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Leapfrog Group releases its first 'Top Hospitals' list

Survey shows that significant progress still needs to be made

While honoring some of the nation's top-performing hospitals with the release of its first Leapfrog Top Hospitals list, the Washington, DC-based Leapfrog Group also noted that its survey uncovered a number of areas in which America's hospitals still lag behind.

The 59 winners were chosen based on the Leapfrog Hospital Quality and Safety Survey.

The survey, which received responses from more than 1,200 facilities, asked the participants to indicate whether they were aware of the 30 "Safe Practices for Better Healthcare" endorsed by the National Quality Forum (NQF), and whether they had acted upon them. (The complete list of NQF safe practices can be found at: www.ahrq.gov/qual/nqfpract.htm.)

The survey showed that:

• About 90% of respondents have implemented procedures designed to eliminate wrong-site surgeries;

• About 80% of hospitals said that all medication orders must be reviewed by a pharmacist before medication can be given to patients.

However, the survey also found a number of areas in which hospitals still have a long way to go. For example:

Key Points

- Most hospitals excel in wrong-site surgery strategies and pharmacist review of medication.
- CPOE implementation continues to lag; experts blame lack of interoperability, high costs.
- Telemedicine is recommended as a remedy to shortage of intensivists.

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• More than 90% of the respondents have not met Leapfrog's standards for implementation of computer physician order entry (CPOE);

• Nine out of 10 respondents do not meet the established Leapfrog standards for performing coronary artery bypass graft surgery, and 96% do not meet Leapfrog standards for abdominal aortic aneurysm repair;

• Seven out of 10 respondents said they do not meet the Leapfrog standard for having intensivists oversee patient care in the ICU;

• Half the respondents said they do not have an explicit protocol to ensure that there is adequate nursing staff. The same percentage also said they do not have a policy for asking patients if they understand the risks of their procedures;

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Editorial Questions

For questions or comments, call **Steve Lewis** at (770) 442-9805.

• According to survey responses, 30% of facilities do not have procedures for preventing malnutrition in patients. The same number said their health care workers are not given the flu vaccine.

(For additional information on the survey results, see the box on p. 3.)

"Those facilities that are on our list really have put a focus on patient safety initiatives that can dramatically improve the quality of care given," says **Catherine Eikel**, director of programs for the Leapfrog Group. "Hospitals that perform well in these areas deserve as much public recognition as possible."

Explaining the results

Eikel says there are some very good reasons why the vast majority of hospitals still fall short in several key areas. "We have seen the slowest statistics in terms of CPOE uptake, but there are significant barriers to implementation across a hospital," she notes. "One of the biggest challenges we hear about centers around the interoperability of CPOE with other decision support tools a hospital may have in place."

Still, she says, "We are pleased to see that at least some progress has been made, because there are so many preventable medication errors that can be caught." She adds that as vendors move towards greater interoperability, "We hope to see CPOE taking greater hold."

John Byrnes, MD, senior vice president, system quality, for Spectrum Health System in Grand Rapids, MI, which made the Leapfrog list, agrees. "For a lot of average-sized and small facilities, cost is also a problem, but I've heard from a number of friends that they are intentionally waiting until systems become more refined and user-friendly," he says. "Commercial vendors are still working as diligently as they can, but they may have more work to do to get to a broader market appeal."

Evan Benjamin, MD, vice president of health care quality at Baystate Medical Center in Springfield, MA, another Leapfrog top hospital, agrees that CPOE is "an expensive endeavor" but adds that it "probably has a significant bang for the buck in terms of reducing medication and transcription errors, tools for safety, and reminders." Most of the facilities that are implementing CPOE, he adds, really use it as a cornerstone of multiple interventions to improve patient safety. "In addition, it aids compliance with the best practices from the NQF 'nevers,'"

he notes. **(The Leapfrog Group has a new initiative around these 'nevers'; see the sidebar on p. 4.)**

Benjamin adds the following: "I would guarantee that 100% of the winners have CPOE; that's why they are the winners — they had the best scores."

Not all low scores indicate hospitals are performing poorly, Eikel continues. Take, for example, the two high-risk procedures. "Leapfrog's focus is not necessarily on encouraging hospitals to be good at everything, but we very much encourage them to do well in service lines they are good at," she explains. "We are more engaged in creating centers of excellence around certain high-risk procedures; from the consumer's perspective, it's very important for them to see that certain hospitals are better for them than others, depending on what it is they are being treated for."

