Interdisciplinary Nursing Quality Research Initiative

To Err is Human

TEN YEARS LATER

A Blog Response to the Anniversary of the Seminal IOM Report on Medical Errors
The Institute of Medicine’s (IOM) report on medical errors, *To Err Is Human: Building a Safer Health System*, is possibly one of the most influential reports on health care of the last century. Highlighting the shocking fact that as many as 98,000 people died each year as a result of medical errors in hospitals, the report significantly changed the way we think about medical errors and how to prevent them.

One important contribution of *To Err Is Human* is the recognition that medical errors are often the result of a problem in the system, rather than the fault of a single individual. The report also helped usher in an era in which teamwork in health care came to be seen as an important element in improving patient safety and quality of care and thereby reducing medical errors.

These are the oft-touted accomplishments of *To Err Is Human*, but how is all this playing out for health care providers and especially for patients? What changes have really been made since the report was released a decade ago? Do members of health care teams feel empowered to take steps to prevent situations in which medical errors could occur? Do patients feel that there are steps they can take?

These are just some of the questions that the Robert Wood Johnson Foundation (RWJF)-sponsored Interdisciplinary Nursing Quality Research Initiative (INQRI) wanted to explore when they launched a blog event last December to commemorate the 10th anniversary of the release of *To Err Is Human*. INQRI invited blog postings from health care researchers, nurses, doctors and patients. Not everyone agreed on how much progress has been made or how much more still needs to be done, and because of this disagreement, the lively and thought-provoking conversation that ensued provided important insights about our health care system and how attempts to increase the focus on patient quality and safety are being carried out and received. The INQRI blog produced perspectives that we felt important to preserve in print. The INQRI blog lives on and we hope that readers of this printed “point in time” snapshot will feel inspired to go online and engage in this important conversation.

Risa Lavizzo-Mourey, M.D., M.B.A
President and CEO, Robert Wood Johnson Foundation
Where Do Nurses Stand 10 Years After the IOM Report, To Err Is Human?

INQRI Co-Directors Mary Naylor, the Marian S. Ware Professor in Gerontology at the University of Pennsylvania School of Nursing, and Mark Pauly, the Bendheim Professor at the University of Pennsylvania’s Wharton School, offer their perspectives on how that report affected safety, front-line nurses and practice culture.

What impact did the IOM report have on advancing safety?

Mark Pauly: I don’t think anybody really knows for sure. The estimate of the number of deaths due to errors was based on taking an old study and extrapolating it nationally. Measures are better now but to some extent we are still in the dark in terms of what we do know for sure or what the baseline is for the number of medical errors. It definitely raised the profile of medical errors and showed how it is a relatively important measure of quality as compared to other measures. There is much more of a concern now about errors than there was in 1999. Excuses for medical errors are now passé. Today, there are no excuses. It mostly changed the nature of the discussion by focusing much more on errors as a measure of quality and offering it as an objective.

Mary Naylor: The report made us pay more attention to the importance of the work that nurses do at the bedside as it relates to medical errors. Nurses mobilized and as a field we began to seriously try to identify measures that captured what nurses do day-to-day to keep patients healthy. An important example of that is the National Quality Forum’s (NQF) 2004 endorsement of nurse-sensitive measures. These were explicitly focused on issues around errors and avoidable events and there was the beginning of a sense that nurses are central to what happens to people in the hospital and other health settings. We finally had a group of quality leaders who said, “Let’s define robust measures and constantly monitor those efforts.”

Did the report focus on the right problems?

Mark Pauly: Calling attention to errors is important. But the basic thrust was to blame it on the system and treat people as cogs in the mechanism. We’ve gone too far in characterizing it as a system failure that has nothing to do with people. The IOM report downplayed the role of the nurse even though the nurse is involved in the actual delivery of care. Nurses are almost always there and are in a position to notice that something hasn’t gone right, but feel intimidated to bring that to someone’s attention. They also have a lot to contribute to system redesign. I feel they haven’t been consulted much on the system design issues over the decade.

Mary Naylor: The first set of nurse quality measures from NQF provided a good start at focusing on all the things that could go wrong with patients, such as failure to rescue, pressure ulcers, falls—things that nurses very much are concerned about and, that if not
Nurses have a central and essential role to play on the team but that recognition is just now coming and it hasn’t really had much of an impact yet.

handled appropriately, could contribute to poor outcomes. But they didn’t capture what nurses do right or what they do to prevent those things from happening in the first place. The focus on errors did push people to look at how we measure those things but it didn’t really focus on what nurses do to intercept those errors. All of this has led to the establishment of a quality alliance focusing specifically on nursing, which will launch in 2010. This is really important because we now have a group of stakeholders agreeing that nursing is central to the prevention of medical errors.

The big word in health care today is “teamwork”—a term promoted in the report. Is teamwork making a difference in quality/safety and are nurses now seen as an equal member of that team?

Mark Pauly: It does seem that while everyone is promoting this idea of teamwork in health care, the doctor is still the leader whose decision matters. Nurses have a central and essential role to play on the team but that recognition is just now coming and it hasn’t really had much of an impact yet.

Mary Naylor: We are only beginning to see some evidence in which the role of nurses is being considered and largely valued. The challenges around care coordination have placed a positive spotlight on nurses as key in helping to identify what information is most vital to be communicated from one person to another or from one site to another. However, nurses are rarely consulted on these important communications. We are seeing much more appreciation that nurses should be a major part of any effort to redesign care coordination but that recognition is not consistent, comes late in the game and is something we as nurses have to fight for all the time.

So where are nurses’ voices being heard when it comes to promoting patient safety? What has made a difference for nurses?

Mary Naylor: Having evidence to show what interventions work makes a difference. The strength of the evidence from research has made us successful in getting provisions in the current health reform bills that reflect nurse-led interventions. For example, the existence of irrefutable evidence in transitional care has been the central reason we cannot be dismissed anymore because we now can show what nurses contribute to quality care and what that contribution means to costs.

Mark Pauly: Concrete examples of nurses’ contribution to care coordination are important. But what gave nurses leverage was when care coordination got translated into the readmission rates and policy-makers started to notice that it mattered for cost and outcomes. That is what changed the conversation. One of the things we are doing at INQRI is starting to generate and link regulation and policy behind the research we’re producing.

Mary Naylor: We need to be providing the same kind of evidence around end of life care, where nurses are the true caregivers. Nurses have played a critical role in engaging patients as family caregivers, even in convening around advance care planning and ensuring access to palliative care. Long-term care is the next crisis on the health reform agenda.
The long-term care debate represents a huge opportunity for nurses through evidence to show their capacity to prevent unnecessary hospitalizations and enable patients to have a much higher quality of life.

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**TUESDAY, DECEMBER 1, 2009**

**Making Health Care Better**

In a recent article in *The New York Times Magazine*, Brent James, the chief quality officer at Intermountain Healthcare (a health network in Utah and Idaho that President Obama uses as a model for health reform), explains that for most of our history, doctors have done more harm than good. But, eventually good science won out over the use of primitive techniques (like leeching). With newer practices, medicine was able to triumph over diphtheria, measles and polio. But more advances brought more options. The article notes that strenuous scientific testing is required of any practice before it is brought into use, but that once a treatment is proven, the “science is left behind.” James asserts that using a scientifically-proven protocol is the best way to treat patients, and he has the proof to back him up.

Read the article here:


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**TUESDAY, DECEMBER 1, 2009**

**Patient Safety Scores a B-Minus**

Patient safety gets a B minus 10 years after IOM released its report, *To Err Is Human.* University of California at San Francisco professor and patient safety guru Robert Wachter handed out his grade in an online article for *Health Affairs.*

Wachter says the United States has made “a modest improvement” in safety efforts since 2004, the last time he issued a report card in the same journal. Wachter says the health care field has made “unmistakable progress” in improving patient safety in the past decade, which he admits is “the best we can hope for.”

Areas that have made great strides—more robust accreditation standards and error-reporting requirements—have forced hospitals to focus more on patient safety.

However, the article also argues that areas such as greater adoption of health information technology (IT), which Wachter says has yet to fulfill its promise, and the stronger enforcement of reasonable safety standards, such as hand hygiene, are still a problem.
“It’s time to penalize physicians and others who fail to follow such standards,” he says.

Although interest in balancing a systems-oriented focus with accountability is blossoming, Wachter says the health field still has far to go.

The full article is available here:

http://content.healthaffairs.org/cgi/content/abstract/hlthaff.2009.0785.

TUESDAY, DECEMBER 1, 2009

Perspectives: ‘Patient Care is a Team Sport,’ NQF President Says

As president and CEO of the National Quality Forum (NQF), Dr. Janet Corrigan sits on the frontline of the patient safety movement. In addition to her leadership of the non-profit standards-setting organization, she served as Senior Board Director at the Institute of Medicine when the seminal report on medical errors and patient safety, To Err Is Human, was released. We caught up with her to talk about what needs to happen to improve patient safety and nurses’ role in making that happen.

