



Management

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Rochester study shows telemedicine could reduce pediatric ED visits

Physicians remain skeptical, saying most visits are necessary

Telemedicine has long been recognized for improving access to care as well as access to specialist expertise, particularly in rural facilities. Now, in an unpublished study just completed in Rochester, NY, the lead author says it also can offer a possible solution to overcrowding when it comes to pediatric ED patients, many of whom, he asserts, easily could be treated by a primary care physician.

The report, which has not yet been published, analyzed data from 2006 and tracked all pediatric visits to the city's largest ED, at the University of Rochester Medical Center. The researchers then studied more than 6,000 telemedicine visits during the same period. The ED visits were categorized into ailments that always could be managed by telemedicine; those that were usually treated through telemedicine; and conditions that usually could not be treated with telemedicine. Results showed that nearly 30% of ED visits fell into the first category and could always be treated with telemedicine. If those problems had all been handled through telemedicine, the research concludes, Rochester would have had at least 12,000 fewer pediatric ED visits in 2006.

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Executive Summary

Would telemedicine access for children in your community relieve overcrowding, or might it threaten to drain revenues from you department in tough financial times? Should you encourage the development of such programs? Consider these issues:

- How much time does it take your department to see and discharge children with subacute complaints? If you see them relatively quickly, telemedicine might not be much of a timesaver.
- How often do you treat children with complaints that telemedicine cannot (or should not) diagnose, such as otitis media, urinary tract infection, or abdominal complaints?
- The quality of care always should outweigh financial considerations.

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Many, if not most, pediatric-age ED visits are for nonemergency problems, says **Kenneth McConnochie**, MD, MPH, founder of Health-e-Access, the University of Rochester Medical Center telemedicine program that uses the Internet to connect pediatricians with sick children at inner city child care centers. "There are a number of studies showing that between 25% and 75% of ED visits for kids are

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nonemergency visits," he notes. "If you accept that as a bad thing, it's a crazy use of resources."

EDs have to be prepared to manage the most severe illness and injury episodes, McConnochie says. "They are set up to manage that, and they do it very well," he says.

Subacute visits, he adds, take precious time away from the ED staff, McConnochie says. "The average time to treat a sore throat, ear infection, or pink eye, is about 4.5 to six hours, according to what parents told us, and sometimes as long as 16 hours," he says. "We can do it in a telemedicine site in no time."

Drilling further down into his study's statistics, McConnochie says that for kids with telemedicine available in their day care center or elementary school, ED use dropped 22% based on a matched comparison of age, gender, socioeconomic status, and season of the year. "For every telemedicine child, they matched them month for month with children of the same age, gender, zip code, and so forth, who did not have access to telemedicine," he says. ED use was down 22%, McConnochie says. "That's good for payers, good for society, and ultimately good for the industry," he says.

But not everyone draws the same conclusions. "Telemedicine will do little to relieve pediatric ED overcrowding," claims **Gregory P. Conners**, MD, MPH, MBA, professor and interim chair, emergency medicine, University of Rochester Medical Center. "Telemedicine is most appropriate for minor visits, which we can usually manage in the ED fairly efficiently." Overcrowding comes from requiring EDs to manage inpatients or from receiving multiple simultaneously very sick patients, he says.

Ironically, Conners has collaborated with McConnochie on earlier studies and believes in the ability of telemedicine to deliver quality care. "We took kids who were sick and came for visits and examined them twice — once in person, and once by telemedicine," he recalls. "We found very good agreement between the in-person exam and the telemedicine;

Sources

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the care was just as good.”^{1,2}

But quality is not the issue in contention, Connors maintains. What he disputes is the fact that many pediatric ED visits are unnecessary “We in Rochester have great pediatric primary care, and yet we still get a certain number of children each day who come to the pediatric ED because of pinkeye or the equivalent, especially outside of the usual Monday-Friday day-time,” he says. “As research in Rochester and other places has shown, if you ask parents why they brought the child to the ED, they often will tell you they were directed there, either by someone representing their primary care office — often a nurse or someone else in the office, sometimes following a written protocol — or a well-intentioned family member or neighbor.”

Alternatively, he adds, parents often are unable to get to the doctor’s office because there were no short-notice visits available, or they were at work or otherwise unable to get in during the limited hours offered by many primary care practices. **(For more on the potential benefits of telemedicine, see the story, below.)**

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Is telemedicine too limited for ED use?

Although a recent study at the University of Rochester (NY) seems to indicate that telemedicine could eliminate many pediatric ED visits, a pediatric ED physician with extensive experience with telemedicine believes that its applications are not broad enough to have a significant impact on ED overcrowding.

“Our group actually worked with telemedicine as far back as 10 years ago,” says **Michael Gerardi**, MD,

Source

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FAAP, FACEP, director of pediatric emergency medicine and an emergency physician at Morristown (NJ) Memorial Hospital. “I think we are looking for a solution [to overcrowding], but this is not it.”

While calling the Rochester research “a good, novel study,” Gerardi adds that it paints a picture of parents of telemedicine patients as people who tend to use doctors more — a bunch of ‘nervous Nellies’ who were coming to a doctor for nonemergency cases.”

But many parents don’t do that, he says. “They may think the patient really *does* have meningitis, or maybe they have abdominal pain, and you can’t asses that with telemedicine,” he notes.

Gerardi says he is doing more than just offering an opinion. “I *worked* telemedicine, and you certainly cannot diagnose otitis media unless the kid is really cooperative, and the only way to diagnose UTI [urinary tract infection] is to have a urine sample,” he notes. Those diagnoses don’t take a great deal of provider time, he adds, “but the kids need to be checked in person.”

However, Gerardi says, he is not totally dismissing the potential use of telemedicine in regard to pediatric emergency medicine. “In the right hands of a big clinic like Kaiser [Permanente], which has lots of resources, you could pull some utility out of it,” he notes. **(Telemedicine visits are less costly than ED visits. Will telemedicine units in retail clinics threaten EDs financially? See the story, below.)** ■

Are ‘televisits’ a threat to EDs?

A recent study by the University of Rochester (NY) indicates that not only would the use of telemedicine reduce “unnecessary” pediatric ED visits, but it also would save parents and insurance payers a significant amount of money. The reason? The reimbursement rate for telemedicine visits is about one-seventh that for a similar ED visit.

