



INSTITUTE FOR
HEALTHCARE
IMPROVEMENT



QualityRules

*How far
have we
come?*

Health care is moving toward a new set of rules.

The Old Rules	The New Rules
<i>Care is based on visits.</i>	1 Care is based on continuous healing relationships.
<i>Professional autonomy drives variability.</i>	2 Care is customized according to patient needs and values.
<i>Professionals control care.</i>	3 The patient is the source of control.
<i>Information is a record.</i>	4 Knowledge is shared and information flows freely.
<i>Decision making is based on training and experience.</i>	5 Decision making is evidence-based.
<i>Do no harm is an individual responsibility.</i>	6 Safety is a system property.
<i>Secrecy is necessary.</i>	7 Transparency is necessary.
<i>The system reacts to needs.</i>	8 Needs are anticipated.
<i>Cost reduction is sought.</i>	9 Waste is continuously decreased.
<i>Preference is given to professional roles over the system.</i>	10 Cooperation among clinicians is a priority.

And under the new rules, *everyone wins.*

The new rules give patients more continuity, control and information, and give providers better tools and efficient systems to support safer care.

The Institute for Healthcare Improvement (IHI) *has the honor of working with thousands of organizations that are playing by the new set of rules.*

The new rules aren't really so new anymore. They were developed by the Institute of Medicine (IOM) as part of its landmark 2001 report, Crossing the Quality Chasm. Called "ten simple rules for the 21st-century health care system," they offer a framework that is distinctly different from the "old" way of doing things.

Since these rules were written, quality improvement has moved to the front burner for most health care organizations. The focus on making positive change has grown exponentially.

IHI is privileged to help lead this dramatic progress in the improvement of health care systems. Working with courageous and innovative organizations, we are instructed and impressed every day by health care's remarkable reservoir of optimism, energy and creativity — and we are inspired by so many stories of success.

The IOM anticipated that organizations would "translate the rules into wise local actions." The organizations profiled in this report have done just that. We celebrate their progress, and are pleased to present their stories — as reported to us by the organizations themselves.

So how far have we come *toward a health care system built on these "ten simple rules"?*
On a journey with no end, we are well on our way.

Care Is Based on Continuous Healing Relationships

What patients want most from their care — relief from suffering or uncertainty — often requires a face-to-face visit with their primary care provider. But not always. Innovations such as care teams and group visits are providing patients with useful alternative ways to maintain continuity, while increasing flexibility and using the system's resources most effectively.

HealthPartners, where an all-or-none measure for optimal diabetes care is driving systemic improvement

Using prepared practice teams and a comprehensive planned care model, providers at HealthPartners Medical Group (HPMG) in Minneapolis, MN, are making impressive gains on a particularly challenging measure of quality for their 10,000 diabetes patients: optimal care.

"This is a comprehensive, 'all-or-nothing' measure," explains Nancy Salazar, RN, HPMG's Director of Care Innovation and Improvement. "It includes five components of care with seven measures," including process measures, such as testing patients' glucose and LDL levels twice a year, and outcome measures, such as patients having a glucose level of less than 7.0 and LDL of less than 100.

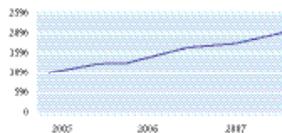
"We have to meet all the measures to meet the goal, and it requires that patients are very engaged and involved in their care," says Beth Waterman, RN, MBA, Vice President for Health Improvement and Care Innovation. The system average

for optimal care across more than 20 clinics went from 5.8% in 2004 to 19.2% in 2007, with a goal of 30% in primary care by the end of 2007. Waterman says some physicians are already exceeding 50%.

Electronic medical records offer alerts and reminders to trigger necessary care and help each prepared practice team take proactive steps to engage patients before, during, and after their visits to the clinic. "To us it's a powerful care model process," says Waterman. "Our patients would just say they have strong relationships with their care team."

"We care about them, and we're organized to be proactive, and we help them achieve improved health," says Nancy Salazar.

HEALTHPARTNERS: PERCENT OF DIABETES PATIENTS RECEIVING OPTIMAL CARE



Clinica Campesina, where continuity drives improvement work

"Continuity is king," says Carolyn Shepherd, MD, Vice President for Clinical Affairs at Clinica Campesina Family Health Services, a federally-qualified community health center with three locations in north-central Colorado. Knowing the positive impact that continuity of care has on patient engagement and satisfaction, and ultimately on outcomes, Clinica Campesina has kept continuity in sharp focus through all its improvement work. "We try to drive up continuity in every change we do," says Shepherd.