Are patients safer today than they were 10 years ago?

Dr. Corrigan: We don’t know the answer to that question because we have not conducted large-scale studies. Based on the smaller-scale focused studies, there clearly have been important advancements in certain areas. We have some very good efforts aimed at reducing infections. Peter Pronovost’s work [on cutting hospital-acquired infections] has shown some very important results in reducing infections. We can point to a plethora of interventions that have made some patients safer.

Are all patients safer? No. There are some disconcerting findings. One hundred thousand or more patients still die from infections each year. We still see wrong-side surgery.

How did your experience at the IOM and that report inform your work today?

Dr. Corrigan: One thing I learned from that process is that it’s really challenging and difficult to make change happen in health care. For reasons I don’t fully understand, health care doesn’t change easily. It’s highly decentralized. It’s also one where the culture resists standardization of care processes, even when that standardization is needed to get to a safer environment.
What needs to happen to improve patient safety?

Dr. Corrigan: We need to do several things differently. We need to focus on high-leverage areas where major national organizations can establish national priorities and goals to transform delivery. We need to align activities of public and private purchases. We have to create an environment that sends clear signs to providers on the front lines, set priorities and focus and align our efforts around them.

Our health care delivery system is in need of a major overhaul. It is fragmented. Many errors occur because there is no clear handoff once patients leave the hospital. They don’t follow the treatment protocol. We need systems of care that can support that patient and have a clear handoff.

We also really need to reform the payment system. Current fee-for-service modalities are really an impediment to safety. Under fee-for-service, some providers find that they make the needed improvements to improve quality and get penalized financially. We need payment programs that reward providers [for quality].

Has the role of nurses changed in response to the IOM’s call to action on patient safety?

Dr. Corrigan: The IOM report clearly recognized the role of nursing and opened up a wonderful opportunity for nurses to assume a leadership role [in patient safety]. Nurses are our front-line providers. They are the ones most likely to notice when an error is about to occur or has occurred.

Nurses also have tremendous knowledge about how to reform the care processes. As members of the care team, they make errors as well. It’s important to realize that multiple things go wrong when an error occurs. There are many actions that can be taken so that nurses can help redesign care processes so that it makes patients safe. Nurses clearly play a role in that.

What’s next for the NQF in terms of the role you play in advancing patient safety?

Dr. Corrigan: We are moving more toward patient-focused measures. That’s another core message of the IOM report. Patient care is a team sport and we really need to focus a lot more on interdisciplinary teams. It will be very important for nurses and all clinicians to think about their relationship to the team.
Searching for Reliable Health Care 10 Years After IOM

While presenting at her 25th medical school reunion, Dr. Anne-Marie Audet was struck by the sophistication of questions from second-year medical students and how prepared they seemed to practice in a health care system built around teamwork and quality improvement. Audet learned that McGill University was exposing students to the real-life world of health care today using a simulation exercise in which actors pose as doctors and nurses operating under stressful conditions and working as teammates to provide the best care and avoid medical errors. Audet, vice president of quality improvement and efficiency for the Commonwealth Fund, says that experience is very different from the kind of training she got when she attended medical school at McGill. Then, physicians were trained to be autonomous and there was very little discussion about “team work.” Today’s training reflects how much health care and the practice of medicine has changed, in part due to a focus on fixing some of the problems reported by the Institute of Medicine in its 1999 report, *To Err Is Human*. The Commonwealth Fund was one of several foundations that supported that landmark study, which by highlighting the breadth of medical errors in U.S. hospitals energized a whole movement to enhance patient safety. Dr. Audet reflects on the effect that report has had on health care 10 years later and what challenges lie ahead.

Do you think hospitals are safer places today than in 1999?

The jury is still out on whether health care is safer today than 10 years ago. We are safer in some places, sometimes, for some patients. But this is not what I would describe as reliable health care. One of the biggest areas where we have seen progress is with hospital-acquired infections. We have seen how possible it is for some hospitals to achieve zero rates of infections. In large metropolitan areas for example, some hospitals achieve zero infections while others may have five times the national average rate of infections. If we are aiming for high-reliability and safety in U.S. health care, we are clearly not there yet.

Where do we need to improve?

One area is leadership. If we are going to reduce unnecessary hospital readmissions, we need interventions at every level of the health care system, from the front-line clinicians to the hospital board. Today, a third of hospital boards are still not looking at issues of quality, or at safety (Full study available by subscription only through *Health Affairs*). If we are going to make any inroads, the hospital board and the CEO need to make quality and safety a priority. That is the only way to start changing the culture. It is the leadership that signals to staff and patients that this is important. If there is no such signal delivered to staff in the chaos of everyday care of patients, the status quo will remain.

How would this play out in day-to-day practice?

If safety is a priority, leadership will give staff time to focus on it. This means health care
teams are excused from daily work to put together their patient safety checklists, go over safety protocols, implement those protocols and teach others how to do the same. It also means that there is time for problem solving, for teams to share near misses and errors they have encountered during the day and to intervene to prevent similar problems in the future.

Iowa Health System is a great example of what I'm talking about. Gail A. Nielsen, the clinical performance improvement education administrator, has made safety and process improvement a priority and they are implementing a new model where staff get time off to be trained and are given time to train others. They also teach nurses how to learn from shadowing other nurses on their units and allow members of the health care team to observe transitions of care and debrief on what they saw and how to improve what and how they do things. This makes a difference. In one case, a nurse shadowing a colleague was able to see how many times the nurse was interrupted during an eight-hour shift. In just one, typical hour she documented that while the nurse cared for five patients, she was in eight locations, changed locations 18 times and interacted with 14 people on 30 topics. Multiply that by eight or 12 hours to discover an astounding number of interruptions in one day. This provides insight into how to redesign systems so that nurses can do their jobs without risking error.

If you had to pick one area we should be focusing on for errors, what would that be?

In addition to hospital-acquired conditions, patient handoffs, or transitions between care, are two big challenges we need to work on. Health systems need to be looking at care across the continuum, not just in a unit. Errors of transition and handoff are pretty significant. When you talk to the public about the need to reduce avoidable hospitalizations, they think you want to prevent them from getting care. We need to educate the public that some hospitalizations are avoidable and can be viewed as errors—events that should not happen if the management plan is well executed.

Where do you think the IOM report fell short?

The report helped raise awareness and get our attention about safety and system problems, but it fell short in providing a blueprint on how to get from where you are to where you need to be. We still don’t know how to truly design a safe health care system or a safe health care environment. The past 10 years gave us a lot of new knowledge about safety interventions but we now have to implement these and scale up to affect the whole system not just one unit or one hospital.

Will a reformed health system help?

I think health reform may remove a lot of barriers. Hopefully, payment reform can send important signals that redesign is important and should be paid attention to. We also need to do better in the next five years in setting targets and working to meet them. If we want 80 percent of hospitals to have zero infection rates in three years, after one year, we need to measure where we are and intervene to make sure we meet our target.
The physician is focused on the immediate clinical condition of the patient, not necessarily on reducing a potential future hospitalization. But you still have to engage providers in the effort?

The challenge for health care organizations in the next five years is to provide consistent signals. Right now health providers—hospitals, doctors and nurses—are getting too many signals. We need to find a way of aligning all of these. What I fear is that people who are taking care of patients every day don’t necessarily make the connections between the importance of a medical home, an accountable care organization, inappropriate readmissions and safety. These are really high-level organizational concepts and we really have to help providers and health professionals see how to make these concepts real. For example, if you talk to a physician about how to avoid unnecessary hospitalizations, it is unlikely that you will get much attention. The physician is focused on the immediate clinical condition of the patient, not necessarily on reducing a potential future hospitalization. Yet, if patients are managed well for their diabetes or asthma, if they are seen in the office soon after they leave from a hospital stay where things like medication reconciliation may happen, those actions will impact on patient outcomes and rehospitalizations. So there is a link between redesigning a practice to be more integrated or to have the elements of a medical home and the fact that by doing this, it will impact safety. The concepts have to be discussed to make sense to those redesigning the care. We have to make the connection to all providers and show them that by pulling a few key levers you can improve care as well as impact safety.

WEDNESDAY, DECEMBER 2, 2009

Environment Leads to Higher Quality Nursing Care

INQRI researcher Linda Flynn recently completed her study, “Examining the Impact of Nursing Structures and Processes on Medication Errors.”

“One of the report’s main conclusions is that the majority of medical errors do not result from individual recklessness or actions of a particular group—this is not a bad apple problem. More commonly, errors are caused by faulty systems, processes and conditions that lead people to make mistakes or fail to prevent them.”

— To Err Is Human

The Institute of Medicine report identified faulty systems as a major cause of medical errors in hospitals and nurse researcher Linda Flynn has been homing in on one such system ever since. Her research suggests that a positive work environment helps nurses catch errors before they have a chance to harm patients.

