patients are followed.

The advanced practice nurses are credentialed by Edward Hospital's internal medicine credentialing body.

The seven advanced practice nurses at Edward Heart Hospital have collaborative practice agreements with the physician groups that practice at the hospital.

"We have one big cardiology group that often has as many as 70 patients in the hospital. The advanced practice nurse can't see all of them, but between them, the doctors and the nurses see all of the patients every day," Cochran says.

The six advanced practice nurses who work on the med-surg floors have collaborative agreements with the highest-volume medical groups that practice at the hospital.

The nurses are assigned by unit for interdisciplinary rounds on some of the med-surg floors. They always are available to any staff member who has questions or concerns about a patient.

The advanced practice nurses are primarily employees of the hospital, with most of their salary paid by the institution. The heart hospital invoices the physician practice group for a percentage of the nurses' salaries.

In addition to managing patients in the clinical setting, the advanced practice nurses track patients who have implanted devices, are members of the hospital's rapid response team, and are involved in clinical research. ■

when external peer review is required, and quality management staff are involved in the internal performance improvement processes. "They are key in ensuring that the appropriate process is followed," says Conrad.

The quality professional's role is to support and guide the various internal committees and assist in the review of the pertinent facts, says Conrad. "They do the legwork for the physicians and, since they are nurses, provide feedback that is reviewed by the appropriate committee to determine their findings and make recommendations for improvement, if necessary," she says.

If an external peer review process is called for, the medical staff professionals assist in obtaining experts in the appropriate specialty with no possible connection to the facility or to the involved practitioner. "The medical staff professional also helps guide the process according to the specified policies," says Conrad.

Conclusions reached through the peer review process must be supported by rationale that specifically addresses the issues for which the review was conducted, adds Conrad. "Such rationale may include reference to specific literature and relevant clinical practice guidelines," she says.

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Very few hospitals using EHR, says a new study

As of 2005, only between 5% to 10% of hospitals are currently using electronic health records (EHR), according to a new study.[1] The researchers urge greater attention to EHR adoption by safety-net providers and others who care for underserved populations.

"Given the potential of EHRs to improve quality, ensuring access to these tools among all providers is critical to reducing disparities in health care," argues **Ashish K. Jha**, MD, MPH, the study's lead author and assistant professor of health policy and management at Harvard School of Public Health in Boston.

"Our study found that the rate of EHR use in hospitals is likely extremely low," says Jha. "This will become a major barrier for improving quality in these organizations."

Most hospitals will have a very difficult time reducing errors, improving patient safety, and dramatically improving the quality of care it provides without investing in these systems, Jha explains. "Quality professionals who recognize the link between quality and EHR use know that just putting in an EHR alone will not make care better," he says. "But without an EHR, physicians, nurses, and other professionals will not have the information they need to make better care decisions."

Reference

1. Jha AK, Ferris TG, Donelan K, et al. How common are electronic health records in the U.S.? A summary of the evidence. Health Affairs 2006;w496-w507. ■

THE QUALITY - CO$T CONNECTION

How to evaluate social service contributions

SWs an important link between providers, clients

By Patrice Spath, RHIT
Brown-Spath & Associates
Forest Grove, OR

Social work services provide an important link between ambulatory and inpatient providers and health care clients. Social workers assist patients in finding available and appropriate resources, help with financial issues, arrange transportation for patients, and conduct many more enabling tasks.

Social workers assist in the assessment of patient needs and ensure that appropriate post-hospital services are provided. For the ambulatory care client, whether hospitalization has

occurred or not, social workers can provide a link from one service to another. In addition to coordinating support services, social workers assist patients and their families in resolving personal or emotional problems that affect the patient's participation in clinical care. Equally important, they provide patients and families with a shoulder to lean on and encouragement to continue the care process until the treatment is concluded or the problem is resolved as effectively as possible.

Measures of the social worker's contribution to the case management process are linked to the job responsibilities. Listed below are common job tasks performed by social workers involved in hospital-based case management:

- Conduct patient/family assessments to identify barriers that may impede recovery and/or patient's return to the community.
- Help patients identify their concerns about their illness and recovery, consider solutions, and find necessary resources.
- Investigate patient or family allegations of abuse and neglect, and intervene if necessary.
- Plan for appropriate post-discharge supportive services and follow through to assure that services actually were provided and met patients' needs.