At the University of Rochester Medical Center, Health-e-Access, a telemedicine program, uses the Internet to connect pediatricians with sick children at inner-city child care centers. **Kenneth McConnochie**, MD, MPH, founder of Health-e-Access and lead author of the recent study, wonders whether as Health-e-Access expands from day care centers and elementary schools into retail clinics that could that represent a financial threat to EDs in the area.

Gregory P. Connors, MD, MPH, MBA, professor and interim chair, emergency medicine, University of Rochester Medical Center, concedes, “We might lose

some revenue, and we might not be able to fund as many programs as we now have available for sick kids or have the infrastructure ready when the really sick kids come in, but the most important thing is to do what's right for kids and help the community, and I sincerely believe that."

Michael Gerardi, MD, FAAP, FACEP, director of pediatric emergency medicine and an emergency physician at Morristown (NJ) Memorial Hospital, agrees. "Emergency medicine should not worry as much about revenue and competition, but quality of care," he says. "Our volumes are going up, although from a competitive standpoint I am naturally worried."

Besides, adds Conners, ED managers are not the ones who should have the greatest concern. Retail clinics threaten the pediatric-primary care relationship, he says. "Telemedicine will do the same thing if it is not linked in with primary care — otherwise, it is just another kind of retail clinic," he says. "Sure, siphoning off some patients from the ED could reduce ED revenues, but I doubt after-hours telemedicine by primary care physicians will ever be a big endeavor, since it still requires the primary care physician to be awake and seeing patients." ■

Lawsuits may arise from ED 'boarding' practice

An emergency physician is managing an acute myocardial infarction, arranging for a patient transfer, sewing up a laceration, and putting in a chest tube, with 20 people still waiting to be seen in the waiting room. This is probably not the best person to provide routine inpatient care for multiple patients being held in the ED, says **William Sullivan**, DO, director of emergency services at St. Mary's Hospital in Streator, IL.

"Chances are that it's been a while since an emergency physician has ordered a colon preparation prior to a patient's colonoscopy or done an in-depth work-up to determine the cause of a patient's anemia," Sullivan says. "Those just aren't things we routinely do. Having admitting physicians handle admitted patients is better for patient care."

Holding admitted patients in EDs always was known to be bad for patient flow, but there is a growing body of research showing that it also harms patients.¹⁻⁴ There's no question that the risk of a poor outcome increases when patients board for long periods, particularly when those patients are critically ill, according to **Jesse M. Pines**, MD, MBA, MSCE, assistant professor of emergency medicine and epidemiology at the Hospital of the University of Pennsylvania in Philadelphia. "In many

hospitals, it is the ED physicians and nurses caring for these boarders, so the risk falls squarely with them," Pines says. "It may be impossible to avoid getting roped into lawsuits if there is an error attributed to boarding."

When a bad outcome does occur, attorneys will scour the chart to see what happened while the patient was boarding. "This is especially true now that there is clear evidence that boarding is hurting people," he says.

ED leadership must be patient advocates, says **Robert Broida**, MD, FACEP, chief operating officer of Physicians Specialty Limited Risk Retention Group, the professional liability insurer for Canton, OH-based Emergency Medicine Physicians. His recommendations:

- **Consistently and respectfully remind administration and medical staff leadership of the responsibility of the hospital**, and ultimately the hospital board, to ensure reliable, quality care under its roof.

- **Provide hospital leadership with the report on boarding from the American College of Emergency Physicians' (ACEP) Task Force, *Emergency Department Crowding: High-Impact Solutions***. (Editor's note: To access the report, go to www.acep.org. Under "Practice Resources," click on "Practice Resources," and under "Issues by Category," click on "Boarding and Crowding." Scroll down to "2008 Boarding Task Force Report.")

- **Use examples, especially near-misses**, from your own hospital to emphasize the risks involved.

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Crowding from boarding can harm patients

There is a significant amount of research that demonstrates ED crowding due to boarding is responsible for poor outcomes, says **Tom Scaletta**, MD, president of Emergency Excellence, a Chicago-based organization that improves patient care and efficiency in the ED

while controlling costs. He also is medical director of a high-volume community hospital in a Chicago suburb.

Most lawsuits will involve delayed diagnoses in time-sensitive problems such as myocardial infarction, ischemic stroke, peripheral vascular disease/ischemia, intracranial bleeding, and hemorrhagic shock, Scaletta says.

In the event of a lawsuit, Scaletta recommends showing the jury a log of patients seen that day, with names redacted, and the number of ED physicians and midlevel providers that were working. "There are published statements published by professional societies that dictate reasonable staffing levels," he says. For instance, of the American Academy of Emergency Medicine says the rate of patient influx should not exceed 2.5 patients per physician per hour on average. *(Editor's note: To access this position statement, go to www.aaem.org. Click on "AAEM Position Statements," and scroll down to "Position Statement on Physician-to-Patient ED Staffing Ratios" and "Position Statement on Nurse-to-Patient ED Staffing Ratios.")*

Scaletta believes this is safely increased by 50% (to 3.75) when a physician works as a team with a midlevel provider. "Emergency physicians need to have due process so that they can speak up about problems like understaffing and not get fired, which has happened," he adds. Your documentation needs to be "factual and not accusatory," says Scaletta. "I also think emergency physicians need to be aware of the waiting room load and call in reinforcements when the number/acuity is high," he says. "Hospitals need to have a crowding action plan, akin to internal disaster activation." (See *ED Management*, December 2000, "'Code Purple' mode relieves ED bottlenecks," p. 139, and "'Mini-disaster' system promotes teamwork," p. 142. Also see the decision process chart on p. 141 of that issue.) ■

Board patients on floors instead

For legal damages to result, a patient's long wait in an ED hallway has to be tied to some consequence, notes **Peter Viccellio**, MD, FACEP, vice chairman of the Department of Emergency Medicine at State University of New York at Stony Brook.

But what about the possibility of a jury being inflamed to hear that a patient was waiting for 20 hours in the hallway of an ED? "It should anger them, but the anger is misdirected. It's not the physician taking care of the patient, it's the fault of the system," says Viccellio. "But part of the problem is throwing

our hands in the air and say we can't do any better, which is not true. We really cannot accept this terrible care that is provided as part of the status quo."

If the ED is "filled to the gills" with patients, and you now have 20 additional patients to distribute, the logical answer is to put two of those patients on each unit. "But what's the current answer in many hospitals? To put all 20 in one place," says Viccellio.