With funding from INQRI, Flynn has been studying 83 medical and surgical units in 14 New Jersey hospitals. Her study suggests that in order to prevent medication errors
nurses on the front lines must be able to think critically about a medication order or a prescription. A nurse must be able to review the chart and evaluate whether the drug, the dose and the timing make sense for the patient. If something doesn’t seem quite right, the nurse must be able to question the order, says Flynn, who leads a multi-disciplinary research team at Rutgers University College of Nursing.

Her research indicates that nurses are more likely to raise an alert on units with a positive atmosphere. For example, a nurse might notice the dose of a drug seems too high and suspect a miscalculation. On a supportive unit, the nurse might feel very comfortable calling the doctor and asking him or her to double-check the dose.

But in units without a good atmosphere, the nurse might be afraid to speak up and question the doctor. She might remain silent because she knows that if she says something her manager will not support her—even if she is right.

Such units represent a faulty system, Flynn says—one where mistakes and errors can flourish.

Her research suggests that units that foster collegial relationships and build teams can provide an atmosphere in which good care is the goal. Doctors, nurses and others on the unit must work together to provide safety checks at every point in a hospital stay. The nurse is often a critical player in this team effort because he or she is often the last point of contact with the patient.

If that nurse notices an error, he or she must feel confident enough to stop and double check it—before it has a chance to harm the patient, Flynn says.

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**WednesdaY, December 2, 2009**

**Don’t Break Out the Bubbly**

The way **Arthur Levin** tells it, we’re either stagnating or moving in reverse as a nation when it comes to patient safety. “We have little or no cause for celebration,” he told a crowd gathered at a recent Consumer's Union forum on the 10-year anniversary of the Institute of Medicine (IOM) study on medical errors.

Levin should know. He was on the IOM committee that helped issue that landmark study. “We don’t know the answer to the most basic question, ‘Is a patient encounter in the United States any safer today?’” he lamented.

Today, Levin directs the Center for Medical Consumers, a patient advocacy organization.

Levin and Jim Guest, president of the Consumers Union, both called for stronger laws that would require health care providers to disclose medical errors and better public reporting of safety and quality measures. “Sunshine is the best disinfectant,” Guest said.
Levin and Guest joined a cadre of prominent patient safety leaders, advocates and journalists to call attention to the “alarming frequency” of preventable harm as part of Consumers Union’s Safe Patient Project.

“The status quo is not acceptable and cannot be tolerated,” Levin warned.

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THURSDAY, DECEMBER 3, 2009

Quality of Care Still a Mixed Bag

Paul Levy is president and CEO of Beth Israel Deaconess Medical Center in Boston, Massachusetts. He also writes the blog “Running a Hospital” in which he shares his thoughts about hospitals, medicine and health care issues.

I know as someone who is the CEO of a hospital, quality issues are probably always at the forefront of your mind. I wanted to start by getting your impressions of what quality of care looks like today.

I think it’s still a mixed bag. I think there have been some good improvements, but I think there is a lot that remains to be done. For the most part there is still great variation in the care that is delivered and, unless more is standardized, we’ll never make progress on using a scientific approach to adopting the types of patient care that are of the highest quality.

So when you say things need to be standardized, are there specific standards you have seen to be more successful than others?

Well we have put some into effect here. For example, installing and maintaining central lines, adopting a bundle to avoid ventilator-associated pneumonia, adopting a pre-surgical protocol to help avoid wrong site surgeries or other errors of that sort in surgery. Those are examples of when the procedure is standardized for that portion of the medical care that is appropriately standardized, variation is diminished and the likelihood of preventable harm goes down.

And what roles do you see nurses having in maintaining this kind of level of quality?

Nurses are key. If the nurses are not involved in developing the protocols, helping with the training, calling out problems on the floor or in the intensive care units, then it just won’t work. Nurses, well more than doctors, actually have contact with the patients and have important responsibilities. The idea of doing it without the nurses is just crazy.

I know there is a lot of research out there talking about the key role that nurses can play in creating a safer environment when they are
really a part of the team as you just described. What do you see as being the actual status quo in terms of the relationship between nurses and doctors? How much of a voice do you think nurses actually have?  

I think it varies. In our hospital, we wouldn’t imagine trying to make quality and safety improvements without fully engaging the nursing staff in that process. When I talk with people in other hospitals, I hear that the opposite happens—that nurses are sometimes an afterthought, if any thought, and are not consulted and engaged in the process. I just don’t see how you can do it effectively with that latter model. It just doesn’t make sense.  

There’s a very low percentage of nurses involved in hospital boards.  

I don’t think that matters very much. There are a very low percentage of doctors involved in hospital boards as well. I don’t think it matters very much who is on the board. The issue is not so much who is on the board. The issue is who is involved in actually designing the way care is delivered. Boards of trustees do not determine the way care is delivered. Their role is of a policy nature or setting overall targets against which the management and clinical leadership will be held accountable. You can have 10 nurses on the board or you can have no nurses on the board, but I don’t think that’s determinant of how process improvement happens in a hospital.  

It sounds like in your hospital you do take into consideration the voice of nurses when creating these measures. Do you have a specific story or example to illustrate that?  

I’m not sure we have a specific one. We recently revamped our pre-surgical protocol, and that was a joint effort with the surgeons and nurses and surg techs and anesthesiologists all working together as a team. You have to have everyone who will be in the O.R. be part of the team. It just seems so common-sensical to me it almost seems pedantic to say it over and over again like this.  

So what do you think the biggest challenge is to improving patient safety?  

I think the biggest challenge is that physicians are trained to deliver medical care in a certain way, and that way does not include training in how to make process improvements in the delivery of care to make care delivery safer, more effective and higher quality. Changing that mindset or introducing that mindset into how systemic improvements are made in an organization is something that many doctors have to learn.  

How do you envision that happening, both for younger, newer doctors recently out of medical school and for those who have been practicing for years?  

Ideally, you’d like to start teaching this in medical school. But, having talked to the various medical schools in Boston, there doesn’t seem to be much interest in that. So the next step is introducing it into the residency training, and we’re doing that in our
The number of people harmed as the result of preventable medical errors has dropped. That’s good news.

I saw on your blog you were recently at an event where Newt Gingrich spoke and you wrote that you thought it was interesting that he said that it’s important not to wait for government to prompt safety efforts.

Right, well it’s because the government, not because of bad intentions, but just because it’s the way government always works, the priorities coming out of the government in terms of safety and quality may not be the right ones in terms of actual safety and quality, and the mechanisms they use to promote it or encourage it are not always the most motivational ways of doing that. The profession itself has to figure out how to do this.

So how do you see health reform, assuming that it passes, affecting quality?

It will have no impact whatsoever. There is nothing in any of the legislation that really amounts to a hill of beans in terms of improving the quality and safety of care.

OK, that’s very straightforward. So then, beyond the improving of medical education and turning more closely toward the nursing profession, what do you see the next steps to be in terms of improving care?

I think each organization, each hospital, has to figure that out for itself, depending on its local culture and how far things are along. I don’t think there’s a simple answer for that.

Do you think that there is a way to implement a similar structure for both the medical and nursing communities in other places?

I don’t think I can presume to say what would work in other places. We have an approach we are trying out here; you’ve read about it on the blog. Whether that’s right or wrong for other places, they have to figure out. But there has to be a prerequisite that the administration and medical leadership of the organization has to be committed to doing it in order to get it done. Unless this is a priority of the organization, it will not get done, whether it’s the nurses or the doctors.

Do you feel that both your hospital specifically and hospitals in general have been improving?

We know that we have improved here. The number of people harmed as the result of preventable medical errors has dropped. That’s good news. The incomplete job is to keep doing better and better at that and to eventually eliminate preventable harm, which is the goal we’ve set for ourselves. It’s good that we’ve made the changes we’ve made, but there’s still a lot left to do.
THURSDAY, DECEMBER 3, 2009

The Building Blocks of Better Care, 10 Years in the Making

This post is written by Barbara Olson of Florence.com, a real-time patient safety primer exploring age-old wisdom and new-found solutions for healing health care. Barbara Olson is a seasoned nurse, educator, project manager, safety analyst and health care consumer.

Shortly after the second IOM report, Crossing the Quality Chasm, was published in 2001, Don Berwick authored a “users’ manual,” a short document that clearly identified four broad stakeholder interests: the experience of patients; the functioning of the units where care is provided; the larger organizations in which direct care units reside; and the forces (policy, payment, regulatory, accreditation) that shape the performance of these organizations. Berwick described the model as necessarily hierarchical with the experience of the patient on top and other interests aligned to improve the health and functioning of the patients.

Berwick was probably wise to suggest that we begin crossing the quality chasm by holding on to the hierarchy. After all, no one understands hierarchies better than those who give and receive health care. By turning the hierarchy upside down, Berwick gave it a disruptive twist, one that helped re-establish the primacy of the care experience (and the outcomes attained) to the business of health care.

But I think Berwick was on to something better when he talked about the patient’s experience being “true north.” It’s a construct that acknowledges the importance of the patient experience while seating all stakeholders around a common cause.