Clinica uses several approaches that support continuity. First, all three locations have been renovated and organized into "mini-clinics" or pods so that a consistent team of providers works in a designated physical space, caring for the same panel of patients. Open access scheduling means that most patients can get same-day appointments, reducing the

use of hospital emergency rooms for acute and primary care, and also reducing the clinics' no-show rates.

Additionally, group visits, which combine a physician visit with an educational and support experience, have been so popular and successful that Clinica now offers them for diabetes, prenatal, depression, ADHD, and chronic pain patients. "That sense of community and continuity has been very effective in motivating patients' compliance with needed self-care," says Shepherd.

Data show these steps have driven continuity of care (i.e., patients seeing a member of their own care team) at all three clinics toward and occasionally above 90%. Now, says Shepherd, the clinic is working toward a new goal: that patients will see their individual primary care provider 90% of the time.



CareSouth Carolina, where 49% of diabetes patients have HbA1c levels less than 7.0

No one was more surprised than Drew Rainwater when, at 25, he was diagnosed with diabetes. "I was young and healthy," he says. And even though he was employed at the time as a nurse, he says he ignored the signs and symptoms. "I was in a state of denial, and I blamed all the symptoms on something else. Sometimes health care professionals are the worst patients."

Fortunately for Rainwater, when lab tests confirmed what he could no longer ignore — an HbA1c level of 8.3, when the goal is to be under 7.0 — he had two things going for him. "I made the decision that I was not going to let diabetes control me, but that I was going to control it," he recalls. And second, he was under the care of a team of health care professionals at CareSouth Carolina's Bennettsville office.

The team consists of a physician, a care manager, and a nurse, and patients get to know each member of the team well, says Rainwater's physician, Scott Anders, MD. "The care managers do a lot of education, and the nurses are empowered through standing orders to order lab tests,

refill medications, and even adjust insulin doses using our sliding scale. It's made a big difference for patients in terms of continuity because when they aren't seeing me they are seeing someone else they know and who knows them."

Anders says the team concept allows each provider to do what they do best. "Our care managers meet with newly diagnosed patients for an hour and answer all their questions. Sometimes patients don't open up quite as well with their doctors, and they won't ask all the questions they have." Care managers also hold classes for groups of diabetes patients.

Drew Rainwater, who now devotes himself to ministry full-time, says that the attention he's received from the care team, as well as the classes he attended, have helped him fulfill his goal of controlling his disease. "They have helped me achieve an HbA1c level of 5.4. I'm a better and stronger person now than before I was diagnosed."



Cleveland Regional Medical Center, where care doesn't stop when patients go home

Every time Flossie Turner was discharged from the Cleveland Regional Medical Center (CRMC) in Shelby, NC, her nurses knew she would be back. Her congestive heart failure, brought under control in the hospital, would slowly worsen at home until she needed to be readmitted. It was a predictable cycle shared by other heart failure patients.

"Flossie could be any number of patients," says Doty Leatherwood, Vice President of Communications and Marketing. "She wasn't non-compliant. She just didn't have the resources or information to manage her health properly."

This came to light, says Leatherwood, through a new hospital program in Care Solutions, a CRMC department that provides community case management. The Congestive Heart Failure Program sends care managers to patients' homes to assess their needs and provide customized health monitoring and education. "Flossie would never have told us

she didn't have the resources she needed," says Leatherwood. But Meredith Morehead, RN, MSN, her care manager, learned that she needed education regarding a low-sodium diet, medications, and self-management. She also benefited from some safety equipment and emotional support.

"They visit me one or two times a month," says Turner, who has since moved into a nearby assisted living facility. "They told me to use a salt substitute and I've done pretty well with that." So well, in fact, that after being hospitalized four times in six months, she had only two admissions over the next 21 months.

"This program bridges the gap between inpatient and outpatient needs," says Elizabeth Popwell, FACHE, Safety Officer and Vice President of Systems Management. "You have to get where the patient lives and understand their barriers. This program does that."

Care Is Customized According to Patient Needs and Values

Evidence-based medicine is all about driving down variability in practice to conform with best practices. But variability is encouraged when it is driven by patients' values. Understanding patients' cultural, family, or personal values and goals, and customizing care accordingly, benefits both patients and providers.

Alaska Native Medical Center, where "customer-driven health care" builds trust and reduces costs

As a tribally-owned health care system serving Alaska Natives and American Indians, the Southcentral Foundation (SCF) at the Alaska Native Medical Center in Anchorage is designed from the ground up by its customer-owners.

