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29

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Quality managers: Periodic performance review can be a powerful quality tool

Don't hesitate to put your processes under the microscope

Do you shudder to think of the workload involved in completing the periodic performance review (PPR) now required by the Joint Commission on Accreditation of Healthcare Organizations? Are you finding yourself solely responsible for all the data collection this entails? Is your goal to do the minimum required to pass muster with surveyors?

If so, you might want to rethink your approach. "The PPR is a very, very useful tool for the organization," emphasizes **Susan Mellott**, PhD, RN, CPHQ, FNAHQ, CEO of Mellott & Associates, a Houston-based consulting firm specializing in health care performance improvement. "But if you want to get the full benefits out of it, then you need to do it correctly and not rush through it."

There's no way around it: Completing the PPR is extremely time-consuming, acknowledges **Michelle Pelling**, MBA, RN, president of the ProPell Group, a Newberg, OR-based health care consulting organization specializing in JCAHO compliance and performance measurement.

"However, our position is that the organization should be assessing its compliance with standards anyway. So why not use the tool that the surveyors will use?" she asks.

The goal of doing the PPR should be to assess the level of quality of care in your organization, not merely to prepare for a survey, Mellott adds. "I suggest doing it every 18 months. That's a lot of work, but that is your continuous quality improvement," she says.

By completing the PPR, you will be able to demonstrate progress made in areas that require improvement, not only to Joint Commission surveyors, but also the Centers for Medicare & Medicaid Services or internal regulatory compliance, Mellott notes. "They all have slightly different requirements, but now you have evidence that you have either fixed any problems or that you are in the process of doing so," she says.

Remember, there is a rationale behind every standard, and these constitute a minimal level of compliance and certainly not best practice, says Mellott. "To pass JCAHO just says you have met minimum standards, but could you do better? Absolutely," she adds. "The more in-depth you go

with the PPR, the higher level of service you will provide. So even if the surveyors go easy on you, you will be making yourself better."

At Round Rock (TX) Medical Center, team leaders were charged with assessing each process, scoring with samples, and proving compliance. "Just because we had a policy didn't mean we were doing the process well," says **Pamela R. Voss**, FACHE, FASHRM, the organization's director of risk management.

"In other words, the proof had to be in the pudding with demonstrated results and outcomes. Many processes were streamlined or improved with the assessment."

To use the PPR as an effective performance improvement tool, do the following:

- **Use a team approach.**

Many organizations are having difficulty finding qualified individuals in-house who have both the time and ability to perform the in-depth assessment required by the PPR, Pelling acknowledges.

As a result, there may be a tendency to put the entire burden of completing the PPR squarely on the quality manager's shoulders, but this is a mistake, Mellott says.

"I do not think there is any way, even in a small hospital, that a quality manager can do all the data collection," she notes, adding that there are more than 100 elements of performance (EPs) for restraint alone. "No one person can be responsible for collecting all that data. Coordinating it, yes, but not doing the whole thing."

If a single individual were to complete the PPR, he or she would be forced to do a cursory overview and only wind up wasting resources, Mellott notes.

Here are some recommendations:

— Form teams, each responsible for collecting data for EPs in a given function area.

At Round Rock Medical Center, director-level team leaders were designated for each of the respective JCAHO chapters, with additional team members as needed depending on the chapter scope.

"Each team leader was responsible for assessment, scoring, and reporting of findings for their chapter, and could ask assistance from whatever department or person who could provide needed information," Voss says.

— Assign a lead person to oversee the completion of the PPR, supported by a small group of trained individuals who will assess each area and gather the necessary data.

It's not a good idea to assign each department director to take a piece of the PPR, since these individuals often have different skills and abilities than are needed to assess and measure appropriately, Pelling cautions.

"There are also a number of standards that cannot be categorized by department and need to be assessed by individuals who understand the cross-functional nature of the various processes," she says.

— Have a designated person do all the required data entry for data control and data quality issues.

This should be someone who is a data-entry

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expert," says Pelling, who adds that this individual would not be expected to interpret the data, which already should be done by the small group assembled to complete the PPR.

- **Involve staff in the data collection process.**

The expectation that unit staff have a thorough understanding of the standards and how they apply to clinical practice is an integral part of the new survey process, Mellott notes. By reviewing charting done in their own units, staff will have a greater understanding of what documentation is required and why, and in the process, will be a big help in completing the data requirements for the PPR.