Byrnes has another explanation. "I notice that most hospitals feel they need to be in the cardiology service arena," he observes. "When you have all the hospitals vying for volume, few – if any – will make those volume targets. You are taking an existing pie and dividing it into too many pieces."

There are also challenges in a third area in which most hospitals fell short — the use of intensivists. "One of the biggest challenges everyone mentions is that there are very few doctors trained in critical care, so hospitals have a hard time finding them," admits Eikel. "However, in our survey, we encourage hospitals to use telemonitoring to meet our ICU staffing requirement. It's an excellent way to have the right level of care in the ICU without requiring an on-site intensivist."

Byrne agrees. "The intensivist problem is just one of supply and demand, but telemedicine is definitely an option — particularly for smaller, rural facilities. It's something you should definitely look at."

Making the list

"What it takes to make that top list is a lot of hard work and very specific attention paid to patient safety," says Benjamin. "Our goal is that the patients have a right to expect these safe practices are in place — but to get there takes tremendous work."

"I think for us it came down to a decision around philosophy — did we want to just do the [JCAHO] National Patient Safety Goals, or did we want to push beyond that and put in as many patient safety initiatives as we could — as fast as possible?" says Byrnes. "We looked at publications from AHRQ and NQF, worked off them, and selected 40 initiatives to implement here at Spectrum."

At Spectrum, an integrated delivery system with seven hospitals and a little more than 100 ambulatory sites, this was a tall order. "Our biggest groups of stakeholders included about 1,600 physicians and over 3,000 RNs," notes

A closer look at the Leapfrog Quality and Safety Survey

The Leapfrog Hospital Quality and Safety Survey contains questions that target four key areas of implementing patient safety practices. These are the questions Leapfrog uses in the survey:

"1. Computerized Physician Order Entry (CPOE): Do physicians enter patient prescriptions and other orders into computers linked to error prevention software?

"2. ICU Physician Staffing (IPS): Are intensive care units staffed by trained ICU specialists (intensivists)?

"3. Evidence-Based Hospital Referral: How well do hospitals perform five high-risk procedures and care for two high-risk neonatal conditions?

"4. Leapfrog Safe Practices Score: How well are hospitals progressing on the other 27 National Quality Forum Safe Practices?"

Of the 1,263 hospitals that responded to the survey, Leapfrog reports that 60% have fully implemented the practices in at least one of those categories. In addition, 30% fully meet the standard for the Leapfrog Safe Practices Score, while only 7% have fully implemented CPOE (another 7% plan to implement it by 2007), representing little progress since Leapfrog began tracking implementation in 2002, when the figure was 3%.

More than 1,100 hospitals indicated that they have one or more ICUs. Of those, 26% said they use intensivists to manage ICU patients, and another 7% indicated they would do so by this year. In the 2002 survey, only10% of the respondents met the Leapfrog standard. ■

Byrnes. "The initiatives were chartered by our safety committee — the executive team and many nurse directors. When they were chartered, the team lead for each initiative would be a nursing director and/or a manager, and these initiatives were our deliverables."

From the beginning, he says, the initiatives were "owned" by the nurse directors and front-line staff.

"The quality team would supply support staff and data, and we would then roll the initiative up through the organization," Byrnes explains. "If the initiative was heavy on the physician side, one of the medical directors would lead it, and if it was equally shared by both camps it would be co-led."

Baystate also has implemented a number of patient safety initiatives, including one to evaluate each surgical patient before surgery to make sure he or she is receiving the correct prophylactics to prevent heart attack or blood clots.

"For example, we evaluate each patient upon admission and then periodically thereafter for their risk of developing blood clots," says Benjamin. "It sounds very simple — clots cause very significant morbidity in hospitals in the U.S. — but we believe most could have been prevented if every patient were evaluated for risk and given meds or other preventive measures."

In order to improve safety in this area, he shares, a system needed to be created. "We had to decide who would evaluate the patient, when it would happen, how often it would happen, what preventive measures should be taken, and we then standardized this and put it in place," he explains.