This means that customer-owners — a term preferred over "patients" — drive everything from the design of the physical space to the integration of traditional healing and tribal doctors into the array of resources.

It means that the values a customer-owner identifies are at the heart of every discussion and care plan, and are used to help that individual and family set health-related goals. "In

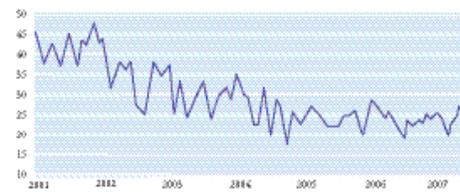


Native cultures, grandparents are responsible for passing on important traditions to their grandchildren," says Douglas Eby, MD, MPH, Vice President of Medical Services. "So with an individual who is diabetic, for example, we would try not to say, 'You need to lose weight and stop smoking.' We might say, 'If you are going to teach your grandchild to fish, you will need to feel the bottom of the river with your feet, and controlling your diabetes will keep your feet healthy.'"

SCF's core philosophy reflects this emphasis on partnership. "Dispensing the right pills and doing the right procedures supports our primary product, which is building trust over time as we walk in partnership on their health journey," says Eby.

Data show that this approach does more than satisfy patients. "Our hospital days are down 40% over the past seven years, and we have an eight-year track record of reducing our per capita costs," says Eby.

SCF: HOSPITAL DAYS PER 1,000 PRIMARY CARE PATIENTS



Cape Town, South Africa, where better information supports better care

In developing nations such as South Africa, it can be as difficult for information to travel between caregivers as it is for patients. For example, says Michèle Youngleson, MBChB BSc Hon (Epidemiol), IHI Project Manager, "Prenatal care takes place over a number of facilities: the prenatal clinic, the labor ward, and the primary health clinic for follow-up. The chain of information transfer has been inadequate."

Specifically, staff at one clinic determined that only 4% of newborn babies had their HIV risk status noted on their patient-held health records issued at the labor ward. To address this, a simple but stunningly effective solution was developed in Somerset West Clinic, a primary health care center in the Eastern sub-district of Cape Town.

"The patient-held maternal and child health cards were stapled together at the time of delivery," says IHI's South Africa Director, Pierre Barker, MD. This way, the mother's HIV status — a critical piece of information in customizing care for the newborn — would travel with the baby to its first check-up.

"This has improved the transfer of information to the primary care clinics to more than 80%," says Youngleson. "HIV-exposed babies are easier to identify. There is less frustration for staff, reduction of re-testing, and improved efficiency."

And the benefits don't stop there: For the first time, reliable follow-up HIV care is being provided for mothers at their babies' check-ups. The intervention is soon to be spread throughout the Western Province, far beyond the Cape Town region.

3 The Patient Is the Source of Control

Control over health care decisions, access and information has traditionally rested in the hands of caregivers. But giving patients more control over these and other aspects of their care empowers them as partners in care, rather than passive recipients of it. Engaged, informed patients appear to have better outcomes, lower costs, and higher functional status.

Dana-Farber Cancer Institute, where patients serve in leadership roles

Many providers today are empowering patients to participate in their care through shared decision making and supported self-management. But the Dana-Farber Cancer Institute (DFCI) in Boston, MA, takes patient empowerment to a whole new level.

Patient representatives sit alongside executives and board members on key committees such as Patient Safety and Quality Improvement/Risk Management, ensuring that the patient perspective is represented in executive-level initiatives and deliberations. Patient and Family Advisory Councils, composed of patients, family members, executive leaders, and staff, enable patients to partner with staff on DFCI priorities and also to create their own initiatives.

"The advisory councils, one for adults and one for pediatrics, set their own agendas and are supported by DFCI staff members," says Saul Weingart, MD, PhD, Vice President for Patient Safety. Some initiatives launched by the groups include the creation of a legislative advocacy network, a newsletter by and for patients and families, and a patient perspective component in staff orientations.

Weingart says the councils are invaluable sounding boards. "They are not shy," he says. "They speak up if they totally disagree. They are an important reality check." And their presence in the management structure is no longer considered unusual. "I don't think of this as token patient representation. I think of them as critical members of our committees, and valuable collaborators," says Weingart.

Likuni Mission Hospital, Likuni, Malawi, where giving women more control contributes to a falling maternal death rate

In the African nation of Malawi, pregnant women have had to make a difficult choice: have an at-home delivery, where cultural traditions can be more easily incorporated, or deliver in the hospital, where there is less risk but also less control. For a nation with one of the highest maternal mortality rates in the world, this can be a life-or-death decision.