Mellott gives the example of data collection to measure compliance with documentation of assessment, reassessment, plan of care, discharge planning, and modification of the plan of care.

She suggests having each staff member take a closed patient record to check whether the required documentation is there and discussing how to apply standards to documentation at staff meetings.

"That way, you have your sample for your score, and staff are learning at the same time," explains Mellott. "If you have five nursing units and 10 nurses from each unit each take a record, you can add all those scores together and that becomes your data to show whether you are in compliance. At the same time, it also serves as your medical review record requirement."

Education was a key component of the PPR process at Round Rock Medical Center. "We made significant strides with knowledge base of requirements among the team leaders, members, and staff," Voss says.

"It was like the lights went on in several staff members' minds that they were grasping the intent, requirements, and understanding why some processes are important," she adds.

With this approach, the PPR becomes much more than simply assessing compliance with accreditation requirements, and serves as a confidence-booster and educational tool for staff, Voss explains.

- **Do an in-depth assessment several months before starting the PPR.**

The idea is to correct any deficiencies or compliance issues so that your organization can minimize the number of areas that will require complete action plans, Pelling explains.

- **Determine compliance with every EP.**

Don't shirk from asking tough questions when looking for evidence of compliance, Mellott advises. "If you don't look at every single EP, the PPR is not as effective or useful," she emphasizes. "If the EP is asking whether you have a policy, don't stop there. Dig a little deeper. You need to address every one of the bullets in that EP."

If you do a cursory PPR without assessing every EP individually, you'll wind up getting a general picture as opposed to ensuring that every single requirement is met, and that is selling your organization short, Mellott argues.

"It depends on what your intention is," she says. "If your intention is only to pass JCAHO, then maybe you'll be OK. But if your intention is to improve your way of doing everything, then doing the entire PPR is a better way of doing that."

- **Understand PPR terms.**

Here are definitions for some of the terms used for the PPR:

1. Measures of success.

A measure of success is numerical or quantitative and reflects whether an action was successful or sustained, Pelling says.

Standards with an "M" noted only need to be measured if you are *not* in compliance, Mellott explains. In other words, if a standard has six EPs and you are not in compliance with two of these, you would only need a measure for the two standards you are not in compliance with.

"You don't have to collect data just to answer those. There is a lot of misconception out there about this," she adds.

For example, the EP may ask if you have a policy with certain items, and if so, has it been implemented, and is the policy being followed consistently. You may have the policy, but if it is not being used consistently, you would have to create a measure to demonstrate that.

This is different from the "C" standards, which require at least 10 samples of data to show your results, Mellott says. "For a C standard, you might look at 10 different patients to see how you rate yourself. But any of the A, B, and C standards may also have the 'M' there," she explains.

2. Corrective action plan.

A corrective action plan should reflect the deficiency identified, how the organization plans to correct it, a time frame, responsible individuals, and how they will measure their results to know whether the actions they took improved compliance, Pelling says.

"Developing measures/indicators to assure that there are ways to determine success or failure prior to the on-site survey is critical," she

says. "The organization should use the JCAHO-recommended sample sizes."

3. Partial compliance.

This indicates that the organization is not fully compliant with all of the principles that comprise an element of performance, or that all of the principles have been met, but not for 12 months, says Pelling.

In many cases, you may be compliant with some, but not all, of the EPs for a given standard, Mellott warns. "You really need to look at what the EPs are asking," she says. "The tendency is to say 'Well, we've got a policy on that, so we're all right,' without really looking at the policy and making sure it covers what it needs to."

Some organizations are skipping over the timeframe requirements, but you are not in compliance unless these are met, Mellott advises. "You can have the best policy in the world, but if it's only been in place for six months, you will still get a zero," she says. "In that case, you don't need a measure; you just need to keep doing it. So your measure would be, 'Are we still doing what we should be doing?'"

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Should you submit your PPR results to JCAHO?

Take the opportunity to obtain valuable feedback

To share or not to share? That's the question for many organizations currently in the thick of the decision-making process for whether to send in the results of their periodic performance review (PPR) to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Some organizations are choosing not to share their PPR results with JCAHO because they fear that the information may become discoverable and be used against them in a medical liability or malpractice case, explains **Michelle Pelling**, MBA, RN, president of the ProPell Group, a Newberg, OR-based health care consulting organization specializing in JCAHO compliance and performance measurement.