He points to his own institution's practice, which sends the admitted patients to board on floor hallways when the ED is at full capacity. "It has dramatically enhanced the care of our patients. This is far more important than the consequence of that: decreasing our liability," says Viccellio. "And in terms of putting patients on the floors, we have done an exhaustive search for patient safety issues, and we can't find any."

What most institutions are asking their EDs to do is care for all the patients that come in, and staffing for those patients, but in effect, saying, 'By the way, you may have an extra 30 admitted patients that you have to care for,' says Viccellio. "What we are asking of the inpatient units is that, during times of high capacity, a nursing unit that takes care of 30 patients will care for 31 or 32," he says. "Patients are much more comfortable upstairs than downstairs. And they don't stay in the hallway for long, because magically a bed opens up once they're up there."

Anyone on a jury has likely gone to an ED and waited for hours to be seen, notes Viccellio. "And to most of them, it's not apparent why," he says. "I think there is a very legitimate moral and legal question we need to ask: Does the fact that 'that's the way things are,' make them OK? I don't think you can fault somebody if it costs \$100 million to do something. But if you can just change the way people work, at little to no cost, and it has a profound impact on the patient, why not do it?" ■

Could giving 'unequal' care to inpatients get you sued?

Admitted patients held in EDs are required by The Joint Commission to receive the same level of care as they would get on inpatient units. A jury hearing about a patient's bad outcome would presumably expect this as well. But what if this level of care is just not realistic for an understaffed, overcrowded ED?

It would be difficult for a plaintiff's lawyer to prove that the care provided during the time the patient spent boarding in the ED was inferior across the board, according to **Jesse M. Pines**, MD, MBA,

MSCE, assistant professor of emergency medicine and epidemiology at the Hospital of the University of Pennsylvania in Philadelphia. However, if a medical error occurs while a patient is boarding, attorneys might look to how the hospital systematically treats boarders, says Pines. For example, if a medication error occurs while a patient is boarding and the order entry system is different in the ED and on hospital floors, attorneys might focus on the difference.

Despite The Joint Commission requirements, many hospitals lack policies to ensure that boarders receive the same level of care, such as having inpatient physicians care for their own patients in the ED. “The problem is that most hospitals still require emergency nurses to care for the admitted patients,” says Pines. “This can put both the boarders themselves and the other patients waiting to be seen at risk.”

Also, even when inpatient physicians care for boarders, emergency physicians still have the ultimate responsibility for patients who are physically in the ED. “From both a patient safety and legal perspective, this is high risk,” says Pines. “If a patient becomes unstable and emergency physicians need to step in to care for a critically ill patient who has been admitted for hours, lawyers may place the blame on emergency physicians for what was really an inpatient complication.”

Boarding is dangerous, and the care patients receive while boarding is inferior in many hospitals, sources say. “When adverse boarding outcomes do occur, lawyers will point directly to the evidence in the literature and use it against hospitals and emergency physicians,” says Pines. “Unless something is done by The Joint Commission to step in and prohibit hospitals from the practice of boarding, this problem is only going to get worse.”

Inpatient care should be the same wherever the patient is located in the hospital, says **Robert Broida**, MD, FACEP, chief operating officer of Physicians Specialty Limited, Risk Retention Group in Canton, OH. “Patients on a gurney in the ED hallway do not receive the same care as those on the inpatient unit,” Broida says. “To the extent that the patient is harmed by this, the hospital is at risk.”

A plaintiff’s attorney also could point to differences in policy. **Peter Viccellio**, MD, FACEP, vice chairman of the Department of Emergency Medicine at the State University of New York at Stony Brook, says, “Hospitals like to write volumes and volumes of policy. And in the setting of boarding, these policies become impossible to comply with. Also, as the staff are stretched thinner and thinner, documentation suffers. So adequate care might be delivered, but not documented.”

If a jury hears that a patient didn’t get the same care he or she would have on the inpatient floor, they are likely to blame the ED physician being sued, says Viccellio. “We

don’t have time to document what we do, and the context in a courtroom doesn’t take into account what was going on with others,” he says. “Juries are not sympathetic to ‘the ED was too crowded.’”

For nurses, it’s ‘unrealistic’

With staffing levels cut to the bare minimum, it is unrealistic to expect the ED nurses to provide comprehensive “floor nursing” care to boarders on top of their already large ED patient load, notes Broida. “The first priority for ED nurses are the ED patients,” he says. “Admitted patients boarded in the ED hallway may experience medication errors, delays in proper admission assessment, lack of privacy, increased risk of falling and other potential problems.”

The burden of holding patients in EDs is mostly on nursing, says Viccellio. “It’s not a matter of ‘do you feel like it’s easy or difficult?’ but ‘do you think it’s doable?’” he says. “Nurses feel like they are failures because they can’t do what they need to do. If you have an ED nurse taking care of six admissions plus eight active ED patients, it’s not a mathematically doable job.”

It is not possible for emergency nurses to deliver the care that admitted patients require for two reasons, says **Tom Scaletta**, MD, president of Emergency Excellence, a Chicago-based organization that improves patient care and efficiency in the ED while controlling costs. Scaletta also is medical director of a high-volume community hospital in a Chicago suburb. “First, they are not floor nurses and definitely not specialty floor nurses,” he says. Second, emergency nurses have a full waiting room to address, he says. “Waiting patients need to be screened for life threats and stabilized,” he says. “This is always a priority over most floor cases.”

There is a significant liability risk if ED staff members are not providing the same level of care, expertise, and documentation as inpatient staff, according to Broida. “It would be difficult to convince a jury that the patient on a gurney in the ED hallway receives the same care as those on the inpatient unit,” he says.

Broida says once a patient is admitted, the care should be provided by the inpatient staff, not the ED staff. Hospitals should float an inpatient nurse down to the ED to care for the boarders or place the boarder in the inpatient unit hallway to await a bed.

Some hospitals have “admission nurses” come down to the ED for patient intake, while others send ICU or floor nurses down to the ED to care for boarded inpatients. “In either scenario, the patient will receive ‘typical’ inpatient care from a designated inpatient nurse,” says Broida. “Also, the ED nurses will not be diverted to care for inpatients and will be able to concentrate on their required ED duties.” ■

Discharge unit helps speed patient flow

ED goes more than 4 years without diversion

ED managers agree that overcrowding and gridlock, while often manifested most graphically in their department, are decidedly hospitalwide issues, and the experience of Sarasota (FL) Memorial Hospital seems to prove their point. For several years now, the hospital has run a “discharge unit,” which houses patients who are ready to leave the facility while they wait for their transportation home to arrive. The unit is open from 8 a.m. until 7:30 p.m. Monday through Friday.