During at-home births, babies are traditionally received by the child's grandmothers, who attend the laboring mother along with a traditional birth attendant. But most health care facilities do not allow a companion to accompany a woman through labor and delivery.

Working in a quality improvement collaborative with IHI and three other health organizations comprising The Health Foundation Consortium, Likuni Mission Hospital set a goal of decreasing inpatient maternal and neonatal mortality by at least 50% in one year. To reduce the barriers to hospital births and improve safety, the hospital now allows women to have a

female companion with them during labor and delivery.

"The team felt this would provide women the comfort of companionship and support, and create an extra layer of safety in an environment with severe human resource constraints," says Karen Zeribi, MHS, IHI's Quality Improvement Technical Assistant in Malawi. "They tested companionship first with the patients of one nurse. She reported that 100% of her patients took advantage of the opportunity and really appreciated it." Eventually the change was spread to the entire ward.

What was not expected, says Zeribi, was the degree to which the nurses also valued the companions. "Patient companions alleviated some of the demands on the nurse midwives to provide comfort and support, allowing them to concentrate more on clinical duties."

Between January 2006 and July 2007, the maternal death rate dropped from 0.31% to 0.16%.



Andrea Burnette with MaCari and CaMari

North Carolina Children's Hospital, where parents are considered part of the medical team

When Andrea Burnette gave birth to twin boys six weeks prematurely, she knew they might require extra medical attention. And indeed, both MaCari and CaMari stayed in the intensive care unit at North Carolina Children's Hospital in Chapel Hill, NC, for a few months, while their lungs developed and they gained enough strength to go home.

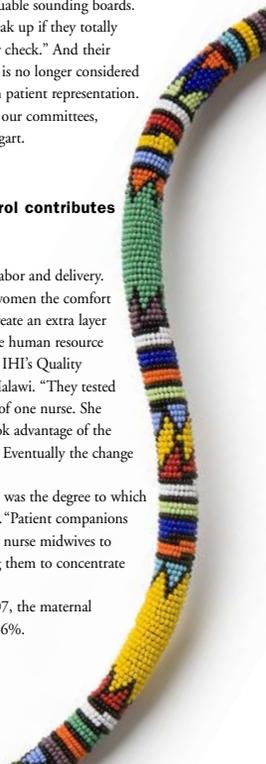
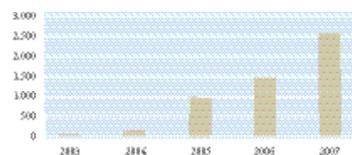
MaCari came home first. But within days Burnette brought him back to the hospital, concerned about his rapid breathing. While the nurse tried to reach the doctor, Andrea became even more alarmed as her baby's breathing worsened. "So I called the Rapid Response Team and they rushed in and got him into the PICU right away," she recalls. "They stabilized him, and now he's fine."

Most hospitals with Rapid Response Teams — an intervention in IHI's 5 Million Lives Campaign — do not invite patients or family members to call the Team directly, but that is beginning to change, especially in pediatric hospitals. NC Children's decided in the spring of 2007 to give family members the same direct access to the Team as the rest of the medical staff. Patients and families view the Rapid Response Team as an extension of the clinical team already taking care of their child, a kind of safety net.

"Some staff were worried families would call for non-urgent things," says pediatric intensivist Tina Schade Willis, MD. But experience at other hospitals doesn't bear that out. "Parents would never call 911 from home for something trivial," says Jordan Erickson, the hospital's Quality Analyst who helped to implement the Rapid Response strategy. "Why would they do it here? This communicates to families that they are part of the medical team."

Willis agrees. "Parents know their children best," she says, which is why about 20% of the 5 to 8 calls from staff members to the Team each month include family concern as one of the reasons for the call. Of those calls, Willis says that about 70% of the pediatric patients are transferred to the ICU because they do indeed require a higher level of care.

NUMBER OF U.S. HOSPITALS DEPLOYING RAPID RESPONSE TEAMS



4 Knowledge Is Shared and Information Flows Freely

The new rules of care hold that information is care. Information is at the heart of the patient-clinician relationship, and patients should have unrestricted access to their health-related information. Giving patients more and better information — and family members, when appropriate — is an essential element of shared decision making.

Our Lady of Lourdes Hospital, where families are included in rounds

Under the “old rules” of care, when a group of doctors and nurses entered a hospital room or ICU to confer about a patient during medical rounds, any visiting family members would be asked to step out. In some hospitals, this is still the norm, but fortunately that is changing.