"Each organization should seek counsel from its hospital attorney and decide whether it feels comfortable taking the risk," she says.

To address this concern, JCAHO gave several options for organizations to choose from. "There are several ways you can tell us you are completing the self-assessment," says **Darlene Christiansen**, RN, LNHA, MBA, director of the Joint Commission's standards interpretation group and office of quality monitoring.

As of mid-April 2004, 57% of the 1,981 organizations that accessed the PPR opted to submit their findings via the JCAHO's on-line tool.

Of the organizations that selected a PPR option, 33% selected Option 1, in which the organization performs the midcycle self-assessment but does not submit information to JCAHO; 9% selected Option 2, in which the organization undergoes a midcycle on-site survey; and less than 1% selected Option 3, in which the midcycle survey is performed, but no written documentation or report of the survey is left with the organization.

Here are items to consider for each option:

- **If you send in your results via the Joint Commission's on-line tool.**

"We call that the 'full PPR process,'" says Christiansen. The organization evaluates itself against all standards and elements of performance, and for noncompliant areas, develops a plan of action and measure of success, which it submits to JCAHO.

Standards interpretation staff review the content and schedule a telephone conference with the organization, which is required if noncompliant areas are identified.

The purpose of that call is solely to support the organization in its performance improvement activities, Christiansen stresses. "The PPR has absolutely no impact on the accreditation decision," she notes.

"There is no integration of the PPR tool to any data related to the future performance of the organization, as long as the organization follows through with the process," she says.

At that time, JCAHO will discuss your plans of

action and measures of success and either will approve them or suggest a way to modify your approach. "We document that, and the plan is approved," Christiansen says.

"The dialogue is not disciplinary — it is our way of working with the organization to ensure that we understand that is the path it is headed down and we all agree," she explains.

If there are any questions, they are resolved at the time of the discussion, she adds.

When your survey does occur, the surveyor cannot question what standards interpretation already has been approved during the telephone dialogue, notes Christiansen.

"The surveyor will only ask for any measures of success the organization has been working on, to be sure they are staying on track with what they said they were going to do," she says. "They don't go back and review the entire tool. They don't have access to that."

- **If you choose Options 1, 2, or 3.**

If advised by legal counsel that there are concerns about discoverability of information in the PPR, the organization may choose from three additional options.

However, it's important to note that by not submitting your PPR to JCAHO, you are giving up the opportunity for counseling and correction by a surveyor, which could modify your action plans, Pelling says.

"One benefit of turning in the PPR is if JCAHO approves the action plans submitted, another surveyor cannot disagree with the action plan when conducting the triennial on-site survey," she adds.

For Option 1, the organization attests to the fact that it has done a full assessment and has been advised by legal counsel that it should choose this option. Although the organization is not required to submit anything, a phone call to discuss the self-assessment still can be requested.

"We encourage them to do this, so that they can discuss standards-related issues if they wish," Christiansen says.

During that discussion, if the organization doesn't want to disclose actual situations, it can still talk about theoretical ones to obtain feedback from JCAHO, Christiansen points out.

"For instance, if an organization is changing its ED to a trauma center in the next budget year, it can discuss systems and processes, and document that we have discussed those situations," she says.

"This process can provide guidance, although it is not as supportive as the full PPR or Option 2," Christiansen explains.

For Options 2 and 3, the organization still is accountable for doing a full self-assessment, and a surveyor is assigned to come on-site to review priority areas at the midpoint of the accreditation cycle. This timing allows for the organization to implement plans of action to achieve a 12-month track record.

"The surveyor is generally out there for about one-third the time of the triennial survey, so if you are having a nine-day survey, we would send one surveyor out for three days for a very focused review," Christiansen says. "Again, even though it occurs during a survey, this is part of the PPR review process and thus has no impact on the accreditation decision."

In Option 2, however, the organization is required to develop a plan of action and measures of success for any noncompliant standards, submit these to JCAHO, and then follow the same course as the full PPR process, with a dialogue required if noncompliant standards are identified, resulting in an approved plan of action and measures of success.

For Option 3, the surveyor leaves no report on-site after the survey, but does give the organization a verbal update and finding report.