It is important that social workers collect and analyze data about the effectiveness of case management interventions so that opportunities for improvement can be identified.

Performance measures

Performance measures are generally easiest to determine for social work activities that have established and quantified goals. When no goals exist for an activity, the case management team should revisit the fundamental question of what it is that social workers are expected to achieve. Several examples of common goals for social work interventions are listed below:

- patient/family are satisfied with social work services;

Figure 1

Social Work Services Satisfaction Survey

Now's Your Chance to let us know how you feel about the assistance you received from social workers at the hospital. We appreciate you taking the time to complete this questionnaire. Your answers will help us identify problem areas, as well as what we're doing right. Any comments you make, positive or negative, will remain strictly confidential. Your signature is optional, not required. Just complete this form and mail it back to us in the envelope provided.

	Always	Usually	Rarely	Never
1. You were treated courteously by the social worker.	___	___	___	___
2. You received pleasant and helpful assistance in filling out paperwork.	___	___	___	___
3. The social worker listened to your concerns.	___	___	___	___
4. The social worker spent enough time with you and/or your family.	___	___	___	___
5. The social worker was available to you and/or your family.	___	___	___	___
6. You were confident in the social worker's ability to assist you in getting the post-hospital services you needed.	___	___	___	___
7. You understood the information given to you by the social worker.	___	___	___	___
8. The social worker involved you in the decisions about your care.	___	___	___	___
9. You were satisfied with the post-hospital arrangements made for you by the social worker.	___	___	___	___
10. You would use social work services again at this hospital.	___	___	___	___

About You

1. Age: _____
2. Sex: __ Female __ Male
3. Is this your first visit to this hospital? __ Yes __ No
4. Have you seen a social worker during other stays at this hospital? __ Yes __ No
5. Present services you now receive: (check all that apply)
   - __ home health agency
   - __ support group
   - __ Meals on Wheels
   - __ senior service center
   - __ aging services
   - __ other (explain: _____)

Thank you for choosing our hospital for your health care needs. By working together and listening to each other, we can help to assure your continued well being.

Signature: _____
(optional)

Source: Patrice Spath, Brown-Spath & Associates, Forest Grove, OR

• provider/community services' are satisfied with social work services;

• timely response to referrals;

• complete documentation of service plan and interventions;

• case management goals, as established in patient-specific case management plans, are achieved;

• unnecessary over-utilization of acute care services is minimized.

Patient and family satisfaction with social work services can be measured with a survey instrument. This survey can be mailed to patients after they leave the hospital or given to them on discharge. Shown in Figure 1 is an example of a questionnaire that is used to gather information about people's satisfaction with social work services. By periodically collecting data about patient and family perceptions of staff performance, the social work department can make constant improvements in its quality.

Include in the survey questions assessing the social worker's capacity to express sincere sympathy and empathy, the timeliness of their services, the clarity with which they communicate the service plan of care, and how well the plan meets the needs and wishes of the patient and their family. Similar types of survey instruments can be used to gather satisfaction information from physicians, post-hospital treatment providers, and community service agencies.

With today's short hospital lengths of stay, social workers must quickly evaluate patients' needs and make necessary post-hospital arrangements. Thus, identification of patients that may require social worker interventions should be done as soon as possible. A screening tool, such as the one completed by the hospital preadmission coordinator shown in Figure 2, can be a useful method for identifying patients who need a social work referral. When a preadmission screening process is in place, social workers can measure how quickly patients are seen after admission. Ideally, high-risk patients are seen the same day as admission or within 24 hours of referral.

The patient's medical record is a vital communication tool, and that's why it is essential that social workers adequately document patient assessments, service plans, and interventions. It is important that psychosocial issues be well documented so that the caregivers understand the environmental influences the patient is coping with while simultaneously undergoing medical care.

The thoroughness and conciseness of the social workers' documentation in the patient record is all-important, and no performance measurement system is complete without an analysis of documentation. However, the measure of quality should focus on aspects of patient care, not just the fact that charting did or did not occur. For example, the performance measure, "percent of medical records that contain an appropriate psychosocial assessment" places emphasis on documentation, not the patient.