The facility has used its CPOE system as a reminder, so when a patient is admitted, if there has been no order for deep vein thrombosis or blood clot prevention, the system will actually remind the provider. "It will say, 'We notice you have admitted so and so, and we see they are high risk; do you want to provide preventive measures?'" Benjamin notes.

Baystate also has created multi-discipline rounds as reminders. These involve physicians, nurses, and case managers.

"To sum it up, we are very gratified to be recognized by Leapfrog as one of the safest hospitals," Benjamin says. "To achieve patient safety really starts with leadership. What Leapfrog recognizes is that you have to start creating a culture of safety — and that comes from the top of the organization."

[For more information on the Leapfrog Hospital Quality and Safety Survey, go to: www.leapfrog-group.org.]

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Leapfrog Group unveils policy on 'never' events

The Leapfrog Group has unveiled a new policy through which it hopes to encourage hospitals to implement strategies to avoid the 28 "never" events that have been identified by the National Quality Forum (NQF). The NQF, which recently updated its list of "never" events, describes them as "adverse events that are serious, largely preventable, and of concern to both the public and health care providers for the purpose of public accountability." The entire list, which includes events such as "patient death or serious disability associated with a fall" and "unintended retention of a foreign object in a patient after surgery or other procedure," can be found at www.qualityforum.org.

"We are focusing on the never events because we felt they are really part of our mission statement to improve patient safety and quality of care in the health care setting," explains Catherine Eikel, director of programs for the Leapfrog Group. "While they are rare, they represent the worst of the worst that could happen in a hospital, and we really wanted to support hospital policies that make sure that facilities take appropriate steps when a rare never event occurs. Our current work focuses on the 30 NQF safe practices, so the two go together, for as facilities improve, the likelihood of a never event goes down."

Leapfrog is communicating the policy to hospitals by including it in its 2007 Leapfrog

Hospital Quality and Safety Survey. "This way hospitals, through the survey, can basically sign on and say, 'Yes, I will implement this in my facility," Eikel explains. "In so doing, they will receive public recognition in our web site and through our member organizations."

Apology accepted?

Leapfrog's new policy also seems to say being in health care doesn't mean "never having to say you're sorry." One of its requirements is that hospitals apologize to the patient and/or their family if they are harmed by a never event.

"There's been a lot of research showing that having one who's been aggrieved receive an apology and acknowledgement is a really important part of the healing process, and an important part of their acceptance and understanding of what has happened," says Eikel.

Conceding that this may be more of a patient satisfaction issue than a patient issue, Eikel adds that the Leapfrog Group does not specify the form such an apology should take. "Our overarching philosophy is to help the healing process of the patient and to encourage the hospital to take steps to prevent never events from occurring again, so we created a framework for that rather than getting into details," she explains.

While concerns have been raised that apologizing to a patient might be a liability risk for the hospital, Leapfrog counters: "Research indicates that malpractice suits are often the result of a failure on the hospital's part to communicate openly with the patient and apologize for its error. Patients feel the most anger when they perceive that no one is willing to take responsibility for the adverse event that has occurred."

The Leapfrog policy has several other components, including:

- Reporting the event to at least one national reporting program, such as The Joint Commission on Accreditation of Healthcare Organizations; to a state reporting program; or to a patient safety organization.
- Performing a root cause analysis that meets the standards of the reporting program being used.
- Waiving all costs that were the direct result of the never event.

The Centers for Medicare & Medicaid Services (CMS) also is moving to support the elimination of never events. In a statement issued May 18, 2006, it stated: "Clearly, paying for 'never events' is not consistent with the goals of … Medicare payment reforms. Reducing or eliminating payments for 'never events' means more resources can be directed toward preventing these events rather than paying more when they occur. In particular, CMS is reviewing its administrative authority to reduce payments for 'never events,' and to provide more reliable information to the public about when they occur. CMS intends to partner with hospitals and other health care organizations in these efforts." ■

SCIP tip sheet seeks to involve patients

Initiative begins consumer-focused phase

The Oklahoma City, OK-based Surgical Care Improvement Project (SCIP) has begun a consumer-focused phase that will include the tip sheet, "Steps to Safer Surgery," which gives patients specific questions to ask physicians and nurses before surgery to ensure the care provided will reduce the likelihood of complications.