How has this unit affected the ED? “We have not been on divert since Dec. 1, 2004,” says **Lynne Grief**, RN, PHD, director of emergency services. “We see about 80,000 patients a year, and for a department of our size, this is especially unusual.”

The ED’s overall flow situation is very smooth, Grief continues. “For example,” she says, “last week we saw 83% of our patients in 30 minutes or less.” During that same period, she adds, only nine patients left before treatment, which represented 0.6% of the department’s volume. On an ongoing basis, she says, 75%-80% of the ED’s patients are seen in 30 minutes or less, and 1%-2% leave before receiving treatment. “We know from research that the reason people walk back out is typically related to how long they have to wait,” Grief notes.

Grief especially appreciates the unit because she has never worked in an ED before that had access to one. “Generally, if a hospital has a discharge unit, it means their philosophy is focused on patient throughput,” she says. “It’s one of the cogs in the wheel we

Executive Summary

Putting a discharge unit in your hospital can significantly improve your department’s patient flow.

Here are some of the benefits realized by the ED at Sarasota (FL) Memorial Hospital:

- The ED has not gone on diversion for more than four years.
- Between 75% and 80% of the department’s patients can be seen within 30 minutes, and 1%-2% leave before receiving treatment.
- Patients in the ED’s clinical decision unit who are ready to go home can sit in the discharge unit while waiting for their ride.

Sources

For more information on the benefits of discharge units, contact:

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have in place to make sure we get them upstairs in a timely manner.” **(Convincing hospital administration to put in a discharge unit shouldn’t be that hard a sell, says Grief. See the story, p. 20.)**

The discharge unit “originated on the back of an ED doc’s cocktail napkin,” according to **Janet Steves**, RN, BSN, MBA, interim patient care director. The unit is located on first floor of the hospital, “directly near and visually connected to where patients drive up and also near the ED.” It includes four private room areas, each with “a nice, full stretcher,” where patients can continue their convalescence if need be. The other half of the unit is an open area with lounge chairs, a TV, and an entertainment center. The unit accepts discharged patients from inpatient units, the clinical decision unit, and the ED.

“We help the ED more by getting inpatients out of the hospital than by taking discharged patients from the ED,” says Steves. “If the ED discharges patients and they are waiting for a ride, they can come to us, but a lot of them want to smoke and we are a nonsmoking campus, so their toleration for the unit is low.”

There is one notable exception, however. “The ED has a clinical decision unit for observing patients,” notes Steves. “Many times those folks, [once they are discharged] will use the discharge unit, too, if they need a ride and that ride will not be coming in a timely manner.”

In other units in the hospital, Steves continues, patients are pulled from the floors as soon as they are ready to leave. **(While a discharge unit can have great benefits for the ED, it is not terribly expensive. See the story, below.)** ■

Unit can be created with small investment

The ED at Sarasota (FL) Memorial Hospital has not gone on diversion since Dec. 1, 2004, and one of the

key reasons is the hospital's discharge unit, which allows staff to free up beds on the floors by giving discharged patients a place to wait for their rides home. Despite its obvious value, **Janet Steves**, RN, BSN, MBA, interim patient care director, says such a unit does not necessarily require a large investment of resources.

"That's the big secret to our success," says Steves, who adds that basically 80% of all discharging patients are using the unit. The hospital will discharge 100 patients on a typical day. "We have two FTEs. One is an RN, which you must have to be successful," she says. "If the vast majority of these patients come from the floors, none of the [floor] nurses who have cared for them so beautifully will want to send them down to a holding area with no one qualified to take care of them."

The other employee, called a health unit coordinator, is "basically a secretary," says Steves. This individual and the nurse facilitate the collection of patients, because central transport does not pick them up. "We have a computerized bed tracking system, and they monitor it to see when patients are ready to be discharged," she explains. "Then they dispatch the volunteers to the appropriate location, and they bring the patients down in a wheelchair, which is their primary responsibility."

Steves has a team of 30 volunteers, "and hence it costs you very, very little to run the unit." ■

Make a strong case for discharge unit

If your hospital does not have a discharge unit, you should be able to make a strong case for adding one, argues **Lynne Grief**, RN, PHD, director of emergency services at Sarasota (FL) Memorial Hospital, which has had such a unit for several years.

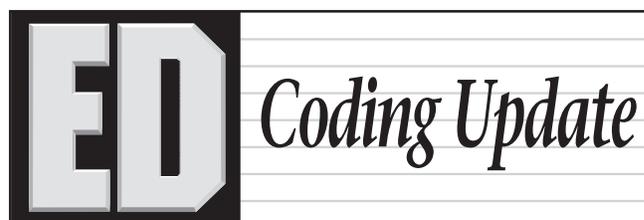
"Every ED in the country has 'boarders,'" she notes. This unit is an inexpensive way to alleviate your backlog, she says. "For example, you're not building more ED beds, which are *very* expensive, and you're not adding whole floors of beds to the hospital," Grief says.

In addition, she notes, a discharge unit is a "patient pleaser." That's especially true in Sarasota, says Grief, where there are many elderly patients. "The family does not feel pressured to have to go pick them up immediately because they are watched over by a nurse," she says. "Plus, they are very comfortable; it's like a living room with recliners."

As for the financial return from Sarasota Memorial's discharge unit, "if it did not pay for itself, it would not

be kept in the budget," says Grief. If an ED manager wanted to see one created at their facility, she says, "I bet they could make a financial case."

Point out that if you can empty beds in the ED, you will reduce your length of stay, Grief says. "If you can empty beds in the ED, your walkout rate drops as well," she adds. "It's much safer for patients to be in the back and not in the waiting room, so the hospital's potential exposure to liability is also reduced." ■



Here's how you can ramp up your department's revenues

*[This quarterly column on coding in the ED is written by **Caral Edelberg**, president of Edelberg Compliance Associates. If there are coding issues you would like to see addressed in this column, contact: Caral Edelberg, CPC, CCS-P, CHC, Edelberg Compliance Associates, Baton Rouge, LA. Phone: (225) 454-0154. EFAX Number: (225) 612-6904. E-mail: edelbergeca@earthlink.net]*

National economic paranoia seems to have taken over, and although ED volumes continue to climb, joblessness combined with the economic downturn promise to make it a rocky 2009 for many. There is a lot of emphasis on patient satisfaction, safety, and security these days, and each requires resources to manage. To sustain our objectives, it will be necessary to ensure the revenue streams to support them.