“The more families know about the patient’s status, the better,” says Susan Fuchs, RN, BSN, Nurse Director at Our Lady of Lourdes Memorial Hospital, an Ascension Health hospital in Binghamton, NY. That philosophy is why family members have been included in rounds there since 2003. Fuchs says it has worked well, saving nurses time and making patients and families happier.

Sometimes the rounding team is rather large, and can

include the case manager, charge nurse, social worker, homecare nurse, spiritual caregiver, nutritionist, or pharmacist. The hospitalist might also join if he or she is available.

“When a team comes in, sometimes the patient can feel overwhelmed with information,” says Fuchs. “A family member brings a second set of ears to hear and remember things that are said.”

And the information flow goes both ways, she says. “Sometimes families will be able to provide information the patient hasn’t mentioned,” such as obstacles at home that should be addressed before the patient is discharged.

Fuchs says that patient satisfaction surveys indicate that patients are increasingly satisfied by how well informed they are.

North Shore-Long Island Jewish Health System, where white boards help keep everyone well informed

Ubiquitous in office settings and in many homes as well, white boards are a simple, flexible, and low-cost way of conveying and tracking information. And in the world of health care, where increasingly sophisticated technology plays a big role, they have surprising power, as the staff at North Shore-Long Island Jewish Health System in Great Neck, NY, has discovered.

“White boards are a critical tool for sharing information with patients,” says Denise Mazzapica, BSN, manager of the hospital’s TCAB unit. TCAB is short for Transforming Care at the Bedside, a joint initiative of IHI and the Robert Wood Johnson Foundation.

Hanging in each patient room, the boards were initially used for mostly one-way communication: nurses would list that day’s caregivers and a patient goal for the day. “Then we noticed that families began to use the boards to communicate with us, or with their loved one,” says Mazzapica. “They

might write, ‘Dad ate all his breakfast today’ or ‘Remember to call the nurse if you get up.’ Sometimes children will draw pictures on them.”

Before long, Mazzapica says, the boards were serving even more functions. “We ask the patient, ‘What is the most important thing we can do for you today?’ and put the answer on the board.” Nurses also write scheduled tests and specialty visits on the boards, or when a patient can expect the next dose of pain medication. In all their messages, nurses are careful to guard patient privacy.

Surveys indicate that patients are increasingly happy with how well informed they are and how clear the plan of care is, which Mazzapica thinks is largely due to use of the white boards. That’s why the hospital is now investing in an important technological advancement: larger white boards.

ThedaCare, where admissions teams gather and provide better information

Anyone who’s ever been admitted to a hospital knows the routine: you answer the same questions over and over as different providers come and go from your bedside. Sometimes this redundancy is beneficial, serving as a double-check on information.

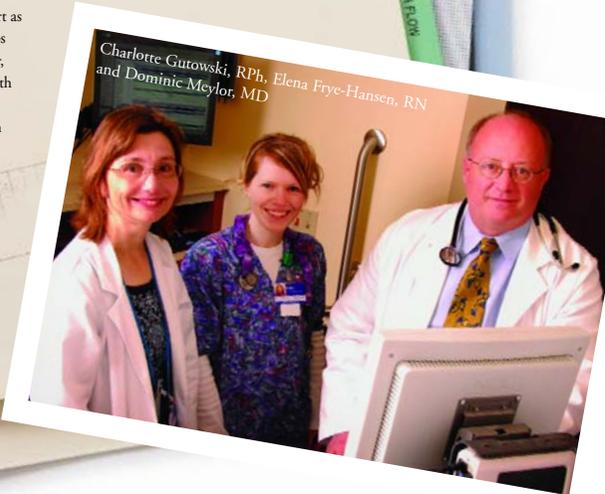
But more often, it’s the result of a process built around the schedules of individual providers and care disciplines rather than what works best for the patient, and what supports the best quality of care. That’s why ThedaCare in Appleton, WI, has created the admissions “trio,” in which the patient’s physician, nurse, and pharmacist gather admitting information from the patient as a team. Not only is it more efficient, but it also provides better information for clinicians and the patient.

“They bring in a computer and have all the necessary supplies at hand so no one has to leave the room,” explains Maribeth Hetherington, RN, BSN, Chief Nursing Officer for Appleton Medical Center and Theda Clark Medical Center, part of the ThedaCare system. “The physician does the introductions, the pharmacist does medication reconciliation, and the nurse might be looking things up on the computer or preparing items to address the patient’s immediate needs.”