The goal of the SCIP national partnership is to reduce by 25% the incidence of the most common preventable surgical complications — infection, blood clots, and adverse cardiac and respiratory events — by 2010. SCIP's steering committee includes the following organizations:

- Agency for Healthcare Research and Quality (AHRQ);
- American College of Surgeons;
- American Hospital Association;
- American Society of Anesthesiologists;
- Association of periOperative Registered Nurses;

Key Points

- SCIP's main goal is to reduce by 25% the incidence of the most common preventable surgical complications.
- Making the patient a partner in his or her care adds another means of ensuring proper procedures are being followed.
- Most common preventable surgical complications are infection, blood clots, and adverse cardiac and respiratory events.

• Centers for Disease Control and Prevention;
• Centers for Medicare & Medicaid Services (CMS);
• Institute for Healthcare Improvement;
• Joint Commission on Accreditation of Healthcare Organizations;
• Veterans Health Administration.

Questions on the two-page tip sheet range from "If I take medicine for heart disease, should I keep taking it?" to "If I need antibiotics before surgery, when will I receive the antibiotic and for how long?"

"This really is the piece we've been waiting so long to put in place," says **David Hunt**, MD, Medical Officer in the Office of Clinical Standards and Quality at CMS. "We've been work on SCIP for more than three years, and one of the things we wanted was a comprehensive program of getting physicians, hospitals, and patients on board."

While patients are an integral part of the plan, "We first made sure we had a pretty good campaign to educate and notify physicians, surgeons, nurses — all the perioperatives," Hunt explains. "Then, there was a concerted campaign to make sure hospital executives were on board – which started a year ago."

The whole point of the previous two phases, he says, was to lay the foundation for the patient phase. "But we wanted to make sure that when the information went out to the patients they would not get blank stares from staff when they asked their questions," he explains. "We want to make sure patients are empowered to understand they can get information and actually participate in things that will help the quality of their surgical experience."

This deliberate plan to make sure the perioperative team and hospital executives were on board was worked through the QIOs. "We wanted to make sure we had an education plan," Hunt explains. "We had things we saw as great opportunities for improvement. Then, we designed measures around those opportunities."

But measuring alone is not enough, he continues. "We had to make sure we had a system of interventions hospitals could use and be taught, either through QIOs or downloaded using tools on the Internet," he says. "We got many people on board in terms of looking at what to improve, how to measure, and what staff can do to change things."

One of the most important things to know about SCIP, Hunt continues, is that it is all about systems. "It has to do with the integration of very complex systems of care delivery," he notes. "Any one component in a given hospital may work incredibly well, but you need that integration and synergy of the perioperative team. All things need to be integrated for them to reliably happen – for example, how to make sure the patient gets antibiotics on time at the optimal time, which is within an hour of incision. This requires a very intricate choreography involving the surgeon, the pharmacy, the perioperative holding nurse, the surgical nurse, and so forth."

Previous QI programs in this area, he asserts, would target one thing, like "surgeon writes the order." "That still does not mean the patient gets the antibiotic on time," he emphasizes.

Patients are critical

Kerm Henriksen, PhD, Human Factors Advisor for Patient Safety at AHRQ, agrees with Hunt that patients are critically important to the SCIP project.

"Certainly for the last 10 to 15 years there has been greater awareness of the role patients can play in improving the care they receive in hospital settings," he notes. "One of the reasons for that is there is such variation in some of the practices when it comes to safer care in the hospital. We know what the right thing to do is, but not every place does the right thing right."

Therefore, he continues, patients need to be aware of what those right things are, as well as which hospitals practice them. "The tip sheet is arming patients with the knowledge of what is right," he explains. "SCIP has identified four target areas: reducing surgical-site infections, preventing adverse cardiac events, preventing venous thromboembolism, preventing respiratory complications. If I was a patient going into the hospital, I would want to talk to someone in the surgical unit and find out what this hospital does to prevent surgical-site infections or adverse cardiac events and how they control for blood clots. These are good questions to ask, because when it comes to surgery, doing things the wrong way can have adverse consequences."

"We've all recognized that medicine was too paternalistic," adds Hunt. "This is a sort of recognition that the patients are number one, and they should be active participants in their care. We know we can reliably do things if we make sure the patients are engaged, and serve as

an opportunity to check things like wrong-site surgery, pre-op meds, and so forth. They are just another very involved set of eyes, ears, and brains that we desperately need for reliable delivery of care."