The realm of ED documentation, coding, and billing continues to change as we see payers clamping down on perceived overpayment through audits and recoveries. Here are a few things you can do that might give you added revenue opportunities without risking compliance liability:

- **Revisit your ED nursing levels and the content of each.**

The higher acuity levels (99284 and 99285) reflect the highest and best resources you provide. If they aren't documented and used appropriately by nursing,

coding, and billing staff you are allowing too much revenue to slip away. Have nurses and coding staff take another look at the services that each level supports and move things around if necessary. That intuition probably belongs with the critical care and *not* the intermediate ED visit level.

• **Modifications to billing rules for observation make it imperative that you ensure your 99284 and 99285 ED services are defined appropriately.**

Observation is a billable and valuable service.

However, as a composite service requiring billing of an ED visit (99284, 99285) or 99291 (critical care) in addition to observation during or following the ED visit, Medicare will drop the payment for observation and pay only the ED level if the code combination isn't right. You are vulnerable to a significant financial loss to your institution, and this might reflect a lack of knowledge of similar issues in other departments as well. (Where there's smoke, there's Medicare!)

Improperly defined nursing criteria can affect your observation revenue if you are unable to bill the 99284, 99285, or 99291 critical care required in addition to the observation service. The new observation payment rules require that ED 99284, 99285, or 99291 critical care be billed in addition to the observation service. A payment of \$315.51 (99285) or \$212.59 (99284) will be made for the ED visit as required for payment for observation (Extended facility assessment and management composite level II). Observation then is paid at an additional \$638.66. So, if you bill it right, the ED and observation stay will provide you a minimum payment of \$954.17 (99285 with Extended assessment/observation) or \$851.25 (99284 with Extended assessment/observation). Multiply this amount times the number of times your ED provides treatment at this level, and you have a significant financial "reward" for your efforts. Remember, content of the code levels determines how they are billed, so don't underreport your higher acuity levels as a result of overly restrictive nursing criteria or criteria that are being used incorrectly.

Medicare is aware that the dramatic change in the observation billing concept might encourage hospitals to rethink how they are billing the associated evaluation/management (E/M) levels. In the 2009 final rule, Medicare expressed, *"We do not expect to see an increase in the proportion of visit claims for high-level visits as a result of the new extended assessment and management composite APCs 8002 and 8003 adopted for CY 2008 and finalized for CY 2009. Similarly, we expect that hospitals will not purposely change their visit guidelines or otherwise upcode clinic and emergency department visits reported with observation care solely for the purpose of composite APC payment. As stated in*

the CY 2008 OPPTS/ASC [outpatient prospective payment system/ambulatory surgery center] final rule with comment period (72 FR 66648), we expect to carefully monitor any changes in billing practices on a service-specific and hospital-specific level to determine whether there is reason to request that Quality Improvement Organizations (QIOs) review the quality of care furnished, or to request that Benefit Integrity contractors or other contractors review the claims against the medical record."

Those statements don't prevent adjusting your ED criteria, but beware of a sudden jump in higher-acuity ED visit codes (99284-85 and 99291 critical care) without rationale. Your documentation must support the level of service. This is the easiest place for a QIO to look and find fault with your coding. For example, if your physicians and/or nurses are forgetting to identify the amount of time spent performing critical care services and you can't support 30 minutes or more but bill it anyway, you might find payment overturned on audit. EDs provide a much higher volume of critical care than is usually billed because of documentation problems so:

- be sure it's documented when performed;
- be sure it's billed when documented correctly;
- be sure all agree as to the content of critical care and how it should be documented before payers come calling.

• **If documentation templates still are in use in your ED and they've been modified and remodified over time, create a task force to take another look at your process and content.**

This task force will help ensure that all of the elements necessary for coding are there and being used correctly by your coding staff. Physician documentation supports professional and technical billing, and the better documented your clinical services appear, the less likely payers are to recoup payments on audit. Good documentation supports accurate coding.

Too often, documentation templates are used inconsistently by providers, interpreted inaccurately by coders, or fail to "prompt" history and physical exam elements consistent with the chief complaint. It takes clinical and coding staff working together to develop templates that provide the prompts for clinical and coding content. Examples are body areas vs. organ systems, components of the history of present illness vs. review of systems or default codes, and documentation when the provider is unable to obtain (UTO) required elements of documentation. The less subjective your documentation content, the better the opportunity for coders to accurately pick up the required elements or coding, thus increasing the likelihood that auditors will agree with your code choices. ■

Staff involvement key to satisfaction gains

Frontline staff get input on selection, implementation

As a small (10,000 visits a year) department, the ED at Boone (IA) County Hospital is fortunate it doesn't have to deal with the long waiting times that face many other EDs. But that fact alone does not necessarily guarantee high patient satisfaction levels.

In fact, the department has done more than that; it has earned a Summit Award from the South Bend, IN-based patient satisfaction firm Press Ganey for maintaining levels of 95% or higher for three consecutive years. To be precise, its overall rating was in the 98th percentile for 2006 and the 99th for 2007. In addition, the likelihood of a patient recommending Boone County Hospital to a friend is 97%, and the overall ranking for physicians is at 99%.

One of the keys to those high scores, agree staff and management, is the proactive role that the ED staff takes in continuing a culture that leads to superior patient satisfaction. "The Press Ganey results and comments are regularly provided to the staff," notes **Howard Eikenberry**, assistant administrator of quality and patient safety, who served as the ED administrator until early this year. "They react to patient complaints not as a personal attack,

Executive Summary

One of the keys to achieving and maintaining high levels of patient satisfaction is to actively communicate with and involve your staff in patient safety initiatives, says the ED leadership at Boone County (IA) Hospital. Here are some of the strategies they use:

- The ED manager share Press Ganey results and comments regularly with the staff.
- Based on results and patient complaints, the staff determine what safety areas should be addressed for improvement.
- ED staff nurse will ask every discharged patient if they were pleased with their care, and will immediately address any complaints they raise.