The image of all stakeholders sharing space at the table works for me, especially since a decade’s worth of study of system design and performance-shaping factors is dismantling the notion that strict hierarchies serve the interests of safety.

Ten years ago, the relationship between safety and strict deference to hierarchies—and other “soft” markers of dynamics that shape human performance—was not appreciated. Cooperation, civility and effective teamwork were seen as “nice to haves,” the kind of behavior leaders might foster using sources like All I Really Need to Know I Learned in Kindergarten. Largely seen as social lubricants, behavior-based risk reduction strategies were given low priority in an increasingly technical health care domain.

A decade of studying what actually makes high-consequence industries reliable has sent health care stakeholders back to some foundational behavior-based learning. It turns out that things like speaking clearly, repeating words to be certain they have been understood, taking turns, using “inside” voices and getting plenty of rest matter when individuals rely on complex processes to deliver intended outcomes. (Even “time-outs” have made a comeback!)

A series of recognizable standards and expectations are now visible on the front lines.

By turning the hierarchy upside down, Berwick gave it a disruptive twist, one that helped re-establish the primacy of the care experience (and the outcomes attained) to the business of health care.
of care. The Joint Commission’s National Patient Safety Goals are the most readily identifiable. But even more important to further progress are the larger studies and best practice recommendations linking elements of organizational culture to improvements in patient safety. Measures that support these relationships are plentiful, easy to locate and increasingly integrated into forces that shape the performance of organizations.

The emergence of patient safety as a distinct discipline means the study of safety-sensitive processes and measures in health care now rests upon a conceptual framework. One that allows stakeholders to understand the science informing compliance measures in a way not possible before To Err Is Human. We’re poised to know, with increasing precision, not only who should be at the table but if what’s being served is any good.

Ten years spent building a table that so much rests upon is probably not too long.

THURSDAY, DECEMBER 3, 2009
Perspective: 10 Years After To Err Is Human

We caught up with Lori Melichar, senior program officer for the Robert Wood Johnson Foundation’s Interdisciplinary Nursing Quality Research Initiative, to talk about the influence the IOM report on medical errors had on her work, the Foundation’s direction and the role of nurses in patient safety.

“Though the report has always been in my peripheral vision, it has influenced a lot of my work I have been involved with at the Foundation,” explains Melichar, Ph.D., M.A., a labor economist and senior program officer in the Foundation’s Research and Evaluation Unit. The IOM report, Melichar says, helped show researchers what tools would be needed to fix the problem and helped shape research agendas.

“The report scared the public in a way they hadn’t been scared before,” she said, referring to the report’s alarming statistic that as many as 98,000 patients die every year as a result of medical errors. Though the Robert Wood Johnson Foundation had been concerned about quality of care for a long time, this report created the momentum, the partners and the framework to make the investment in research aimed at finding solutions to the problem.

The Foundation knew that the role nurses play in keeping patients safe would be integral to the ambitious goals for improving safety that the IOM report laid out. “It was clear, in 2002, that the contributions nurses were making daily to patient care outcomes were invisible. After consulting with the nursing field, the Foundation decided to support a national quality forum effort to endorse a set of valid, reliable quality measures linked to nursing,” Melichar remembers.

In early 2005, the Foundation began looking at ways to build the evidence base that could address gaps identified by the National Quality Forum steering committee that endorsed
a set of “nursing-sensitive” quality measures. And the newly-created INQRI program set about supporting the development and testing of measures that could provide a window into nurses’ positive contributions to care and guide improvements in the care delivered by nurses.

Most recently, Melichar has been acting as director of research for the Initiative on the Future of Nursing at the IOM, a two-year joint effort of the IOM and RWJF to find solutions to the biggest challenges in the nursing profession. A committee will issue recommendations next September that are intended to transform the future of nursing.

This IOM report should not scare the public, however. “The nursing field is ready for action now. We have measures. We have models, and we have evidence that these models work,” she says of the mission ahead.

Melichar is encouraged that those outside of nursing will embrace the report’s recommendations by one recent sign: Quality of nursing care is now being included in rankings by *U.S. News & World Report* on hospital care. “It’s a big deal,” she said, noting that the real trick will be using the right measures that “really capitalize on nurses’ true value.”

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**THURSDAY, DECEMBER 3, 2009**

**Improving Communication to Reduce Medical Mistakes**

INQRI Researcher Mary Beth Happ and her team were recently funded to conduct a project called, “SPEACS 2: Improving Patient Communication and Quality Outcomes in the ICU.”

A man in the intensive care unit (ICU) kept trying to communicate a message to the nurses but he was on a ventilator and it was difficult to speak. The nurse thought he was saying that he was in pain and got him a painkiller. But that’s not what the man was saying and the painkiller was a mistake.

When patients can’t communicate clearly, nurses and doctors can get the wrong message. That miscommunication can lead to unneeded procedures, medication or a lapse in care—all of which can harm patients, says Mary Beth Happ, a nurse researcher at the University of Pittsburgh.

In this case, the man was lucky. Nothing serious happened. But a miscommunication like this could have led to a longer period on the ventilator, or a serious medical complication—all of which are unnecessary and increase hospital stays and health care spending.

Ten years ago the IOM report, *To Err Is Human*, focused attention on egregious medical mistakes like the case in which a surgeon amputated the wrong leg. But Happ and her
With INQRI funding, Happ and her colleagues are studying whether techniques used to improve nurse-patient communication will enhance the quality of care at the bedside.

Lots of patients, like the man in the ICU, are on ventilators and can’t talk because they have a tube in their throat, Happ says. Others are on medicine that makes them groggy and still others are too sick to communicate clearly to the nurse or doctor.

The IOM report also raised the bar on quality of care and patients who cannot communicate clearly can get frustrated and that can also lead to sub-optimal care, Happ says. She says agitated patients in the ICU can pull out tubing or disrupt medical devices and that’s a big problem for nurses trying to provide the best care.

With INQRI funding, Happ and her colleagues are studying whether techniques used to improve nurse-patient communication will enhance the quality of care at the bedside. She’s testing a system in which nurses are trained to ask confused or very sick patients a simple question with a response tagged on the end.

For example, instead of asking “are you in pain?” the nurse will ask “are you in pain—yes or no?” Happ says that a yes/no tag at the end of the sentence focuses the patient’s attention on the question at hand and even very ill patients will respond and then can be treated appropriately.

In other cases, a nurse will use an alphabet board to help the patient point to words that can clarify a request or a symptom.

The INQRI study will compare the intervention to the standard communication between patients and nurse, which can be haphazard and unclear. There’s no data yet to indicate whether such communication tools will help improve care or reduce the risk of medical errors or mistakes. Still, Happ says that an immediate benefit of such training may be that patients are less likely to be frustrated or agitated and that can lead to a smoother, faster recovery.

FRIDAY, DECEMBER 4, 2009

Nurses: The Crucial Link for Patient Safety

This post is by Terri Schmitt of Nurse Story, a blog that is full of thoughts on nursing, nurse practitioners, service to others and life in general. Terri Schmitt is a nurse practitioner who is currently finishing up her Ph.D. at the University of Missouri–Kansas City.

In the past, nurses such as Florence Nightingale, Dorthea Dix, Lillian Wald, Margaret Sanger and Mary Breckenridge provide a legacy for improving patient access and quality in health care. Nursing has readily embraced this foundation, developing nurse-run clinics, advanced practice models of care and preventative education. For the current profession
of nursing, the publication of *To Err Is Human* brought to light new needs for standards and methods of patient care.

For nurses, frequently the first and last health care professionals to interact with patients in any health care setting, being the crucial link to patient safety has long been a focus of care, making our ability to clearly communicate and translate science crucial to patient safety. As health care cost, technology, complexity and revenue have expanded, the need for examination of errors and safety were readily embraced by nursing and pushed to the forefront of nursing organizations like the American Nurses Association, where initiatives such as the Safe Staffing Save Lives campaign have served to protect patients from medical errors (http://www.safestaffingsaveslives.org/).

The examination of preventable deaths and health care errors at the bedside and beyond, has found a close companion in nursing. Since the *To Err* publication, nursing has expanded educational and practice activities. Nurses now develop and head workplace safety through occupational health programs such as the graduate program at the University of California at San Francisco (http://nurseweb.ucsf.edu/www/spec-och.htm). Nurse-run pediatric helmet and seatbelt programs help save lives through community safety programs such as Safe Kids USA. Likewise, nurses are actively engaged in developing new models to prevent medication errors such as the Good Catch model or collaborative professional teams that evaluate medication interactions in home health patients (Aston & Young, 2009; Frey & Rahman, 2003).

Nurses influence patient safety throughout all aspects of the nursing process, assessment, planning, implementation of care and continuous evaluation. Nurses have been essential in the evolution of patient safety and continue to work on researching, translating and implementing patient safety initiatives. However, challenges still remain.