"Nothing is ever sent to the organization, and the organization does not have to send us the completed plan of action," Christiansen notes.

Future of the PPR

When surveys become unannounced sometime after January 2006, an annual update will be required for the PPR, but only for those areas identified as needing improvement. "It will not be burdensome to the organization. The requirement shouldn't scare organizations, because it will only assist them," she explains.

"It will simply be a matter of continually updating it through your PI processes, she adds. It might be only a half-dozen areas a year — you might be addressing leadership one month and patient care processes another month."

Quality managers have reported that the PPR process has helped them to fully understand the meaning of the standards and how they should be interpreted, according to Christiansen.

"Now all the EPs are available to them and are no longer hidden, as they were prior to 2004, when all the measurable characteristics were in the surveyor's laptop. Now, you are working

with the same information that the surveyors do," she says.

When the PPR tool was rolled out by the Joint Commission in November 2003, an important criticism was voiced by many of the organizations that completed it.

"They said it was a very beneficial tool, but really wanted it to be available all the time. If the PPR is really part of their PI process, they need to address issues as they occur, not just once every three years," Christiansen points out.

The Joint Commission currently is working on filling this need, to make the PPR tool continually available.

"It was an important lesson for us, that if indeed they were to use this as a performance improvement process, they would need to be able to continually go into that and allow their staff access to it as well," she adds. ■

ACCREDITATION
Field Report

Key aspects of a recent Joint Commission survey

Surveyors focused on staff knowledge, patient care

Throughout a recent Joint Commission survey at Paradise Valley Hospital in National City, CA, surveyors zeroed in on two key areas: staff knowledge and patient care, reports **Catherine M. Fay**, RN, director of performance improvement.

"The surveyors provided a great deal of education and consultation information. The staff felt a sense of achievement when they finished their turn with the surveyor," she says. "For management, the difficulty was in not knowing where the surveyors were going."

Here are key aspects of Paradise Valley's survey:

- **Tracers were selected according to diagnosis and/or processes.**

In general, the tracer methodology process was very close to what Fay had expected.

"Our educational efforts with staff stressed that any patient could be selected for a tracer. However, we did anticipate that the focus might be the patients with diagnoses we had selected for core measure data collection, such as cardiology and pulmonary," she adds.

In total, there were about 12 tracers, including home care and behavioral health, with two in the core measure categories and the others in priority focus areas.

Once the initial patient was selected, linkages to other processes were driven by diagnostic procedures, treatments, or questions that the surveyors had, Fay notes. For example, when surveyors learned that a patient being traced had a blood transfusion, the tracer moved from the patient to every one of the processes involved with the transfusion, beginning with the order.

Fay says that she was surprised at how carefully the linked processes were traced.

"The process was very detailed in its continuity and thoroughness," she says.

- **Once a patient had been selected for a tracer, the process linkages could go anywhere.**

On several occasions, the surveyor even changed destinations midroute, Fay explains. On the way to the intensive care unit for one patient tracer, the surveyor switched gears and decided to start a different tracer on another patient in a step-down unit.

During another tracer, a surveyor was on the way to the cardiac catheterization lab and learned that they were in the middle of a procedure, so he decided to head to the same-day surgery unit to review the patient's chart before returning to the lab.

- **The system tracers were not what had been anticipated.**

System tracers were data use, infection control, medication management, competency, environment of care (EOC), and leadership, and were not what Fay had anticipated.

About 18 individuals were identified to participate in each system tracer, because she had anticipated the surveyors would want input from all of the service areas for how medication management was implemented across the organization, for example.

But in actuality, the surveyors discussed the process for each function, not necessarily how it applied to each service, Fay explains.

For example, the surveyor used a medication order in a patient's chart and had the group verbally walk through the process from the written order for the medication to documentation of the effects, including questions relating to the National Patient Safety Goals.

In retrospect, it probably would have been better

to have a smaller number of staff participate, specifically individuals who were more directly involved in the system tracer process, Fay says.

"The EOC system tracer was the document review for life-safety standards, and we did downsize the group when we learned that document review was to be the focus," she adds.

- **Staff liked the new process.**

During survey preparation, department directors were reminded that the surveyors were expecting to speak with staff and not managers.