But is there evidence the providers will react positively to the proposed queries? "That's a good question," says Henrisken. "Some might take offense, but in general I think the surgical care team likes to see their patients are well informed about some of the risk factors in surgery. It shows, among other things, that they are taking an interest in their profession."

[Editor's note: The consumer tip sheet, "Steps to Safer Surgery" is available at: www.ofmq.com/user_uploads/FINALconsumer_tips2]

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Study shows efficacy of bar-code usage

Bar-coding can reduce errors, study says

A new study published in the *Annals of Internal Medicine*[1] indicates that the use of bar code technology in a hospital pharmacy can help achieve significant reductions in medication errors and potential adverse drug events (ADEs). However, the authors add, some systems are more effective than others.

The research team used three different configurations, notes **Eric Poon**, MD, MPH, assistant professor of medicine at Harvard Medical School and associate physician at the Brigham & Women's Hospital, both in Boston, MA.

"There were three different ways of dispensing meds in the pharmacy, so depending on where the meds were going and what types of meds you're talking about, there were three different possibilities with bar-code technology," he explains.

In two configurations, all doses were scanned once during the dispensing process. In the third configuration, only one dose was scanned if several doses of the same medication were being dispensed.

"In two of the three systems, every single dose is scanned at least once during the process, but in one of the three that does not necessarily happen," says Poon. "In the two in which every single dose gets scanned, we verified there was an 80%-90% reduction in the incidence of dispensing errors and also in potential ADEs."

The researchers were not able to assess actual ADEs, Poon continues, "Because errors were actually stopped from getting out. But what we did see with the two good processes was anywhere from an 86% to 97% reduction in potential ADEs — which was pretty good."

The numbers up close

In the pre- and post-bar code implementation periods, the authors observed 115,164 and 253,984 dispensed medication doses, respectively. Overall, the rates of target potential ADEs and all potential ADEs decreased by 74% and 63%, respectively. Of the three configurations of bar code technology studied, the two configurations that required staff to scan all doses had a 93% to 96% relative reduction in the incidence of target dispensing errors and 86% to 97% relative reduction in the incidence of potential ADEs. However, the configuration that did not require scanning of every dose had only a 60% relative reduction in the incidence of target dispensing errors, and an increased (by 2.4-fold) incidence of target potential ADEs.

"We further tried to make the argument that in the two configurations that did well, bar code scanning happened in different ways," adds Poon. "In one, the identity of the meds was verified when they were stocked and when they were taken out for dispensing. In the other, scanning

Key Points

- Incidence of dispensing errors, potential ADEs reduced between 80% and 90%.
- For greatest efficacy, system must be able to scan every single dose at least once.
- Individual hospital pharmacies may dispense millions of doses per year, so benefits may be considerable.

was not required when the meds were stocked, but when they were taken out every single dose had to be scanned."

In the third process, Poon explains, when the meds were taken out, if staff were trying to dispense say, 10 bags, the way the software worked it only mandated that the techs scan one of the 10 bags.

Verify every dose

The research revealed to Poon that medication dispensing is not a linear process. "What comes out of the pharmacy can come back," he explains. "For example, you may dispense an antibiotic that the patient does not need, so it is put back on the shelf. That's why if you do not scan meds when they are stocked, or if you don't scan every single dose, dispensing errors can happen."

Accordingly, the authors concluded that bar coding systems should be configured to mandate scanning of each dose at least once during the dispensing process. "You should definitely select one that does that, or at the very least, every single dose should be verified somehow by barcode scanning," says Poon, who says he is now conducting a cost-benefit analysis of the systems.

Another thing that surprised Poon during his research was just how many meds are dispensed — and accordingly, just how many errors can occur at a single hospital pharmacy.

"Pharmacies dispense a lot of meds; ours, for example, does about 6 million doses in a year. So, even if your error rate is very low, you still get a very substantial amount of errors. Using the bar code technology, even if you take all three systems into account, we would have been able to reduce ADEs by about 60%. That means we were preventing about 6,000 potential ADEs every year — which is a handsome number."

Reference

1. Poon EG, Cina JL, Churchill W, et al. Medication dispensing errors and potential adverse drug events before and after implementing bar code technology in the pharmacy. Ann Intern Med. 2006;145:426-434.