With an aging population that has expanding health care needs, an aging and dwindling nursing workforce and less insurance coverage of preventive education, the safety of patients is in jeopardy. Nurses will need to expand their knowledge base even more to include being well-versed in health policy, understanding epidemiology, evidence-based practice, use of communication and technology and accountability for our performance and autonomous practice. Nurses will need to work with state and federal agencies, as well as with other health care disciplines, to prevent further development of these patient safety risks. This multidisciplinary model of patient care and safety cannot be emphasized enough in matters of patient safety. Likewise, schools of nursing need to be preparing future nurses to be well-versed in two-way communication, translation of science to practice and multidisciplinary problem-solving models. Nursing accounts for more than half of the health care workforce and is based in primary practice areas of holistic care and patient education, making nurses well-equipped to meet the upcoming challenges and to continue with a legacy of improved access, quality and care.

**References**


The primary goal of the project is to reduce by 50 percent the risk that an elderly nursing home resident will suffer from a pressure ulcer.

FRIDAY, DECEMBER 4, 2009

How Teamwork Can Reduce the Risk of Infection

Tracey Yap and Susan Kennerly are members of an INQRI research team who were recently funded to conduct a project called “Interdisciplinary Mobility Team Approach to Reduction of Facility-Acquired Pressure Ulcers.”

More Americans die each year from medical mistakes than from car crashes, breast cancer or AIDS—so said the IOM report a decade ago. But the real impact of the report, according to two INQRI researchers, was to shift the focus from individual blame to an atmosphere of collective responsibility for patient safety.

Prior to the IOM report, hospitals kept track of medical errors, like giving the wrong drug to the wrong patient, say nurse researchers Tracey Yap, Ph.D., and Susan Kennerly, Ph.D., of the University of Cincinnati in Ohio. Typically, mistakes were attributed to one person; therefore, that nurse might have to explain how she planned to change her practice to avoid making the same error again.

Now hospitals seek safety protocols that can prevent individual error and also have the ability to raise the quality of care provided throughout a facility, say Yap and Kennerly, who, with their University colleagues Elaine Miller, D.N.S., Jay Kim, Ph.D., and C. Ralph Buncher, Sc.D., are working on an INQRI-funded project examining the merits of a team approach to care. The University of Cincinnati’s College of Nursing in partnership with Signature HealthCare of Florida developed a system-wide approach to prevent bed sores or pressure ulcers, which can lead to infection and significantly higher health costs.

The group of researchers, led by Yap, knew nursing home residents needed to be moved every two hours to reduce the risk of a pressure ulcer. The intervention sounds a musical alert over the facility intercom every two hours to indicate it is time for the residents, if capable, to move or be assisted to move by facility staff. Furthermore, the program is designed to be carried out by an entire team (composed of staff from various areas in the facility—not just nursing) working together to reduce the risk of a facility-acquired pressure ulcer.

The housekeeper or another member of the health care team can assist nursing with those residents who only need verbal prompting, while nurses will continue to perform the crucial safety tasks with those who require assistance with moving. The staff member who does the task makes a note that the patient has been moved at the designated time and indicates it on the medical record.

The primary goal of the project is to reduce by 50 percent the risk that an elderly nursing home resident will suffer from a pressure ulcer. The advantage of such a system is that it
spreads the responsibility for a safer environment to the team and takes the onus off a single individual, like the nurse, who might be handling many duties all at the same time. In addition to reducing the risk of pressure ulcers, the researchers hope this system-wide approach will also free up the nursing staff to attend to other duties.

Today’s nurse must deal with complex patients with multiple medical problems and with an increased workload, say Yap and Kennerly, adding that often, facilities that take some of the load off a single nurse and encourage teamwork are able to provide a higher standard of care, one that keeps patients safer.

FRIDAY, DECEMBER 4, 2009
The Foundation of Quality Is Safety

Recently, Janice Simmons blogged for HealthLeaders Media regarding a presentation by Richard Shannon, M.D. (chair of the department of medicine at the Hospital of the University of Pennsylvania in Philadelphia) at a Consumer Union’s Safe Patient Project forum. Shannon asserted that health care could become a “high-performing organization” and provided tips to health leaders on ways to improve their organizations. Shannon believes that a new mindset can lead to greater patient safety. Patient safety, he says, should be considered “a precondition of work.”

“The foundation of quality is safety—and safety must be a precondition.”

Read the piece here:

Fulfilling the Promise: Advancing Patient Safety and Medical Liability Reform Innovations

In the midst of the To Err Is Human blog series, Common Good hosted a public forum in connection with the U.S. Department of Health and Human Services’ $25 million initiative to test patient safety and medical liability innovations. The event presented information on promising avenues of reform and engaged national legal, medical and policy experts, potential applicants and other interested parties on how to develop viable proposals for submission to the Department.

Speakers included:

- **Lucian Leape, M.D.**, chair of the Lucian Leape Institute at the National Patient Safety Foundation and an internationally recognized leader on patient safety;
- **Michelle Mello, J.D., Ph.D.**, professor of law and public health, Harvard School of Public Health;
- **Nancy Foster**, vice president for quality and patient safety policy, American Hospital Association; and
- **Philip K. Howard, J.D.**, chair, Common Good.

A Webcast of the event is available at:


Perspectives: The Answer Is With Nurses, Leapfrog CEO Says

This piece was based on an interview with **Leah Binder**, the CEO of the Leapfrog Group.

If you want to know if a hospital is safe, look at how much nurses lead efforts to reduce errors and have the ability to take charge of the decisions that keep patients safer. That, according to Leapfrog Group CEO Leah Binder, is the key to keeping patients safe and preventing medical errors.

Leapfrog Group, an employer consortium that seeks to use its purchasing power to improve the quality of care in hospitals and the health care system, has been pushing for better information that will help patients make informed decisions about hospitals and providers. It was the 1999 IOM report on medical errors that gave the Leapfrog Group its initial focus of reducing preventable medical mistakes. The report recommended that large employers take a more direct role in pushing for safer care.
“Nurses know what needs to happen. They know the safety answers,” says Binder, who once served as public policy director at the National League for Nursing.

But too often, they don’t have the influence in a hospital to change a system and make things safer for the patients. “That’s the role nurses need to take on. Nurses should be very critical of the real lack of progress on patient safety,” Binder maintains.

One way to make that happen is for nurses to take a strong stand on the issue of transparency, which Binder believes is sorely lacking in today’s health care system. Binder calls for independent, unbiased, transparent reports about medical errors, providers and hospital quality as a solution. “We have smoke and mirrors today. What we have today is some information that isn’t all that interesting or relevant to consumers. We need information that allows consumers to choose between hospitals and providers.”

Another step in the right direction will be reforming payment incentives to reward both doctors and nurses for improving patient safety, she says.

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**MONDAY, DECEMBER 7, 2009**

**How Safety Protocols Prevent Drug Mistakes**

INQRI Researcher Linda Costa and her team recently completed their project called, “Nursing-Pharmacy Collaboration on Medication Reconciliation: A Novel Approach to Information Management.”

The IOM report, *To Err Is Human*, highlights the chilling story of Ben Kolb, an eight-year-old Florida boy who died in 1995 after he was injected with the wrong drug during a routine surgical procedure.

That case and other medication mishaps or errors are less likely to happen in today’s hospital, says INQRI grantee Linda Costa, a nurse researcher at the Johns Hopkins Hospital in Baltimore. She says that in the wake of the IOM report, hospitals have gotten much better at protecting patients from medical mistakes, like the one that killed Ben Kolb.

About 400,000 people in the United States each year are affected by an adverse drug event, a mix-up or an error in dosage that can lead to a serious medical complication. With funding from INQRI, Costa and her colleagues are studying drug safety interventions like those that occur at the time of admission and in the risky discharge period. The INQRI study has a nurse-pharmacist team double-checking with the patient and other sources, to make sure the patient gets all the right drugs both in the hospital and after they go home.

So far, that study suggests that the safety intervention can prevent lots of drug errors that can potentially harm patients, Costa says.
But now, more than ever, the nurse often serves as the final safety net, someone who can catch an outright error or even a subtle lapse in care.

But Costa says the IOM report spurred many other safety interventions, including procedures aimed at reducing even subtle medication problems—like those that occur when a drug dose needs to be adjusted. In the past, a nurse who noticed a dose problem couldn’t change the order without a doctor’s okay. If the doctor couldn’t be reached right away, there was a delay that could put the patient at risk of developing an adverse drug event, Costa says.

More hospitals now have the nurse check the dose and then follow a standard of care outlined in a prescribed protocol. For example, if the nurse sees a test that indicates the dose is too high or too low she can adjust the order right away—without waiting for a doctor’s okay. That means the patient gets a therapeutic dose of the drug without a potentially harmful delay, Costa says.

Nurses have long double-checked medication orders and performed other tasks that have kept patients safe, Costa says. But now, more than ever, the nurse often serves as the final safety net, someone who can catch an outright error or even a subtle lapse in care. But Costa says nurses must have the resources they need to do the job at hand; a job that includes making sure patients get the right drug at a therapeutic dose.