"We had heard from other facilities that some of the surveyors had requested that the managers not answer questions directed to the staff," says Fay. "In the medication management system tracer, the physician surveyor did request that vice presidents not answer any questions."

Initially, staff were nervous about being questioned directly but later conveyed appreciation for being able to talk directly with the surveyors, Fay says.

"Conversely, the management team was in the unusual position of *not* talking with the surveyors and were prepared not to answer questions unless no one else could, or the questions fell to their area of expertise, such as operational or budgetary issues," she notes.

- **Documentation review was limited.**

This was limited to specific processes being traced, with the most detailed document review related to the EOC life safety standards, Fay explains.

"For the most part, personnel files were selected from staff to whom surveyors had spoken. Medical staff files were randomly selected from patients' medical records," she says.

- **Communication among caregivers was an area identified for improvement**.

The focus was that documentation in the patient's medical record should provide sufficient information to prevent error and miscommunication, Fay points out.

"When a patient is transferred from one area to another, the providers receiving the patient must have enough specific information to assume the care of the patient," she adds.

[For more information about the organization's JCAHO survey, contact:

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Dramatically reduce your surgical infection rates

Set goals for 100% compliance

Would you like to be able to boast that your organization performed hundreds of surgeries without a single infection or reduced rates of surgical infections dramatically? By making specific process changes, these impressive results can be achieved.

At Gwinnett Hospital in Lawrenceville, GA, 478 hysterectomy procedures were performed without a single infection over an 11-month period, and 71 colon procedures were performed without a surgical infection in a seven-month period.

"The mission was to achieve, in 13 months, a breakthrough improvement in surgical infection prevention through system redesigns using proven evidence-based practices," says **Gwen Hudson**, RN, BSN, CNOR, surgical services project operations manager.

By analyzing surgical practices and making comparisons with national best practices, Baptist Medical Center in Jacksonville, FL, was able to dramatically reduce the infection rates of postoperative coronary artery bypass graft surgery (CABG) patients. As a result, the organization received the JCAHO's Ernest A. Codman award, which recognizes the effective use of performance measurement in improving health care quality.

In addition to improving patient outcomes, dramatic reduction of surgical infections is something an organization can really brag about, says **Wendy Solberg**, CHE, Gwinnett's director of quality resources, pointing to coverage of her organization's successes in local and national newspapers.

"It felt so wonderful to be able to show these amazing outcomes to our community so that when people come to our hospital, they feel safe," she adds.

Here are specific changes that were made at the organizations:

- **A multidisciplinary team was formed, and goals were identified.**

At Gwinnett, the first step was forming a multidisciplinary team with pharmacy, preoperative holding, operating room, anesthesia, infection control, post-anesthesia care, and members of the medical staff.

The team's first action was to develop an aim

statement, as follows: "To improve the quality of care for patients undergoing surgery at Gwinnett Hospital System by decreasing the surgical site infection rate by 25%. Changes will be tested on colon and hysterectomy procedures with the goal of spreading improvements to all surgical procedures."

The following goals were set:

1. 100% of eligible patients will receive appropriate prophylactic antibiotics within one hour of the surgical incision time.
2. 100% of prophylactic antibiotics will be discontinued within 24 hours after surgery.
3. Perioperative systems of care to be redesigned include elimination of preoperative shaving, intraoperative oxygen delivery at a higher concentration, and maintenance of perioperative normothermia.

At Baptist Medical Center, the chiefs of cardiovascular surgery and infectious disease met with an infection control nurse and cardiovascular case manager to review infection rates, and all agreed that cardiovascular surgery infection rates should be evaluated for improvements.

"We found opportunities that might improve outcomes of our patients and avoiding undesirable consequences like infection," says **Missi Halvorsen**, RN, BSN, senior consultant for JCAHO/regulatory accreditation. **(See chart listing roles for the organization's multidisciplinary team, at right.)**

The group found that cardiovascular surgery infection rates were above the Centers for Disease Control and Prevention's (CDC) National Nosocomial Infections Surveillance System benchmark. Additionally, chest-cavity infection was identified as a problem, and preoperative antibiotic-to-incision time was greater than CDC recommendations. Three goals were identified: To decrease postoperative CABG surgical wound infection rates, decrease timing of prophylactic administration of antibiotics, and have zero cases of mediastinitis.