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Statewide campaign slashes VAP rates

Follow-up provides strong support for facilities

The Minnesota Hospital Association (MHA) recently completed a successful pneumonia prevention program for hospital patients on ventilators, crediting it with saving an estimated 53 lives and $7 million in health care costs. All 84 Minnesota hospitals that treat ventilator patients participate in the Ventilator-Associated Pneumonia (VAP) Initiative, which MHA estimates reduced pneumonia cases by 175, or 57% over 15 months.

The effort, part of the Institute for Healthcare Improvement's (IHI) 100,000 Lives Campaign, was launched in the spring of 2005. "We received an invitation to participate in a day-long presentation and discussion on how to reduce VAP in Minnesota," recalls **Roberta Basol**, RN, MA, CNA, BC, department Director of the ICU at St. Cloud Hospital. "They made recommendations on things to do, such as implementation of the ventilator bundle, oral care, subglottic suctioning, and so forth."

A head start

The MHA benefited in turn from the experiences of Mercy Hospital in Coon Rapids, which began its own initiative in 2003. "As soon as they heard our data, they knew we were a little bit ahead of the curve," recalls **Pam Madrid**, RN, CNS, CCNS, CCRN, a clinical nurse specialist at Mercy's ICU. Accordingly, she says, MHA asked Mercy to participate in presentations to other hospitals.

Three key elements contributed to success at Mercy, according to Madrid: Good hand hygiene,

Key Points

- VAP initiative reduces pneumonia cases by 175, or 57% over 15 months, according to hospital association.
- Proper hand hygiene, IHI ventilator bundles, good oral care are keys to successful reduction of VAP incidents.
- Participating hospitals share successes and challenges, strengthening each others' efforts.

ventilator bundles, and good oral care.

"We started using alcohol-based foam [for hand hygiene] and put colorful 'foam in, foam out,' signs on the doors. We even encouraged family members to foam when going in and out of the room," Madrid shares.

Some of the staff, she continues, would try to call each other and offer reminders. "One weekend some nurses even started yelling 'Foaming in, foaming out,'" she says.

Foam dispensers are located "everywhere," adds Madrid. "We also started using some wipes to help wipe off stethoscopes." Compliance was measured by counting how much foam was used. "We doubled our count," she reports.

The second element, the ventilator bundle, included three elements: Head of the bed elevated 30 degrees; DVT (Deep Vein Thrombosis) prophylaxis by 24 hours; and stress ulcer prophylaxis by 24 hours. "We scheduled a weaning readiness assessment and lightening of sedation at least once a day to see if the patients were ready to be weaned off the ventilator," she adds.

The oral care initiative involved brushing patients' teeth twice day, and in between that doing swabs with a bicarbonate of soda base. New endotracheal tubes were purchased that make suction of secretions easier.

The result? "We have gone 515 days without a single case of VAP," Madrid reports.

An easy sell

Because of the experiences of Mercy and other facilities across the country, the MHA's VAP initiative was an "easy sell," says Basol. "There was a lot of supportive data, so it did not take much for you to participate. For example, IHI's data showed that if you just elevated the head of the bed to 30 degrees, you could reduce VAP by 18%." In addition, she notes, VAP has a 25% mortality rate, "So it was so convincing to say, 'We can save lives.'"

All participating facilities submitted data on what their past VAP rates had been, and reported ongoing VAP rates monthly to MHA. "The data process was really quite easy, and the measures were clear (i.e., VAP rate per 1,000 days) so we all compared the same things," says Basol.

Upon leaving the seminar, recalls Basol, the MHA challenged all the hospitals to immediately do one new thing. "We did two," she says. "We made signs to remind ourselves to keep the head of the bed elevated at 30 degrees, and we also put little reminder cards at the entrance of the room to use alcohol foam. We also had a 'Foam in, foam-out' sign."

Those "little" things made a big difference, she says, as did improved oral care and subglottic suctioning. "We also looked at how frequently we changed vent tubing and how frequently we change suction canisters; we even changed where we were storing resuscitation bags," says Basol. At the start of their initiative, the staff also conducted an extensive search of the literature to identify best practices.