Working within a privacy curtain, the pharmacist moves away from the bedside to put medication information in the computer, and the physician steps in to take the patient’s history and do the physical exam with the nurse. “They are all gaining and sharing information from each other’s processes. It’s a very collaborative, interactive assessment that gives everyone a deeper understanding of the patient’s status,” says Hetherington.

The admissions process has been dramatically shortened — from as long as 12 hours to as short as 45 minutes — with more than 78 duplicate steps eliminated. This allows care to get started sooner, which ThedaCare leaders believe is associated with a 34% reduction in patients’ average length of stay over the past seven months. Documentation of the assessment is consolidated from four places to one.

“When the team walks in, some patients or families worry that they must be really, really sick,” says Project Manager Beth Malchetske, MBA, RHIA. “But once they understand why all three people are there, they really appreciate it and understand its value.”



Charlotte Gutowski, RPh, Elena Frye-Hansen, RN and Dominic Maylor, MD

Seton Family of Hospitals, where the birth trauma rate is essentially zero

Every mother's child is the most beautiful baby ever born. And that was certainly the case for LaDonna Mathews-Claude, who recently gave birth to her fourth child, Richard Marcus Claude III, known as RC. "He's perfect," she says. What Mathews-Claude doesn't realize is how many other mothers are also having perfect babies these days in the Seton Family of Hospitals, thanks in part to a new protocol that has dramatically reduced the number of babies born with traumas or injuries associated with induced births. Seton is a multi-hospital network in central Texas with four hospitals providing obstetrical services.

Sometimes, of course, inductions are medically necessary, as was the case for RC's mom. But too often, women are delivering babies before 39 weeks by choice. "Some women ask to be induced early because they are tired of being pregnant," says Frank Mazza, MD, Vice President of Medical Affairs at Seton Medical Center in Austin, TX. "Obstetricians like to be customer-focused, so they'll do it. Or, in some cases, doctors schedule an induction so they can sure to deliver the baby themselves."

But not only does an induced birth require the use of powerful medication that can strain the baby's circulation and oxygenation, it can also result in trauma to the baby. This is because induced labor is more likely to require the use of forceps and vacuum extractors, tools that can cause injuries ranging from lacerations to fractured skulls. Studies say this happens on average to 7.4 babies per thousand in the U.S.

In collaboration with IHI, Ascension Health, Seton's corporate parent, developed two new perinatal "bundles" designed to reduce the number of elective inductions, and to improve the safety of medically necessary ones. Standardized order sets were developed to support the bundles, and customized systems were created at each site to ensure reliability. "We thought we could get our trauma rate down, but we never thought we would get close to zero. It turns out we were wrong," says Mazza.

Now, Seton has not had an elective induction before 39 weeks in more than two years, and has had zero birth traumas during the past year. "It is a very happy surprise," says Mazza.



Decision Making Is Evidence-Based

Whenever possible, clinical decisions should be based on science, not convention. When care is standardized around proven best practices, outcomes improve. Ideally, clinicians and patients should use current best evidence to guide clinical decisions, and allow patients' personal values — something science can't dictate — to guide other choices.

BryanLGH Medical Center, where one ICU went 27 months with no cases of VAP

Like a lot of hospitals, BryanLGH Medical Center in Lincoln, NE, had its share of ventilated patients getting pneumonia. It was seen as an unfortunate but sometimes unavoidable complication of mechanical ventilation.

But all that has changed, says Denise Moeschel, RN, the hospital's team leader for preventing ventilator-associated pneumonia, or VAP. "We no longer view VAP as inevitable. Now when we get a case, we view it as a defect and we do a drill-down to learn everything we can about why it happened." Today, BryanLGH is a Mentor Hospital in the 5 Million Lives Campaign, helping other participants prevent VAP.

All this is the result of the hospital's success over the past few years in its three ICUs by implementing the Ventilator Bundle — a set of proven steps for preventing VAP. In

addition to the specific steps, Moeschel says "the recipe calls for education, persistence, and motivation."

Mona Reynolds, RN, Clinical Manager for the Medical/Surgical ICU, agrees that the effort has to be all or nothing. "Everyone has to contribute, and you have to do all the steps. It has to be 100%." When her unit went two years without a single VAP, Reynolds says they took time to acknowledge the contribution of each staff member.

"People in health care come to work every day wanting to do their best for their patients," says Moeschel. "The elements of the bundle make it easier for them to do that, and it becomes part of the culture." In addition, Moeschel says the bundle steps have been integrated into the nursing curriculum at the BryanLGH College of Health Sciences.