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**MONDAY, DECEMBER 7, 2009**

**Medical Mistakes, 10 Years Post-Op**

To commemorate the 10th year anniversary of *To Err Is Human*, *The Hospitalist* caught up with two of the committee’s original members: Donald Berwick, M.D., M.P.P., F.R.C.P., president and CEO of the Institute for Healthcare Improvement (IHI) and Christine Cassel, M.D., president and CEO of the American Board of Internal Medicine (A.B.I.M.) to discuss the advances made in medicine since November 1999 and what still needs to be accomplished. They discuss the report’s legacy and the impact it has had on medicine and the patient safety agenda.

Read the interview here:

We’d all like to think that, 10 years after the publication of To Err Is Human, the problems and conflicts it described have been examined and improved. But a new study published December 2 in the Journal of the American Medical Association underlines how very far we have to go.

The study, informally named EPIC, was a prospective point-prevalence survey—essentially, an intense single-day snapshot—of infections in 1,265 intensive care units (ICUs) in 75 countries on May 8, 2007. It found that 51 percent of the critically-ill patients in those ICUs (7,087 of 13,796 adults) were experiencing infections on that day, and 71 percent (9,084 of 13,796) were receiving antibiotics.

Those percentages are dismaying enough. But here’s the really bad news: This iteration was EPIC II; its predecessor study, EPIC I, was conducted 15 years earlier, on April 29, 1992. And over those 15 years, the ratios of infected patients and antibiotic therapy worsened: In 1992, they were respectively 45 percent and 62 percent.

Now, it is fair to say that the databases that lie behind both studies do not exactly match. EPIC I (the European Prevalence of Infection in Intensive Care study) comprised data on 10,038 patients in 1,417 ICUs in 17 Western European countries. EPIC II (for Extended Prevalence of Infection in the ICU) was designed to sample ICU infection rates across the entire world. It took in 152 fewer ICUs but extended across a much wider geographic swath, though many of the European hospitals that participated in EPIC I are present in EPIC II as well. The authors’ comment on the geographic mix within EPIC II can serve as well as a caution for comparing the two studies: “Comparisons among geographic regions should be interpreted with caution, because clearly there are large differences in healthcare systems, ICU facilities and regional policies for infectious disease management.” And it is worth noting as well that EPIC II, unlike EPIC I, did not focus only on nosocomial infections—but that, say the authors, is because the behavior of some of the organisms infecting ICU patients, such as methicillin-resistant Staphylococcus aureus, has grown so complex: “We were concerned that it may be difficult to distinguish between community-acquired, hospital-acquired and ICU-acquired infections.”

Nevertheless, the results of EPIC II are unsettling reading for anyone concerned about quality of care. The longer they had been in the ICU, the more likely patients were to be
Patients with infections were more likely to die during their hospital stay. Infections were more likely to be Gram-negative than Gram-positive or fungal. Patients with infections were more likely to die during their hospital stay. And in a finding that should trouble anyone concerned with global inequities in health care, the lower a country’s proportion of spending on health care relative to its gross domestic product, the higher its rate of ICU infection was likely to be.

An accompanying editorial emphasizes the relationship between ICU infections, ICU antibiotic therapy and the development of antibiotic-resistant organisms: “Early intervention with appropriate antibiotics is lifesaving in patients with severe infection, yet the profligate use of antimicrobial agents contributes to progressive antimicrobial resistance. Quality-of-care indicators now penalize physicians for delayed antibiotic use in specific situations; no such imperatives are used to limit extended and unnecessary antibiotic use.”

The editorial’s authors lay out some critical considerations going forward—increased antibiotic stewardship, excellent infection control—but they acknowledge the troubling trend embedded in the data from EPIC I and EPIC II: “A ‘post-antibiotic era’ is difficult to contemplate but might become a reality unless the threat of progressive antibiotic resistance is taken seriously.”

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**TUESDAY, DECEMBER 8, 2009**

**Nursing Research Helps Drive Safety**

**Laura Caramanica** is the chief nursing officer at Westchester Medical Center.

Ten years after the IOM reported on medical errors, research funded by INQRI has been adding crucial information to the ongoing debate on quality of care. So says Laura Caramanica, senior vice president and chief nursing officer for Westchester Medical Center in Valhalla, New York.

She should know. Caramanica is also a member of INQRI’s National Advisory Committee. She says INQRI grantees have been hard at work generating data that’s already being used by policy-makers and health care leaders to enact changes aimed at making the U.S. health care system safer for patients. For example, INQRI-funded studies have been investigating the role that nurse staffing levels have on the quality of care that patients receive in hospitals and other health care settings.

“Nurses make a tremendous difference in the provision of high-quality care and often step in and prevent medical errors,” Caramanica says.

Advocates of a safe staffing level suggest that when the number of registered nurses dips too low, the quality of the care can suffer. But INQRI research suggests that the safe staffing question is more complicated than just counting the number of registered nurses. They’re finding that the skill mix and staffing levels for non-nursing positions can also
Nurses are also providing care that can prevent serious medical complications from occurring after the patient leaves the hospital.

In fact, INQRI research suggests that a one-size-fits-all approach like setting a rigid nurse-patient ratio won’t always raise the quality of care. Rather, such research indicates a more sophisticated approach to staffing, one that takes into account the mix of skill levels as well as the severity of illness. Units with lots of very sick patients might need a higher staff ratio than those with relatively stable patients, she says.

INQRI grantees have demonstrated the fact that nurses can make assessments and implement skillful interventions that prevent serious medical complications, like infections. “Patients are monitored 24/7 by a nurse,” Caramanica says. The nurse is often the front-line health professional that catches a problem, like an emerging infection, and then gets the patient the care they need. Such early and aggressive treatment for an infection or another untoward event can make the difference between life and death, she says.

Nurses are also providing care that can prevent serious medical complications from occurring after the patient leaves the hospital. For example, a nurse is often charged with educating the patient about the post-hospital medication regime to ensure safety after discharge. Patients can get into trouble once they arrive home: They might mistakenly start to take a double dose by taking medication previously prescribed as well as a new one, without realizing that the two drugs do the same thing.

But the discharge nurse reviews the medication list with the discharging physician and can prevent such mistakes. That nurse can also set up an appointment with a nurse in the community who can pay a home visit and check the drugs in the home medicine cabinet.

Nurses have done this kind of detailed, attentive care since the nursing profession began, Caramanica says. For example, Florence Nightingale is credited with pioneering innovations in patient care that still permeate the profession today. Her insistence on sanitary conditions for soldiers wounded during the Crimean War cut the death rate significantly. Nightingale’s strict attention to statistical data made her case and pushed leaders at the time to improve the conditions at hospitals to keep soldiers and others safe. INQRI grantees are following that time-honored tradition and are building a case, one that shows the true value of the Registered Nurse.

Caramanica hopes that such information will play a role in the current debate over health care reform. “Policy-makers are looking for solutions that help keep costs down and at the same time keep patients safe” she says. “INQRI research can offer just that kind of innovative fix, one that reduces errors by putting the nurse at the center of a system dedicated to best practices.

The IOM report noted that as many as 98,000 people die in hospitals each year due to preventable medical errors. Today, research by INQRI has also helped health experts and nursing leaders across the nation reduce that risk. And Caramanica believes that the safety practices that are now in use have surely saved lives.
TUESDAY, DECEMBER 8, 2009

Checking the Right Boxes, but Failing the Patient

Dena Rifkin, M.D., recently published a piece in The New York Times Health section with her reflections on the care delivered to patients in the 10 years following the release of To Err Is Human. While she acknowledges the need for adherence to best practices and understands the importance of newer interventions (i.e. pay-for-performance and electronic prescription systems), she also believes that there is a large problem in our current health care system: “a change in focus from treating the patient toward satisfying the system.”

“The effects of focusing physicians’ attention on benchmarks and check boxes are not, I think, to the patient’s advantage. “

Read the article here:


WEDNESDAY, DECEMBER 9, 2009

Researcher Looks at Education, Experience of Staff and Safety

Nancy Donaldson is director of the Center for Nursing Research & Innovation, a collaboration between the University of California San Francisco School of Nursing, its UCSF Medical Center, Stanford Hospital and Clinics and Lucile Packard Children’s Hospital at Stanford.

I have observed a transformational revolution in health care during the 10 years that have passed since the IOM released its landmark report, To Err Is Human. That report estimated that as many as 98,000 Americans die in hospitals each year as a result of preventable medical errors. It also casts a harsh light on delays or lapses in care that can threaten patient safety and challenges all health care providers to examine the quality, safety and outcomes of their care.

More and more hospitals today have recognized the impact of nurses on patient care quality and outcomes—from preventing falls, to exercising their expert clinical judgment to rescue recovering surgical patients from treatable complications.