The staff really took to the initiative, she adds. "We are very proud, for example, that we have had 100% compliance with the ventilator bundle for going on over a year," says Basol.

At the project's end in June 2006, St. Cloud reported a 75% reduction in VAP. "This was very significant, even though I did not think we had very high rate to begin with." says Basol. "By CDC statistics, we had been outperforming more than half the hospitals in the country, but I did not realize there was an opportunity to really reduce VAP."

Basol is now a big supporter of the IHI's collaborative model. "We shared successes with other hospitals, and we would send e-mails back and forth, offering assistance, and checking on how each other was doing," she says. "You also get good ideas from other people; we took ideas from other hospitals, and we implemented them here."

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Key Points

- VAP initiative reduces pneumonia cases by 175, or 57% over 15 months, according to hospital association.
- Proper hand hygiene, IHI ventilator bundles, good oral care are keys to successful reduction of VAP incidents.
- Participating hospitals share successes and challenges, strengthening each others' efforts.

Study indicates drop in mortality rates

But gap between best, worst hospitals has grown

The ninth annual HealthGrades Hospital Quality in America Study contained some encouraging news, but also some troubling data, according to officials of the Golden CO-based organization.

It showed, for example, that the nation's in-hospital risk-adjusted mortality rate improved, on average, 8% from 2003 to 2005. However, the degree of improvement varied widely by procedure and diagnosis studied (the range was from -19.6% to 24.72%.)

A total of 40.6 million Medicare hospitalization records from the years 2003 through 2005 were analyzed for the HealthGrades study. Each of the 5,000+ hospitals gets a one-, three- or five-star rating indicating poor, average or excellent outcomes in each of 28 medical categories. Researchers analyzed such diagnoses as: Acute Myocardial Infarction, Community Acquired Pneumonia, Coronary Bypass Surgery, Heart Failure, and Coronary Interventional Procedures.

The study found much lower risk-adjusted mortality rates for the five-star rated hospitals across all three years.

In a continuing trend that **Samantha Collier**, MD, the author of the study and the vice president of medical affairs at HealthGrades, calls "a concerning finding," the "quality chasm" between the best and poorest-performing hospitals has grown by approximately 5% since last year's study.

"The Eighth Annual HealthGrades Hospital Quality in America study (last year's study) showed an overall average gap of 65% between five-star and one-star hospitals across multiple diagnoses and procedures," Collier explains.

Key Points

- Nation's in-hospital risk-adjusted mortality rate improved, on average, 8% from 2003 to 2005.
- "Quality chasm" between the best and poorest-performing hospitals has grown by approximately 5%.
- If all hospitals performed at top level across 18 procedures and diagnoses studied, 302,403 lives might have been saved.

Two measures

Collier points out that the "contradictory" statistics do, in fact, measure two different things. "Medicare beneficiaries in the U.S. during the time period studied have seen a decline in absolute and risk-adjusted mortality rates, which is great," she notes. "However, that looks from the '5,000 ft. level' across a wide array of diagnoses and procedures."

But when the top-rated hospitals are compared to the one-star hospitals, things come into clearer focus. "While in the aggregate everyone is doing better, the best are getting better at a faster rate than the bottom performers," she explains.

This would appear to run contrary to the conventional wisdom which argues that as the top performers come closer to perfection they will find it harder to improve. "I don't know that anyone knows where the cap is, and where [improvement] starts to get marginal," says Collier.

What the data does underscore, she continues, is that "There is still a lot of opportunity in hospitals for continuous quality improvement." Some of the reasons why top performers keep getting better, she says, are that "They continuously look to find where opportunities to improve are, they tackle the problems, find a solution, and move on to the next problem. There is never an end."

The ideal goal, she says, would be to actually reach a limit "where you would have to put whole lot of effort in to just get marginal

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improvement."

There are periods in any organization's growth where with little effort big gains can be made, she continues. What sets apart the "true level-five organizations," says Collier, is, "As the effort needed to improve becomes greater, the investment becomes greater."

The key finding of this latest study, she asserts, "Is that it is possible to achieve that."

Inspiring others

That finding, that such excellence is achievable, should be an inspiration for those hospitals that have farther to go, says Collier. It should also make them realize, she adds, that they have to make an investment and a commitment and continually examine their progress.