Parkland Medical Center, where the MRSA rate has decreased for three years in a row

At Parkland Medical Center in Derry, NH, Infection Control Director Karen Cozzens, RN, MSN, CIC, admits that she wanted proof that alcohol-based hand rubs do a better job disinfecting hands in routine situations than good old-fashioned soap and water. "So I did a hand hygiene experiment," she says. "I got 12 volunteers, and I cultured their hands before and after washing with antibacterial soap and water, and before and after using the alcohol rub."

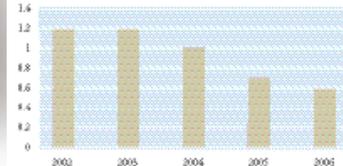
The results? "I was shocked," she recalls. "The results were convincing. With soap and water there were still many bacteria colonies afterward, but after hand rub there were virtually none." Now she uses pictures of the culture plates at staff orientations to drive home the importance of using proper hand hygiene procedures and products.

Carefully following these and other protocols has helped Parkland reduce hospital-acquired infections, particularly methicillin-resistant *Staphylococcus aureus* (MRSA), the so-called "super bug" that is resistant to so many antibiotics. This has required a relentless attention to a collection of proactive interventions, including environmental decontamination, active surveillance cultures for at-risk patients, and aggressive isolation precautions.

Parkland's nurses have become so proficient at all the aspects of MRSA prevention that they are empowered to independently screen patients on admission even if the admission criteria doesn't automatically trigger the screening. The combination of interventions is working: Parkland's hospital-acquired MRSA rate has decreased three years in a row, dropping from 1.2 per 1,000 patient days in 2003 to 0.6 in 2006.



PARKLAND MEDICAL: HOSPITAL-ACQUIRED MRSA PER 1,000 PATIENT DAYS



Safety Is a System Property

When patients are harmed in the hospital, in most cases the cause can be traced back to flaws in the system of care. The key to reliably safe care does not lie in exhorting individuals to be more careful and try harder. It lies in learning about causes of error and designing systems to prevent human error whenever possible.

Safer Patients Initiative, where safety briefings are at the heart of safer care

The Safer Patients Initiative (SPI) is a quality improvement program that encompasses all four nations of the United Kingdom. It has been designed and implemented by IHI with the support of The Health Foundation, an independent charitable foundation working to improve the quality of health care across the UK and beyond. The program, now entering its third year, puts safety at the heart of all care delivery.

Two SPI hospitals in England — Musgrove Park Hospital in the Taunton and Somerset NHS Trust, and Torbay Hospital in the South Devon Healthcare NHS Foundation Trust — have been working as partners to reduce adverse events, hospital-acquired infections such as MRSA, and overall mortality, using an IHI tool called safety briefings.

Based on concepts in aviation and other industries, safety briefings are quick huddles where staff review the important safety issues on the ward at any given time, particularly at

shift changes. The briefings help ensure that everyone is focused on safety.

“The concept of the safety briefing is fantastic,” says Julie Branter, Head of Clinical Governance/Risk in Taunton. “We use the briefings to identify safety risks and to highlight the infection status of patients, which is especially important at handovers.”

Staff say the briefings have helped contribute to successes such as a dramatic increase in hand hygiene compliance — up from 46% in 2006 to 94% in 2007 at Taunton — as well as significant reductions in MRSA infections, with 254 infection-free days in one Torbay ward, and counting.

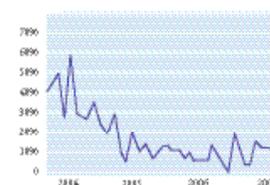


Missouri Baptist Medical Center, where the raw mortality rate dropped 22% from 2002 to 2006

At Missouri Baptist Medical Center in St. Louis, MO, they call it “putting it all together,” the ability to take the kind of multi-faceted approach to improving safety that results in reduced mortality rates.

“From the board of trustees to the front line we recognize that in order to affect mortality, we have to do multiple things on multiple fronts,” says John Krettek, MD, PhD, Vice President of Medical Affairs and Chief Medical Officer. Every month the board reviews not only financial measures, but also data on patient satisfaction and all-cause mortality.

MISSOURI BAPTIST: PERCENT OF PATIENTS WITH ADVERSE EVENTS



“The culture of safety is infused in every staff member,” says Krettek. “Error identification is critical, and every employee knows that he or she has the responsibility to report potential sources of error or injury. Management is responsible for addressing and removing those risks.”