That’s what we hope to learn more about in our INQRI-funded research study of hospitals participating in the California Nursing Outcomes Database Project, the nation’s first ongoing benchmarking quality database in the nation. Our study, co-led by Carolyn
Aydin Ph.D., will examine how the configuration of direct care nursing staff at the unit level may affect the prevention of falls, pressure ulcers, medication administration errors or bloodstream infections arising from the experience of hospitalization. Previous studies have noted how important the registered nurse is to patient care safety and outcomes. Our study explores, in more detail, how the education, experience or expert certification of the staff may influence patient care processes and outcomes.

We hope our study will assist clinical and administrative leaders and staff themselves to better understand factors that produce safe staffing and ultimately the safest patient care.

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**WEDNESDAY, DECEMBER 9, 2009**

Modern Healthcare Article: A Long Way to Go

The below comes from an article by Jean DerGurahian in *Modern Healthcare*.

In the decade since the IOM's groundbreaking study on medical errors, there's progress to report, but many of the objectives remain elusive.

In the winter of 1999, one ticking time bomb appeared to be the “Y2K bug,” when it was feared that computer glitches on January 1, 2000, could cause any number of annoyances and even calamities. While that fizzled, another bomb—the Institute of Medicine report *To Err Is Human*—soon exploded in the health care industry.

The IOM report is still causing repercussions 10 years later.

It was not the kind of event that later leads people to ask each other: “Where were you when you heard the news?” But Helen Haskell remembers when she first heard about the IOM report. She was in her car listening to a news report on National Public Radio and thinking it had little to do with her life. She recalls that moment now, a decade later, after losing her son to medical errors and helping to lead patient-safety advocates in their crusade for better care in hospitals. She founded the advocacy organization Mothers Against Medical Error.

Families are still losing loved ones to errors, Haskell explained during a recent conference hosted by Consumers Union. But the biggest difference in the past 10 years is, “where once there was denial, we now have tireless leaders.”

But what did it take to get to this point? The American Hospital Association, promoting its Prescriptions for Reform campaign that was launched in October, touts quality initiatives and improvements in organizational excellence that hospitals have made toward better and safer care.

But the biggest difference in the past 10 years is, “where once there was denial, we now have tireless leaders.”
AHA President and CEO Richard Umbdenstock, among others, hails the IOM report as a “landmark” in health care. Prior to the light shed on quality shortfalls at hospitals, providers were able to dismiss errors and patient harm as other hospitals’ concerns, not their own.

“Ten years ago, we wouldn’t have had this conversation, or we would have had it behind closed doors,” says Carolyn Clancy, director of the federal Agency for Healthcare Research and Quality, speaking at a recent Health Research & Educational Trust event commemorating the report.

WEDNESDAY, DECEMBER 9, 2009

Patients Still Struggle to Find Their Role in Reducing Medical Errors

This post is written by Nancy Shute, a contributing editor for US News & World Report and vice president of the National Association of Science Writers. Contact her at nancy@nancyshute.com.

Last July 26 started out like a typical summer Sunday: pancakes with the family, talk about an afternoon at the neighborhood pool. Instead, I spent the day at the ER, suddenly and horribly ill with pyelonephritis and bacteremia. I was lucky; four days of IV antibiotics knocked back the bad bugs (thank you, Cipro!). But I spent those days in the hospital worrying about more than when I’d be back home cooking dinner for the family. As I watched the IV drip, hour after hour, I fretted. Was I being given the right medication? The right dose? How could I tell if there was a medication error? As a journalist who has covered health care quality for years, I knew what I should do: Check medications and doses; ask questions; recruit a family member to be my advocate. Did I do those things? Nope. Afraid that I’d be labeled a nutcase or a troublemaker by the busy nursing staff if I voiced my fears, I clammed up.

My tiny medical drama ended happily. But each year, tens of thousands of patients aren’t so lucky. Ten years after the publication of the landmark Institute of Medicine Report, To Err Is Human, patients remain subject to errors in medical treatment that threaten their health and their lives. The federal government, hospitals, foundations and health care providers have made concerted efforts to educate patients on their role in protecting themselves from medical errors. I’ve done my part, too, writing about successful experiments to reduce medical errors, as well as “news you can use” articles intended to help patients and their families advocate for safer, better care. Yet too often, patients like me still feel powerless, rather than empowered.

That powerlessness is not indifference. Survey after survey over the past 10 years has shown that Americans remain deeply concerned about the risk of medical error, and almost half
Indeed, family members often say they feel wracked with guilt for not preventing medical errors. A 2007 perspective in the *New England Journal of Medicine* quotes one woman interviewed for a documentary about medical errors whose brother died after being mistakenly given morphine, despite the family’s repeated warnings that he had had life-threatening reactions in the past. “The feeling was impotence, because you can’t stay with a patient 24 hours a day. That’s why you rely on hospitals—you rely on nurses. You feel like you failed your family in terms of ‘I should have been there.’ That’s a guilt that everyone shares.” Other patients interviewed say they feared retribution, including withdrawal of medical care, if they pointed out mistakes. And patients and family members who do speak up say they are often shunned by doctors and nurses.

But just as health care systems are experimenting with novel technologies to reduce medical errors, patients are seizing new technologies that make it possible for them to collaborate and interact with each other in order to ferret out medical errors and make informed decisions. I recently interviewed participants in PatientsLikeMe.com, a database of symptoms and treatments created by patients themselves. They control their own data and can use the collaborative database to evaluate their own medical care and comment on others’. As a result, patients have discovered that they were misdiagnosed or misprescribed and have changed their care for the better.

I’ve interviewed patients who use do-it-yourself genetic testing through sites like DNADirect.com to find out if they have the BRCA gene variant for breast cancer and ovarian cancer, then update their insurance and estate planning before meeting with their doctor to develop a treatment plan. On the Web site DiabetesMine.com, patients vigorously debate the merits of glucose meters and insulin pumps, and veterans share hard-won knowledge with newbies. DiabetesMine founder Amy Tanderich writes in the new *Journal of Participatory Medicine*: “Every day, networks for interacting with others online are getting better at affording patients the opportunity to collectively communicate with medical providers and with the drug industry that caters to them.”
Many of the new tools being touted for patient-driven participatory medicine are little more than snake oil with a URL, demanding much work (such as typing in my family’s entire medical record) with little reward. But as the tools that let people collaborate with each other get cheaper, better and easier to use, we patients stand a much better chance of being able to find the information and support we need, and participate in our health care as co-equals. I know I’m not the only patient who has lain in a hospital bed worrying about medical errors but stayed silent. Connecting with other patients like me could have given me the information and confidence to speak out if I needed to or the reassurance that I could relax and get well.

THURSDAY, DECEMBER 10, 2009
System-Wide Safety Changes Spurred by IOM

This piece was written by Tracey Yap and Susan Kennerly, INQRI researchers at the University of Cincinnati.

Ten years ago the IOM report issued this challenge to health care leaders:

“The status quo is not acceptable and cannot be tolerated any longer. Despite the cost pressures, liability constraints, resistance to change and other seemingly insurmountable barriers it is simply not acceptable for patients to be harmed by the same health care system that is supposed to offer healing and comfort.”

Today, we believe the health care system is safer, although we still have a long way to go. Part of the revolution in the way that care is delivered has to do with a change driven by the IOM, which noted that faulty systems or procedures are often responsible for common medical errors. Rather than put blame on the individual, the IOM report shifted the focus so that hospitals now try to create a culture of safety.

What we’ve noticed in the decade after IOM is that hospitals and other health facilities take a broader view of quality and instead of homing in on one mistake and one individual, they look at systems to try to figure out how they can make the whole process of providing care more safely. Here are some ways:

**Diffusing Technology.**

Increasingly, hospitals now rely on technology, such as computerized prescribing systems to prevent drug errors. In the past, a doctor ordering a drug might write out the prescription by hand and the nurse trying to read the script might get the drug name wrong. Now, hospitals that use computerized systems have the doctor type the drug prescription right into the computer. Such systems eliminate errors that resulted from hard-to-read handwritten prescriptions.

That’s an example of a technology fix that’s made a big difference in errors.
One key change is that hospitals and other facilities have put teams in charge of patient care, a move that spreads responsibility for safety throughout the entire team. For example, doctors, nurses, therapists and others might all work together to provide the highest standard of care.

**Focusing on Staff Needs.**

In addition, hospital administrators are looking closely at staffing levels. They might put higher numbers of experienced staff, including nurses, on a unit, like an intensive care unit, that requires one-on-one care.

**Promoting Accountability.**

We’ve also seen a revolution in accountability: Health care workers from housekeeping right up to the nurses and doctors are much more likely to speak up and draw attention to an error if they think some part of care has gone awry.

Research by INQRI and other private and public organizations has been driving a lot of the changes in quality that we now see in the health care system. Today there is more funding for such research and more attention is paid to the results, which can be used by policy-makers to craft laws or regulations aimed at making health care even safer.