Source

For more information on achieving and maintaining high patient satisfaction ratings, contact:

- **Mark Addy**, RN, ED Staff Nurse; **Howard Eikenberry**, Assistant Administrator of Quality and Patient Safety, Boone (IA) County Hospital. Phone: (515) 432-3140.

but as a learning experience, and we examine how we can work on those problems in the future." (**Patient complaints are personally responded to by the ED director. See the story on p. 23.**)

Success brought pressure

In fact, as the ED started receiving these high scores, it brought pressure to perform, adds ED staff nurse **Mark Addy**, RN. "It's almost expected, but it's definitely self-imposed," he says. "The ED staff feel a lot of pressure to keep up."

The staff knew it was doing a good job, he says, "but until we started winning the awards, we never realized how high it was." For himself, Addy says he always tries to make sure patients are satisfied before they leave; if they aren't, he addresses the problem then and there. "For example, if they tell me the doctor did not explain things well enough, I will bring them back in, or they could have had a test and maybe just need a further explanation on why it was done."

As the patient is getting to leave, he adds, he will specifically ask them if everything was done to their satisfaction and if there is anything else he can do for them. "Patients have two options to voice complaints, before they leave or on the Press Ganey survey," he notes. He'd rather have them voice them before they leave. "Once a complaint is on the survey, there's nothing you can do to prevent it," Addy says.

However, when the complaints do make it to the survey, the staff swing into action. It's a frontline approach, Eikenberry says. "We look at all the comments and complaints and decide where to focus," he says. It's up to the staff to make decisions about what to work on in terms of patient care, safety, and satisfaction, he says. When the staff saw a number of

COMING IN FUTURE MONTHS

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■ How to manage rapid service improvement in your department

■ ED slashes one hour off patient wait time

patient complaints about test result delays, “one specific area we targeted was keeping patients informed of those delays,” Eikenberry says.

Addy says, “We found as long as people understood why they were waiting they became more content. We have a small waiting room, so it’s easy enough to pop your head out and ask if everything is OK.” In fact, he notes, when patients are placed in the patient care area, “We encourage them to come back and let us know if something in their condition changes or if they have questions.” ■

ED director responds to patient complaints

Although the ED staff at Boone County Hospital in Boone, IA, takes a proactive approach to patient satisfaction, a certain number of unsatisfied customers is probably inevitable. When complaints are made, however, the director of the ED usually becomes personally involved.

“Each patient complaint is taken very seriously and addressed individually by the ED director,” says Howard Eikenberry, assistant administrator of quality and patient safety, who served as the ED administrator until early this year. “We contact these patients, give them the opportunity to express their frustration, and apologize for their negative experience,” he says.

This follow-up is done by phone or via letter, says Eikenberry. If the ED director is not able to personally make the response, then Eikenberry will.

The Boone County ED, which has earned a Summit Award from the South Bend, IN-based patient satisfaction firm Press Ganey for maintaining levels of 95% or

higher for three consecutive years, has implemented several other initiatives to keep those scores high, including:

- allowing as many family members as possible in the room with the patient;
- arranging follow-up care for patients who don’t have a primary physician, and ensuring that treatment plans are carried out;
- rewarding staff members for their hard work and dedication through complimentary meals, gift certificates, and small tokens of appreciation.

Each department manager decides who to reward, Eikenberry explains. “Many times when an employee does something positive, it will be brought to their attention, and they may give the reward right then and there,” he says. The small token could be a dessert coupon or a \$5 gas card. For more formal recognitions, such as the Summit Award, there is a recognition ceremony.

Each department has its own budget for these intermittent rewards. “We probably spent about \$1,500 last year in the ED,” says Eikenberry. ■

CNE/CME objectives

1. **Apply** new information about various approaches to ED management.
2. **Discuss** how developments in the regulatory arena apply to the ED setting.
3. **Implement** managerial procedures suggested by your peers in the publication. ■

CNE/CME questions

25. According to Michael Gerardi, MD, FAAP, FACEP, which of the following diagnoses requires more than a telemedicine consultation?
 - A. Sore throat
 - B. Urinary tract infection
 - C. Pink eye
 - D. Earache
26. According to Lynne Grief, RN, PHD, which of the following is a benefit an ED will realize when its hospital adds a discharge unit?
 - A. Fewer diversions.
 - B. Fewer patients leaving without treatment.
 - C. Shorter door-to-doc times.
 - D. All of the above
27. According to Carol Edelberg, CPC, CCS-P, CHC, which of the following will not help ensure that the

CNE/CME instructions

Physicians and nurses participate in this CNE/CME program by reading the issue, using the references for research, and studying the questions. Participants should select what they believe to be the correct answers, then refer to the answer key to test their knowledge. To clarify confusion on any questions answered incorrectly, consult the source material. After completing the semester’s activity with the **March** issue, you must complete the evaluation form provided and return it in the reply envelope to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you. ■

- amount you bill accurately reflects your volume?
- A. Documenting services when they are performed.
 - B. Billing for critical care time you can't support.
 - C. Ensuring you have agreement as to the content of critical care and how it should be documented.
 - D. Ensuring you bill when you have documented correctly.
28. Before patients leave, Mark Addy, RN, will:
- A. Make sure he has a home phone number for a follow-up patient satisfaction call.
 - B. Have them fill out a patient satisfaction questionnaire.
 - C. Ask them if they were satisfied with the care they received.
 - D. Provide the patient a ride home.
29. According to James Walker, MD, FACP, which of the following will help ensure that IT installation will not hinder patient safety?
- A. Standardization of terms used to describe processes.
 - B. Integration with the hospitalwide IT system.
 - C. Intense testing of the system.
 - D. All of the above
30. According to Becky Petersen, RN, MS, manager of emergency services at Alta Bates Summit Medical Center, the best way to handle patient handoffs is:
- A. during a discussion outside the patient's room.
 - B. at the patient's bedside.
 - C. at the nurses' station.
 - D. via internal e-mail.

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CNE/CME answers

25. B; 26. D; 27. B; 28. C; 29. C; 30. B.



ACCREDITATION UPDATE

Covering Compliance with The Joint Commission Standards

New *Sentinel Event Alert* gives warning: IT implementation has inherent safety risks

While the introduction of new technologies such as computerized physician order entry (CPOE) were lauded by proponents as “silver bullets” that dramatically would improve patient safety, The Joint Commission is warning in a new *Sentinel Event Alert* that “users must be mindful of the safety risks and preventable adverse events that these implementations can create or perpetuate.”