By changing this measure to "percent of patients receiving appropriate psychosocial assessment," the importance of proper patient care is emphasized rather than the documentation.

Patient-specific case management plans should contain goals, and achievement of these goals is a common measure of performance. However, evaluating this aspect of social work services can be difficult when goal attainment is not expected to occur until after the patient leaves the facility.

Figure 2

Preadmission Service: Social Services Referral

Date of referral: _____ Expected date of admission: _____
Name: _____
Surgery type/date: _____
Marital status: _____ Date of birth: _____
Physician: _____

Present Living Conditions:
__ in your own home, alone
__ at home with spouse
__ at relative's home
__ other (explain: _____)

Present Services you now receive:
__ home health agency (Name: _____)
__ support group (Name: _____)
__ Meals on Wheels
__ senior service center
__ aging services
__ oxygen supplies
__ other (explain: _____)

When you leave the hospital, you will be:
__ alone
__ with spouse
__ with relatives
__ with friends
__ other (explain: _____)

Source: Patrice Spath, Brown-Spath & Associates, Forest Grove, OR

For example, it may be a week or more before the social worker can verify that a discharged patient actually is receiving the community services that have been arranged.

The fact that the social worker made the appropriate referral is important. However, the goal of obtaining community service support for a patient is not actually achieved until the services are being delivered as promised.

Gathering goal attainment information post-discharge will require some type of call-back system to verify that patients are receiving necessary services.

Social workers can help to reduce overutilization of acute care services. When social work assessments are completed on time and referrals initiated early in a patient's hospitalization, discharge is more likely to occur as soon as the patient is medically stable.

Measures of resource utilization problems that may be attributable to problems with social work services include:

- number of patients with recognized psychosocial problems that were not resolved during their hospital stay and for whom no post-hospital support was arranged (these patients are at high-risk for readmission);
- number of patients readmitted to the hospital within 30 days with suspected abuse/neglect who were not seen by social worker during their first hospital stay;
- number of patients with a history of suicide or drug abuse not seen by social worker and/or not offered a referral to follow-up counseling clinic;
- number of discharge delays due to late referrals/arrangements by social service staff.

Professional standards

The National Association of Social Work (NASW) has developed professional standards and clinical indicators for many aspects of social work and psychosocial services, including case management activities in acute care and psychiatric hospitals. These resources can be found on the NASW web site at: www.naswdc.org/credentials.

The NASW supports the establishment of systems and processes that enable social workers to evaluate the quality of case management services to patients, families, and other customers. Ideally, performance improvement of social work services is part of a coordinated effort of all disciplines within the case management department. ■

CE *questions*

21. Which did a recent study find regarding public reporting of quality data and its impact on quality professionals?
    A. Quality improvement priorities are no longer included in formal strategic planning.
    B. Hospital leaders are refusing to accept responsibility for reviewing performance data.
    C. Quality leaders report increased respect from clinical staff.
    D. Almost all respondents said it was more difficult to lobby for additional resources.
22. Which of the following is recommended to ensure that medical peer-review hearings are conducted in good faith?
    A. An external review process is only needed if a lawsuit has been filed.
    B. Don't give members the right to challenge the committee's findings.
    C. Avoid using external experts, even if a procedure involved is new to the institution.
    D. Don't include individuals who are in direct competition with the affected individual.
23. Which is a finding of a recent study on electronic health records?
    A. Over half of hospitals have implemented EHR.
    B. Between 5% to 10% of hospitals are using EHR.
    C. EHR is linked to patient safety problems.
    D. EHR use is decreasing because of resistance from administrators.
24. Which did a recent Institute of Medicine report recommend?
    A. That Medicare gradually transition from fee-for-service to pay-for-performance.
    B. That Medicare delay any switch to pay-for-performance.
    C. That organizations provide more data before pay-for-performance is considered.
    D. That pay-for-performance not be considered due to concerns about adverse impact on patient safety.

Answer Key: 21. C; 22. D; 23. B; 24. A

CE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. **The semester ends with this issue.** You must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a credit letter. ■

Anti-kickback safe harbors could give boost to P4P

Under expanded safe harbors to anti-kickback statutes, physicians are now allowed to accept donations of electronic prescribing software, electronic health records software, and training services from hospitals and health plans, says the Department of Health and Human Services (HHS). To be covered in the new safe harbors, electronic health records software must be certified as being interoperable with other systems, and electronic prescribing software from one supplier must not restrict or limit compatibility with other systems. Also, donors may not select recipients using any method that takes into account the volume or value of referrals from the recipient.