- **System process changes were implemented.**

At Baptist, the following baseline data were collected to identify areas of potential impact on infection rate: CABG postoperative wound infections, cases of mediastinitis, and observation of infection control aspects of care, including analysis of clinical practice in skin preparation, wound care, and antibiotic timing.

The clinical staff then identified and implemented five changes: Clipping rather than shaving hair for operative site preparation, infusion of insulin for 72 hours postoperatively to maintain blood sugars between 126-175 mg/dL, standardizing postoperative surgical wound care, reinforcing use of antibiotics to nares, and reducing antibiotic infusion-to-incision time to between 30 minutes to 60 minutes.

The resulting improvements in care led to a decrease in surgical wound infections and no cases of chest-cavity infections, Halvorsen states.

At Gwinnett, razors were replaced with clippers for preoperative hair removal, the concentration of

Key Roles to Reduce Surgical Infections

Below are the designated roles for members of a multidisciplinary team formed at Jacksonville, FL-based Baptist Medical Center to reduce surgical site infections:

KEY INDIVIDUALS	ROLES
Physicians	Performance improvement physician champions, education, review of evidenced-based literature for selection of changes, enforcement of selected changes.
Hospital leadership	Allocation of staff time and resources, enforcement of policy changes, consultation resource.
Cardiovascular surgery nurse	Data collection, performance improvement team.
Hospitalist	Leader, staff education, enforcement of selected changes, continued monitoring.
Clinical effectiveness and performance improvement nurse	Evidenced-based research, standing order organization, data organization and presentation.
Clinical effectiveness and performance improvement system analyst	Design and implementation of computerized spreadsheet for data management and reporting.
Nursing management/staff	Identification of selected changes, implementation of selected changes.
OR management/ staff	Identification of selected changes, implementation of selected changes.

oxygen delivery intraoperatively was increased, and appropriate prophylactic antibiotics were administered.

- **Results were shared.**

After the changes were implemented at Gwinnett, staff were informed whenever there was 100% compliance with any of the following: On-time administration of prophylactic antibiotics, appropriate selection of prophylactic antibiotics, patients with normal body temperature on arrival to post-anesthesia care unit, patients receiving > 80 fraction of inspired oxygen intraoperatively, patients with clippers utilized for preoperative hair removal, and antibiotics being discontinued within 24 hours after surgery.

"Positive results were shared at every opportunity," Hudson adds. "We posted results, education was reinforced, and enthusiasm for continuing improved patient care spread throughout the system."

- **Initial goals were expanded to include additional populations.**

Since the initial 13-month period, Gwinnett's pilot population was expanded to include hip/knee arthroplasty, vascular procedures, and ventral hernia repairs.

"It was our goal to spread to all surgical procedures within one year of the completion of this project, and we are well on our way to accomplishing this," Hudson says.

- **The effectiveness of system changes are measured.**

Ongoing monitoring is crucial, says Halvorsen. "Our project started in November of 2001 and is ongoing. We continue to collect the same data on each CABG patient to ensure we hold this gain," she says.

The key to ongoing success is a multidisciplinary team approach with strong physician leadership and involvement, Solberg notes.

"The team reviews the data and the practice patterns to improve our systems. These goals are also a component of our system quality goals that are tracked by our quality steering committee and our board's quality and community health committee," she continues.

- **Obstacles were identified and eliminated.**

"The biggest surprises were the obstacles we encountered," Halvorsen says.

Problems in implementation of every system process change were addressed as they were identified, as follows:

1. Staff were resistant to clipping instead of shaving hair, so staff were re-educated and written orders for clipping were added to standing orders.
2. Baseline data revealed delays in preoperative antibiotic dosing when administered on the nursing unit. To reduce prophylactic antibiotic infusion to incision time to between 30 and 60 minutes, administration of antibiotic was moved from the patient's room to the operating room and from nursing to anesthesiology.
3. To rectify problems with interdepartmental communication and data collection, meetings were held with all disciplines involved; letters were sent to OR, nursing, and anesthesiology departments; and standing orders were reworded.
4. For the goal of consistent administration of antibiotics to the nares, it was discovered that mupirocin was on national back order, and there was a problem getting agreement on acceptable substitutes. To resolve this, standing orders were reworded to specify acceptable substitutes.
5. Surgeons had different methodologies for postoperative wound care. To address this, there was standardization to one evidence-based practice, and this was added to the orders.
6. When changing from an insulin infusion for 72 hours postoperatively, as opposed to use of a sliding scale for treatment of elevated glucose levels, there was lack of staff familiarity with the new protocol. This led physicians to discontinue insulin drips prior to the 72-hour recommendation. "This was addressed with re-education of physicians and nurses about the new protocol," says Halvorsen.