“Technology-related adverse events can be associated with all components of a comprehensive technology system and may involve errors of either commission or omission,” the alert says. “These unintended adverse events typically stem from human-machine interfaces or organization/system design.” (*Editor’s note: To download the Alert, go to www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_42.htm.*)

Joan Kolodzik, MS, MD, FACEP, an attending emergency physician at Upper Valley Medical Center, Troy, OH, and director of education/EMS for Premier Health Care Services, Dayton, OH, has first-hand knowledge of the pitfalls that can accompany health information technology (IT) installations. Several years ago, she was working in the ED of a medium-sized rural community hospital that saw about 45,000 patients a year. “The hospital, I’m sure, did a fair amount of research, and it’s my understanding they invested about \$5 million in the IT system,” says Kolodzik.

The hospital purchased the system and implemented it in phases across the hospital, and then came to the ED at the end of August and said it was starting the system on Sept. 1. “They said we’d get five minutes of training when we came in for our first shift using the system, and by the way, CPOE is mandatory,” she shares. “We were not allowed to ask the nurses or unit clerks for help, so we kind of looked at each other, and

we made the best of it.”

The hospital did provide some preliminary training which Kolodzik says was “rudimentary and inadequate.” The ED had had no input into the planning process and no input into product selection or in creating the macros of the system. “Sept. 1 was complete gridlock; the computers took us away from the patient’s bedside, put us in front of a computer with little training, and it was basically trial and error — in other words, disaster,” says Kolodzik.

In addition, she says, the staff ultimately realized that the new system had no ability to generate reports or collect data. “We were forced to use a system that did not meet our needs or allow us to manage data,” notes Kolodzik. “At first there was no tracking system, and that was probably the No. 1 piece you need in an ED with an EMR [electronic medical record], so you know who is in the lobby, where the patients are, and where there nurses are.”

The awkward implementation also affected the ED staffing situation, says Kolodzik. “We had two very, very experienced ED physicians — with maybe 40 years’ experience between them — who were very well liked by the administration and who patients loved; the kind you should clone,” she relates. “They went to other sites because they could not make the change.” Another physician who worked nights threatened to quit if he was forced to use the system. “It’s not easy to find someone works who will work 100% nights, so the hospital made accommodations,” says Kolodzik.

Financial Disclosure:

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You also can hear “war stories” from **Timothy Van Fleet**, MD, medical director, emergency services, Magee-Womens Hospital of University of Pittsburgh Medical Center (UPMC), assistant professor, Department of Emergency Medicine, University of Pittsburgh School of Medicine, and eRecord liaison, Emergency Resource Management, a UPMC organization that provides ED staffing and support services. “One of the biggest problems we saw with CPOE/EMR rollouts was inadvertently writing an order on the wrong patient,” he recalls.

One of the first systems installed, Van Fleet explains, placed a tracking board on every user’s computer, and that board could jump into other patients’ charts. “It is dynamic; it changes from second to second,” he explains. “The doc would have their cursor on a patient’s name to click on and go into their chart, but if he or she does it a fraction of a second after the board changes, they may not realize they are in another person’s chart, so the doctor would write the order and be on the wrong chart and not realize it.”

How can such problems be avoided? “It is a training issue,” says Van Fleet. “Your physicians need to double-check before they place the order that they are in the correct patient’s chart.” With better training, his concerns have lessened, “but this still has the potential to be a big issue,” he says. ■

Preparation can help avoid IT problems

The best way to avoid (or at least minimize) problems with information technology (IT) implementation in the ED is to take certain steps to make sure you are adequately prepared, advises **James Walker**, MD, FACP, chief medical information officer of Geisinger Health System in Danville, PA.

“One of the most common issues is failure to really understand the work processes of triage nurses and other nurses, doctors, therapists, pharmacists, and patients — who are often forgotten entirely,” Walker says.

Control teams at EDs in Walker’s system spend two months mapping flow before implementation. The teams include a doctor, a nurse, one of the triage staff, a patient, and perhaps a consultant such as a cardiologist. They examine processes such as the way patients flow from triage into their rooms and the discharge process. “During this period, they often change processes, sometimes eliminate them, and sometimes add them for quality and safety reasons,” Walker says. “If you do not do this, it’s almost guaranteed IT will not

improve the way things are done. It has to fit people’s workflows.”

Ideally, he says, this should even be done before the selection of the system. “Sometimes the vendor can change the software; sometimes you can do it locally,” he notes. “Sometimes all you can do is training, but that’s a horrible alternative.”

In addition, says Walker, the ED’s system should be integrated with the hospital’s system. “The ED should really be part of the process of buying the system,” he says. What if the ED manager has problems with a proposed system? “Often it’s just a matter of getting the hospital and the IT people to sit down and map out the processes that they run across,” Walker observes. “You’ve got to get ED representatives on the design team.”

Standardization also is critical, Walker continues. “At one facility, every unit had different abbreviations for different processes,” he notes. “You have to decide what all these things mean and work to standardize them before you do the health IT.” If you try to do implementation without standardization, he warns, “it will really be a mess, and implementation will be that much harder.”

Another mistake providers often make, says Walker, is that they underestimate the importance of testing a new system. “We once did 50,000 hours of testing an inpatient system before implementing it last fall,” he shares.

Following implementation, says Walker, continue to change processes. “You can’t change everything up front,” he notes. “Six months after implementation, if all goes well, you might look at other things that could be changed.”

By doing this, “you really do get continuous improvement,” says Walker. “It creates a climate wherein you can identify ways to make care better and safer.” (**The Joint Commission’s *Sentinel Event Alert* included additional recommendations for ensuring successful implementation. See the story, below.**) ■

Joint Commission urges these preventive actions

Below are suggested actions to help prevent patient harm related to the implementation and use of health information technology (IT) and converging technologies.

- Examine workflow processes and procedures for risks and inefficiencies, and resolve these issues prior to any technology implementation.
- Actively involve clinicians and staff who will ultimately use or be affected by the technology, along

Poor IT implementation teaches hard lessons

An ED's poor implementation of information technology (IT) several years ago was costly in more ways than one, when two valuable ED physicians resigned in frustration. However, the process yielded important lessons for **Joan Kolodzik**, MS, MD, FACEP, an attending emergency physician at Upper Valley Medical Center, Troy, OH, and director of education/EMS for Premier Health Care Services, Dayton, OH.

First, Kolodzik says, the people who are on the care delivery end of operations, such as doctors and nurses, need to have input on system components to make sure there are no missing pieces. This involvement is especially needed from physicians, she says.