Are patients safer today than they were 10 years ago? Yes. But we believe that we still can make a lot of improvements in the system in the next 5 to 10 years. ■
We know that good care coordination, which is managed by nurses, can affect how long a patient stays in the hospital, whether mistakes happen and whether the patient is prepared to go home.

THURSDAY, DECEMBER 10, 2009
Ten Years Later: Look to Nurses as Champions of Patient Safety

During the series, Kaiser Health News featured this column by Mary Naylor and Mark Pauly, INQRI’s co-directors.

Ten years ago this month, the Institute of Medicine shattered a widely held perception that American health care was safe. IOM’s finding that as many as 98,000 patients die each year in hospitals from medical errors launched an aggressive patient safety movement that continues today.

But the report also cast a spotlight on the role of the nurse in keeping patients safe, a role that will become even more important under the ongoing effort to reform the health care system.

Prior to the IOM report, To Err Is Human, there was little recognition among health care leaders of the contributions nurses make to improve quality and prevent medical errors. Although they are the caregivers who have the most contact with patients, nurses have typically been undervalued and have had to practice in an environment that often set them up for failure.

For example, a nurse working on an understaffed unit with lots of very sick patients might, in some cases, make a mistake. But the IOM report is credited with taking the blame off individual health care workers and shifting the focus to system-wide flaws that lead to errors.

Today, nurses are playing a central role in offering solutions that correct such flaws and advance patient safety and quality—throughout the system.

A chief reason for this sea-change is that nurses are starting to identify the steps they take on a daily basis to prevent errors in multiple settings including hospitals and patients’ homes. And, the quality field has started to measure and apply those error-prevention practices, like double-checking a medication order or making sure a safety checklist is followed in the operating room, to make sure patients get the best care. Most importantly, nurses are connecting the evidence accumulated in recent years with outcomes—including reducing errors, engaging patients in their care and lowering health costs.

For example, we now know that unnecessary hospital readmissions are highly sensitive to what nurses do and don’t do with patients and family caregivers. We know that good care coordination, which is managed by nurses, can affect how long a patient stays in the hospital, whether mistakes happen and whether the patient is prepared to go home.

We also know that a poorly-managed hospital discharge process, one in which the
patient doesn’t get the information they need to recover safely at home, wastes precious health care dollars and puts patients at unnecessary risk of costly complications that can put them back in the hospital. In fact, one in five seniors who are discharged from the hospital return within 30 days because they or their families have not been given enough guidance in the discharge process on how to manage their illness or medications safely once they return home. The Medicare Payment Advisory Commission estimates that unnecessary readmissions costs this nation as much as $17 billion a year.

We now have the evidence to show that when nurses effectively help patients transition from hospital to home, educating both patient and family caregiver, hospital readmissions are reduced, patient satisfaction is enhanced and health care spending is decreased by as much as $5,000 per patient.

That’s a lot of money that could be directed at other worthy health care causes, such as expanding health coverage to the estimated 47 million Americans without insurance.

We also have identified the nursing practices that need to change to prevent medication errors from occurring. Each year, 7,000 people die because of medication errors in hospitals. Although use of electronic prescribing tools helps reduce this problem, researchers have shown how the practice environment and level of nurse staffing affect error rates and drive up health costs. Nurses are identifying the steps that need to be taken to find medication errors early.

What they’ve learned is that when hospitals foster work environments that let nurses focus on safety interventions without fear of being constantly interrupted because there is inadequate staff to handle non-clinical matters, errors are reduced and the quality of care is improved. Imagine a nurse trying to reconcile a patient’s medications and being interrupted every 45 seconds for tasks that could have easily been done by other staff. These are the kinds of interruptions that often lead to medication errors, medical complications and longer stays.

In addition, when hospitals create a culture in which nurses feel free to speak up about whether a prescribed dosage is appropriate or question a course of treatment, a teamwork approach to care is fostered, a model the IOM report linked to high-quality care.

Helping hospitals determine appropriate staffing is another area where nurses are making inroads. Research is showing that having more highly-educated and experienced nurses on staff is crucial to prepare patients for a safe discharge. Well-trained and experienced nurses can also reduce infections and complications that can lengthen hospital stays among the tiniest babies in the intensive care unit (ICU).

Despite these pockets of progress, nurses are still undervalued as quality and safety champions. They constantly have to fight to be included in decision-making roles in hospitals and other health care settings. Even today, only 2 percent of hospital boards—where major decisions about safety, quality and health system redesign are made—have nurses sitting on them. This, despite the fact that nurses account for more than half of

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all health professionals and are spearheading efforts to reduce bloodstream infections in ICUs, prevent medication errors and better coordinate care.

If we are to move forward, we must do a better job of providing policy-makers, health care leaders and the public with the evidence showing the link between nursing care and patient safety. Any health care reform legislation must support the role of nurses in building a better system that provides the highest standard of care that is not only safer but is also likely to save money.

One key step would be to eliminate regulatory and other barriers that make it hard for nurses with the right skills to provide care that has been linked to better outcomes. And reform bills should foster quality and payment incentives that maximize the solid contribution of nurses on the front lines of the health care crisis.

Is American health care safer today than it was 10 years ago?

Yes, but the health system can still make improvements, and the nurse, now more than ever, needs to be at the center of the ongoing safety revolution. ■

Mary Naylor is the Marian S. Ware Professor in Gerontology at the University of Pennsylvania School of Nursing; Mark Pauly, is a health economist and the Bendheim Professor at the University of Pennsylvania's Wharton School. They co-direct the Robert Wood Johnson Foundation's Interdisciplinary Nursing Quality Research Initiative.
FRIDAY, DECEMBER 11, 2009

Patients Play Key Role in Quality Movement

INQRI Researcher Kathleen Stevens and her team are in the middle of their project, “Small Troubles, Adaptive Responses (STAR): Fostering a Quality Culture in Nursing.”

Some hospitals have given family members and patients more authority to sound an alert, which might prevent an error or lead to better care.

Teamwork has become a standard of care in many U.S. hospitals since the IOM released its landmark report on medical errors, says Kathleen Stevens, nurse researcher at the University of Texas Health Science Center at San Antonio.

That team often includes nurses, doctors and other health professionals who work together to both check for errors and provide the highest standard of care, Stevens says. But she says that more and more hospitals are starting to involve patients and family members in the final effort to raise the bar on quality.

For example, nurses on a neonatal intensive care unit often provide one-on-one care for tiny babies. But the mother is often at the bedside for hours and in some cases is the first line of defense against an error or complication, Stevens says. If the mother notices the baby seems to be showing signs of distress, she can press a button on the side of the bed and call for a rapid response team.

That team examines the baby right away and can start treatment that prevents the condition from worsening. Such rapid response teams used to be called by health care workers, and often by the nurse, says Stevens. But in the wake of the IOM report, many hospitals shifted to a team approach to providing quality of care.

Instead of being left out, patients and families now are often brought onto that team and asked to provide a final safety check, Stevens says. After all, a mother who is caring for her premature baby in the intensive care unit is probably more acutely aware of even tiny signs of distress and might be able to sound an alarm at a much earlier stage.

Since the IOM issued its report in 1999, hospitals have been searching for ways to reduce errors and improve the quality of care from administration on down to actual bedside care. For example, Stevens has INQRI funding to learn if training nurses to reduce workarounds—temporary “band-aid” solutions to recurring glitches in patient care—can create a team culture that values removing the underlying causes of those glitches. For example, rather than squirting out the extra medication in a syringe when the pharmacy prepares too large a dose, the nurse can alert her team that they need to collaborate with the pharmacy to prevent such errors from recurring.

But Stevens says that one of the most dramatic changes of the past decade has been the way that some hospitals have given family members and patients more authority to sound an alert, which might prevent an error or lead to better care.
FRIDAY, DECEMBER 11, 2009

Let’s Not Wait Another 10 Years

I would like to extend a very warm thank you to everyone who participated in our two-week series to commemorate the 10th anniversary of the To Err Is Human report. Thank you to those who were interviewed, wrote blog entries, promoted us on your sites, followed along on Twitter, wrote comments, voted in our poll and read with us for the past two weeks. I hope you will continue to do so.

We have heard from hospital administrators, clinicians, researchers, journalists and fellow bloggers. We have heard what we already suspected to be true—patient safety is a team sport. Doctors, nurses, patients and families are all part of this effort and, though progress has been made, we still have a long way to go.

As the report said 10 years ago:

“To err is human, but errors can be prevented. Safety is a crucial first step in improving quality of care...Must we wait another decade to be safe in our health system?”

Let’s not wait another 10 years.

Continue following us on our journey. Be a part of the conversation. We want to hear from you.

All the best,

Heather Kelley

INQRI Program Associate
In December 2009, INQRI hosted a two week blogging event to commemorate the 10th anniversary of the Institute of Medicine’s *To Err is Human* report. Our blog series consisted of posts from national health care leaders, researchers and advocates who offered their perspectives on how the report changed the practice of health care in the United States and what challenges lie ahead.