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THE QUALITY - CO$T CONNECTION

Worst practices used in conducting FMEA projects

Part 1 of a 2-part series

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Health care practitioners now have had a couple years of experience in doing failure mode and effect analysis (FMEA) projects. Now that we've got some know-how in how to do a FMEA, it is clear that these projects aren't easy. Health care providers may not always know the best way to conduct a FMEA project, but it has become apparent that there are several wrong ways. This is the first of a two-part series on how FMEA projects can be made more effective by avoiding the worst practices.

✔ **Worst Practice #1**: *Choose a process that people aren't passionate about.*

The leaders' visible commitment to patient safety must be reinforced through the establishment of strategic goals related to performance improvement/patient safety. The goals will be based in part on external requirements (e.g., Joint Commission on Accreditation of Healthcare Organizations' National Patient Safety Goals, Medicare clinical quality improvement goals, etc.); however, it must be clearly evident to everyone that the organization's commitment to achieving these goals is internally driven. Don't force a particular project on staff members. The FMEA will be most successful if people truly have a passion for improving the process. Use information available in your organization about near misses, sentinel events, and other indicators of unsafe situations and high-risk processes to substantiate the need for the FMEA project.

✔ **Worst Practice #2**: *Choose a complex process.*

When hospitals learned that medical mistakes occurred most often during medication administration, many initiated a FMEA project on this process. People soon learned that administering medications to a hospital patient involves many different complex processes. The scope of these projects had to be narrowed or else the project would continue on forever. Limiting the FMEA to a subprocess or selecting a particular high-risk activity or medication to evaluate can narrow the project scope. One hospital chose to conduct an

CE *questions*

5. Which is recommended when completing the periodic performance review (PPR)?
   A. The quality manager should be solely responsible for all data collection.
   B. If a policy exists, the organization is therefore compliant with all related EPs.
   C. Teams should have responsibility for data collection for EPs in a given function.
   D. Each department director should be assigned a portion of the PPR.
6. Which is true of the options given by JCAHO for completing the PPR and submitting results?
   A. Surveyors may interpret the information to your disadvantage during the triennial survey.
   B. You should avoid a dialogue with standards assessment staff unless this is required.
   C. Surveyors may question the corrective action plan previously approved by standards interpretation.
   D. Surveyors cannot question your corrective action plan if these have been approved by standards interpretation.
7. Which is an example of a change made to reduce surgical site infections at Baptist Medical Center in Jacksonville?
   A. Shaving instead of clipping hair for operative site preparation.
   B. Reducing prophylactic antibiotic infusion-to-incision time to between 30 and 60 minutes.
   C. Avoiding administration of antibiotics to the nares.
   D. Use of sliding scale for treatment of elevated glucose levels.
8. Which is accurate about a JCAHO survey at Paradise Valley Hospital?
   A. During tracers, surveyors went to only one other process such as diagnostic testing.
   B. Linkages to other processes were driven by diagnostic procedures, treatments, or questions that the surveyors had.
   C. For system tracers, surveyors wanted input from all of the service areas.
   D. Surveyors allowed managers to answer questions addressed to unit staff.

Answer Key: 5. C; 6. D; 7. B; 8. B.

FMEA just on the task of administering a second IV medication, a known problem for the nurses at that hospital. This task involves just three steps:

1. Hang secondary IV bag.
2. Open the clamp on the secondary bag.
3. Infuse secondary bag.

Three critical failure modes were identified and actions taken to reduce the likelihood of future failures. It's prudent to limit the FMEA to a narrow scope. The team should be spending the majority of their time finding and fixing problems instead of trying to articulate each of the steps in a very complex process.