"They've got to have early input from the get-go," Kolodzik says. "Physicians are not completely ignorant about IT, but they do not like to have something shoved down their throats."

In addition, she says, the staff should have the opportunity to ask questions of the vendor. In the aforementioned case, for example, the staff members weren't able to ask the vendor about the system's ability to generate certain profiles such as length of stay, throughput times, or door-to-doc or door-to-X-ray times.

"Had we been involved in the process, I assume we would have made sure the system could do those things, which it couldn't when we implemented it," says Kolodzik. "If you don't get 'invested' in the system, they're not really allowing you to manage your department."

In addition, she recommends that ED managers talk with people who are using the systems under consideration. "Go for a site visit and see them up and running, so you know what the nuances are," Kolodzik advises. "There's no reason you should make such decisions in a vacuum." ■

with IT staff with strong clinical experience, in the planning, selection, design, reassessment, and ongoing quality improvement of technology solutions, including the system selection process.

- Assess your organization's technology needs beforehand, such as supporting infrastructure; communication of admissions, discharges, transfers, etc.

- During the introduction of new technology, continuously monitor for problems and address any issues as

quickly as possible, particularly problems obscured by workarounds or incomplete error reporting.

- Establish a training program for all types of clinicians and operations staff who will be using the technology, and provide frequent refresher courses.

- Develop and communicate policies delineating staff authorized and responsible for technology implementation, use, oversight, and safety review.

- Prior to taking a technology live, ensure that all standardized order sets and guidelines are developed, tested on paper, and approved by the Pharmacy and Therapeutics Committee (or institutional equivalent).

- Develop a graduated system of safety alerts in the new technology that helps clinicians determine urgency and relevancy.

- Develop a system that mitigates potential harmful drug orders created by computerized physician order entry (CPOE) by requiring departmental or pharmacy review and sign off on orders that are created outside the usual parameters.

- To improve safety, provide an environment that protects staff involved in data entry from undue distractions when using the technology.

- After implementation, continually reassess and enhance safety effectiveness and error-detection capability, including the use of error tracking tools and the evaluation of near-miss events.

- After implementation, continually monitor and report errors and near misses or close calls caused by technology through manual or automated surveillance techniques.

- Re-evaluate the applicability of security and confidentiality protocols as more medical devices interface with the IT network. ■

No new NPSGs, but no time for EDs to relax

ED managers might breathe a small sigh of relief following the announcement from The Joint Commission (TJC) that there will be no new National Patient Safety Goals (NPSGs) developed for 2010, but experts say that doesn't mean they should pay any less attention to improving patient safety strategies.

"I don't know any place that has [patient safety] down. I don't know anyone who has completely hard-wired all the elements," asserts **Becky Petersen**, RN, MS, manager of emergency services at Alta Bates Summit Medical Center in Berkeley, CA. "I can't believe there'd be any reaction other than, 'We have another year go at this.'"

Regardless of any regulations, nurse managers always should work with physicians, staff, and patients to improve operational safety, because it is the “right thing to do,” adds **Diana Contino**, RN, MBA, FAEN, senior manager in the healthcare practice of McLean, VA-based BearingPoint Management & Technology Consultants, which provides management and technology consulting services. “The 2009 safety goal delay shouldn’t impact department operations,” she says.

The Joint Commission noted on its web site that “over the next year, the current National Patient Safety Goals will undergo an extensive review process” as TJC examines comments it has received from the field, thus the one-year hiatus. How can ED managers make the most of this opportunity to improve current practices?

Identify your weaknesses

Clearly, every department has different areas of weakness to address; the first step, which Peterson has already taken, is to identify them. “For my ED, the three issues that need the most attention over the next year are handoff communication, monitoring patient response to medication, and moderate sedation,” she says.

“I am a zealot about handoffs — especially in the ED,” adds Peterson, who notes that her department has just implemented an electronic documentation system. The system has been a great improvement for documentation, but it creates a barrier to giving reports at the bedside, she says. “I strongly believe it is a best practice for all clinicians to hand over care at the bedside, so that will be a major goal for 2009,” Peterson says.

As for monitoring patient response to medication, “I am on a campaign to increase awareness of the need to make patients pain-free, whether it be with medication or other means,” Peterson says. “Constantly checking on pain levels is a must.” EDs, she adds, “are notorious for undermedicating for pain.”

In terms of moderate sedations, Peterson says her department recently implemented an alert in Pyxis when a medication that was used for moderate sedation was removed. “It reminds the nurse to have the medical record and moderate sedation forms reviewed by the charge nurse,” she explains. “We are auditing all charts for nurse and physician compliance to the pre- and post-procedure requirements for timeout, consent, patient monitoring, and sedation assessments.”

In addition, Peterson plans to keep a keen focus on things “that never go off the radar screen,” such as hand washing. “Our hospital has a policy whereby we observe each other anonymously during the month, seeing that people wash before going into and out of a

room,” she says. “One of the things I do is wander around the department and remind people not to come out of a room with gloves on.” ■

Know the key areas of safety improvement

If your department has identified that your processes with the following issues are not evidence-based best practices for your environment — in that there have been errors or near misses that could have been avoided with a different process — then the manager and safety teams should be working to improve these key areas below. This advice comes from **Diana Contino**, RN, MBA, FAEN, senior manager in the health care practice of McLean, VA-based BearingPoint Management & Technology Consultants, which provides management and technology consulting services. Areas of improvement include:

- elimination of transfusion errors;
- improvement of the effectiveness of communication among caregivers;
- safety of using medications;
- hospital-acquired infections;
- encouragement of patient involvement in their own safety;
- improvement of recognition and response to changes in condition;
- universal protocol for procedures;
- prevention of patient falls.

There are also several key elements to creating a safe environment, Contino adds. They are:

- a robust and nonpunitive event reporting process;
- a departmental safety team or committee, which includes key process stakeholders, including staff physicians and, when appropriate, patients;
- regular review of events and a process by which to identify and prioritize solutions.

“Solutions should not be focused on adding forms, but rather on decreasing steps and improving accountability with the defined process,” says Contino. “For example, if the entire team determines that lab specimens will be labeled at bedside, then enforcement is not the manager’s sole responsibility, but also a peer and team responsibility.”

Managers, she adds, step in when peer enforcement hasn’t been successful. “Every member of the health care team is responsible to ensure we care for patients in a safe environment and through safe, accurate processes,” she says. ■