"I think some of the characteristics of top performing hospitals involve not just a verbal commitment, but an action commitment from the board all the way down that quality is our strategy," says Collier. "You've got to make the necessary capital, labor, and technology investments to get the best quality and safety outcomes." For example, she notes, "Some facilities are committed to having the lowest RN to patient ratios possible, while others simply say they can't do that."

What are the keys to a lower performer turning things around? "First of all, if they are not benchmarking — which most hospitals do — they've got to do that," says Collier. "There are still some smaller facilities that have difficulty acquiring a database that has the ability to do that, but at least they can use HealthGrades' ratings. If you are not where you should be or could be, use that information to drill down to get the necessary resources to improve."

[For more information, contact: Samantha Collier, MD, Vice President, Medical Affairs, HealthGrades, 500 Golden Ridge Rd., Suite 100, Golden, CO 80401. Phone: (303) 716-6548. Fax: (303) 716-6648. HealthGrades ratings are posted free on its website, www.healthgrades.com. A copy of the study, which includes tables, is also available on the HealthGrades web site.] ■

AHRQ to request evaluation of P4Q programs

The Agency for Research and Healthcare Quality issued notice in the October 24, 2006, *Federal Register* that it intends request permission from the Office of Management and Budget to conduct an evaluation project on pay-for-quality programs.

The proposed project, "Evaluation of the Implementation and Impact of Pay-for-Quality (P4Q) Programs," would assess if quality improves on the measures used in P4Q programs in health care safety net settings and whether the programs lead to unintended consequences. The project would also seek to identify best practices in P4Q programs.

Information for the project would be collected through a survey of physicians participating in P4Q programs and through interviews with up to six key managerial staff (physicians, office managers, practice leaders, etc.) at each target site regarding program design, implementation, and impact. ■

AHRQ creates DVD on chest tube insertion

The Agency for Research and Healthcare Quality (AHRQ) has a DVD available on the proper insertion of chest tubes. The 11-minute DVD uses video footage of 50 chest tube insertion procedures taken at medical centers in the Baltimore, MD, area.

"Chest tubes, unlike other invasive catheters, are never replaced," explains **Colin Mackenzie**,

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- San Diego area hospitals agree to standardized IV care
- NCQA conference assesses the future of pay for performance
- CMS to preview publicly reported hospital mortality rates

MD, Professor of Anesthesiology at the University of Maryland, who along with his colleagues observed the procedures and developed the DVD. "We saw during our observations that there were problems with the technique of tube insertion, and research shows this may be the cause of a number of infections."

The preventive measures demonstrated in the DVD are represented by the mnemonic device UWET, which stands for:

- Universal precautions: These, says Mackenzie, are (or should be) "standard operating procedure" when any surgery is being done – i.e., sterile gloves, gown, cap, and mask. "Still," he says, "We found that in emergencies people were sometimes not doing that."
- Wider skin preparation: "We found that people would make small preparations of skin around the area in which they wanted a chest tube and then contaminate the skin or themselves by touching areas outside of what was prepped," Mackenzie shares.
- Extensive draping: This is a similar problem, says Mackenzie. If the area is too small, instruments may go beyond the drapes and become contaminated.
- Tray positioning: "We found that because of the nature of trauma, especially its emergency aspects, sometimes as many as three different procedures were being done from the same tray," Mackenzie notes. "We also noted two [surgical] knife cuts and one needle stick in the 50 procedures." He and his colleagues recommend using a separate tray for each procedure.

Copies of the DVD can be ordered from the AHRQ Publications Clearinghouse by calling (800) 358-9295, or by e-mailing: ahrqpubs@ahrq.hhs.gov. ■

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Report finds that most hospitals support P4P

Nearly all hospitals support the Centers for Medicare & Medicaid Services (CMS) in moving forward with a pay-for-performance program over the next few years, but selecting the right measures will be a critical element of future success, according to a new report by Mathematica Policy Research. The findings are based on a 2005 survey of hospital executives that Mathematica conducted for CMS, which explored hospitals' views on a future CMS pay-for-performance initiative and the quality measures it should include. Most hospitals participating in the Hospital Quality Alliance supported using that program's original 10 measures or a modestly expanded set of measures, while most hospitals participating in the CMS/Premier Hospital Quality Incentive Demonstration favored using or expanding that program's 35 measures. ■