✔ **Worst Practice #3**: *Don't select the right team members.*

The success of an FMEA is heavily reliant on the people chosen to be members of the project team. Team members should have sufficient knowledge of the process under study and be able to devote some time to the project. The team leader should be comfortable with the FMEA methodology and be skilled in leading the project. Are managers reluctant to provide release time for staff to attend project meetings? Do physician team members often fail to show up for meetings? If you have these problems, this is an indicator of worst practice #1 — people in the organization are not personally committed to making this particular process safer. It may be necessary to reaffirm everyone's dedication to the project before proceeding, including medical staff leaders. Describe the team selection process in your PI/Patient Safety Plan. Ideally, leaders initiate the team member invitations to establish the importance of the project.

✔ **Worst Practice #4**: *Don't define the FMEA team boundaries.*

The FMEA project team members should know their role in the investigation. Are they just responsible for the FMEA analysis? Will they also be making recommendations for improvement? What group is responsible for approving these recommendations? Will the FMEA team continue to meet to monitor successful implementation of the actions? It can be very disheartening for a dedicated group of staff members to discover at the end of a project that their recommendations for improvement won't get implemented because another leadership group didn't approve them. Be as up front as possible! Let the team members know just how far their responsibilities and authority stretch and what other individuals or groups will become involved as the project progresses.

✔ **Worst Practice #5**: *Use an unnecessarily complex failure mode criticality-scoring scheme.*

The Joint Commission standards require that the FMEA project team prioritize the failure modes for analysis and action. There is no mention in the standards of how this should be done. Some of the priority scoring schemes in FMEA models from other industries are fairly well-defined and, in some instances, too complex for use in health care. Often health care providers don't have a sufficient amount of historical data to be precise about the expected frequency of a failure, nor can the effect be accurately predicted. The FMEA team can spend an inordinate amount of time determining if the probability that a particular failure will occur is, for example, *low* or *moderate*. Scoring the criticality of failures can be especially frustrating if the range of score choices is too wide (for example, between 1 and 10). Using a failure mode criticality scoring method that is easy to use and makes sense to health care professionals can save a lot of time.

✔ **Worst Practice #6**: *Identify root causes before selecting critical failures.*

According to the Joint Commission, the sixth element of the required components of a proactive risk assessment project is "Determine why the prioritized breakdowns or failures could occur, which *may* include performing a hypothetical root-cause analysis." However, FMEA teams often identify causes for all failures — not waiting until after the high-priority failures are selected. This may be the result of the FMEA models that many organizations have adopted. The FMEA matrix has a place to record causes immediately after identifying failures. While it is not wrong to identify causes for every failure, it can be problematic. First, it takes time for the team to articulate causes — time that might be better spent in the action-planning steps. Second, when the causes for high-priority failures already

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are documented, the tendency is to accept these as actual root causes when corrective actions are formulated. How often does the team go back and validate its initial thoughts on what might be causing a critical failure? Without this validating step, the team is likely to be fixing causal factors, not root causes.

✔ **Worst Practice #7**: *Use only FMEA techniques to make the process safer.*

The FMEA methodology for improving the safety of processes has some known limitations. For example, an FMEA allows you to consider only one failure at a time, and there is no logical process for considering multiple or interacting failures. To reduce the effect of this limitation, other safety improvement techniques should be used. One tool to consider is a fault-tree analysis. This is a graphical, deductive method for systematically listing various sequential or parallel events or combinations of faults that must occur for a particular undesired event to occur. A fault tree resembles a logic diagram or flowchart.

It can be used in combination with FMEA to identify interacting causes of critical failures. Another improvement technique that could come in handy during the action-planning step is inventive problem solving or TRIZ (a Russian acronym). TRIZ consists of several inventive tools that help improve the desirable features of a process and/or simultaneously eliminate the undesirable features. One of the powers of TRIZ problem solving comes from deliberately changing the question from "What might fail?" to "What are we trying to accomplish?"

✔ **Worst Practice #8:** *Devote too little time to process improvements.*

By the time the FMEA project team gets to the process redesign step, enthusiasm for the project may have waned. This is especially true if the team spent a considerable amount of time in defining the process, selecting failure modes, and choosing the high-priority failures for action. Ideally, these steps were quickly completed, and the team has lots of energy left over for action planning. This is the phase of the FMEA project that deserves the most attention. The team must be encouraged to be innovative in redesigning processes; otherwise, the same familiar action plans will be implemented with the same less-than-desired results.

(Editor's note: In the second part of this series, you'll learn about four more FMEA "worst practices" and find out how to avoid these practices.) ■

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