Electronic health records will give more complete and accurate data to both providers and the Centers for Medicare & Medicaid Services, and will allow tracking of individual physician performance, says **Scott A. Edelstein**, a Washington, D.C.-based attorney who advises health care providers on legal and regulatory issues. The expanded safe harbors will likely speed the progress of pay-for-performance.

"That is definitely a driving force behind these rules," says Edelstein. While pay-for-performance does not require electronic health records, these will greatly facilitate the ability to track data for quality measurement purposes.

"I see these rules as being at least a step in the right direction for getting adoption of health information technology, and electronic health records in particular, done much quicker," says Edelstein.

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IOM report: Medicare should switch to P4P

A recent Institute of Medicine (IOM) report recommends that Medicare gradually replace its current fee-for-service payment system with a new pay-for-performance system for its 42 million beneficiaries.

However, since pay-for-performance doesn't yet have an established track record, the committee recommended that it be phased in to avoid unintended consequences.

Here are other recommendations from the IOM report:

- For an initial period of three to five years, Congress should reduce base Medicare payments across the board and use the money to fund rewards for strong performance.
- Large organizations that already have the capacity to begin participating in the pay-for-

COMING IN FUTURE MONTHS

- Which quality rating methodologies are most meaningful
- How to use the Leapfrog Group survey to improve safety
- What "top hospital" lists mean to quality leaders
- Update on reportable adverse events in health care
- How survey coordinator role is impacting quality

performance system should be required to do so as soon as it is launched.

• A reduction in base payments should be used to fund bonuses initially, while exploring long-term solutions such as savings generated by improved efficiency and cost-reducing reforms.

• To increase the likelihood of participation by as many health care providers as possible, give significant rewards to those who improve their performance, as well as those who meet or exceed designated thresholds of excellence.

• Offer incentives to encourage providers to submit data, since obtaining technology and skills needed to collect and submit performance data could impose a burden.

• Make data publicly available to patients and stakeholders.

The IOM report represents a significant development for the future of pay-for-performance, says **Steven A. Schroeder**, MD, chair of the IOM committee and distinguished professor of health and health care at the University of California, San Francisco. "The report presents a snapshot of where we are at the present time," he says. "The fact that it was commissioned by Congress indicates how serious Congress is about pay for performance."

Very little hard data on the effects of pay-for-performance systems are available — over 100 incentive programs have been launched in the private sector in the past few years, but few studies have assessed the impact on quality of care, say the researchers.

However, pay for performance has demonstrated enough promise based on early experience, to justify its being pursued in a way that allows for adjustment as needed, says Schroeder. "Pay for performance is just one part of the solution. Other interventions will be needed to achieve the level of quality that Medicare patients deserve," he adds.

Medicare will likely go forward with a pay-for-performance program, possibly along the lines suggested by the IOM report, says Schroeder. "How quickly it will proceed will depend on the new CMS director, the seriousness with which Secretary Leavitt views this issue, the pressure it receives from Congress, and the pace of parallel developments in the private sector," he adds.

The report is one more piece of evidence of growing interest among federal officials about ways to improve quality, says Schroeder. Hospital-based professionals should read the report carefully, understand what will be measured currently and what is likely to come online in the near future, he recommends.

Quality professionals should get a sense of the implementation issues they will face, share these with senior leaders at their institutions, assess how well positioned they are to implement pay for performance, and be ready to discuss its merits and challenges with clinician colleagues, says Schroeder. "They should also monitor the performance of their institution, because public reporting will become increasingly important," says Schroeder. ■

CE objectives

To earn continuing education (CE) credit for subscribing to *Hospital Peer Review,* CE participants should be able to:

- Identify a particular clinical, legal, or educational issue related to quality improvement and performance outcomes.
- Describe how the issue affects nurses, health care workers, hospitals, or the health care industry in general.
- Cite solutions to the problems associated with those issues based on guidelines from the Joint Commission on Accreditation of Healthcare Organizations or other authorities and/or based on independent recommendations from clinicians at individual institutions. ■

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