Staff use the IHI Global Trigger Tool to help identify sources of adverse events and take steps to mitigate the effect. Where possible, a focused intervention is implemented to prevent a recurrence.

Krettek underscores the importance of keeping an eye on the big picture. “A physician sees one patient at a time. We look at populations of 300 patients at a time, and we are able to pick out subtle trends before they become patient injuries.” In addition to the right improvement tools, Krettek names three qualities necessary to build safety into the system: “Vigilance, diligence, and a naked awareness that things can go wrong.”



Jennifer Dunscomb and David Lenart with housekeeper Debbie Finkle

Columbus Regional Hospital, where a focus on safety promotes teamwork

They say it takes a village to raise a child, and the same concept is true in health care: it takes a team to deliver excellent care. At Columbus Regional Hospital in Columbus, IN, teamwork brings together unlikely partners who reach across departments and disciplines to build safety into every aspect of care.

One such partnership is that of Clinical Nurse Specialist Jennifer Dunscomb, MSN, RN, CCRN, and Director of Facilities and Materials Management David Lenart, PE, MBA. They have worked together to improve care in a number of unexpected ways.

“As a clinician you focus on the clinical aspect of things, and you don’t always see how critical the support staff is in making your processes possible,” says Dunscomb. “Working with Dave and his staff has helped me learn this.”

The two have teamed up to improve heart attack care by engineering a process to quickly repair broken EKG leads; hand hygiene by setting and meeting new goals for sink repair turnaround; and central line safety by creating central line kits containing gloves, hats, masks, gowns, and hand gel to encourage clinicians to take all proper precautions to reduce the risk of infections.

“When you’re not a hands-on caregiver, sometimes it’s difficult to see how your work connects to the mission of patient care,” says Dave Lenart, who also oversees housekeeping. “I try to develop tangible activities and measurements that show how support services can affect patients’ outcomes.” This means helping staff see the connections between the assembly of central line kits and reductions in central line infection rates, for example.

Jennifer Dunscomb says this cross-departmental teamwork is part of the organization’s culture. “Our leaders challenge us to think specifically about how non-clinical leaders affect quality. Dave heard that message and took it to his staff in ways they could really act on.”

With only four cases of VAP and two central line infections in nearly five years, the teamwork has really paid off. “Everyone thinks a sink is just a sink,” says Dave Lenart. “But we understand the relationship between a broken sink and hand hygiene and infection. So we make fixing that sink a top priority.”



Transparency Is Necessary

Confidentiality has always been essential to high-quality health care. But secrecy of another sort — about how well hospitals and providers do their jobs — should not be. Publicly sharing quality data increases accountability and improves performance. Organizations that do so, especially when it's not required, demonstrate a commitment to honesty — and excellence.

Delnor-Community Hospital, where performance data is included in the annual report and patients present to the board

“We firmly believe in transparency here,” says John Hubbe, Vice President for Medical and Legal Services at 118-bed Delnor-Community Hospital in Geneva, IL. “We know we’re not perfect, and to get to higher levels of performance you have to be honest. It’s not always comfortable, but that’s a good thing.”

This is the philosophy that led to the inclusion of performance data in the hospital’s annual report. “We do very well on most measures, except for one or two, but we put those in anyway,” says Hubbe. “We want to hold ourselves accountable.”

Hubbe attributes much of this attitude to the strength of Delnor’s Board of Directors, and it’s why the hospital serves as a Mentor Hospital for the “Get the Boards on Board” intervention in IHI’s 5 Million Lives Campaign.

“Our board is community-based. They come from all backgrounds and disciplines,” says Hubbe. “Their role is not to fix problems, but to provide the vision and promote the culture of safety, and to ensure that the organization is allocating enough resources to provide safer and better systems of care.”

Hubbe says the board is inspired by patients’ personal stories, sometimes presented by the patients themselves at board meetings. “Data can be dry, but patient stories are powerful.” The board recently heard from an 80-year-old patient who had developed a post-surgical infection. “He told the board, ‘It was a lost summer. And when you’re 80, to lose a whole summer means an awful lot.’ That changes the dynamics.”

As for publicly sharing performance data, Hubbe says it is a leap of faith worth taking. “At first it feels uncomfortable, but trust me, it accelerates the change you can accomplish.”

New York City Health and Hospitals Corporation, where performance data is publicly available on the organization’s website

Serving 1.3 million patients, the New York City Health and Hospitals Corporation (NYCHHC), a member of IHI’s IMPACT network, is America’s largest public health system. It is also among its most transparent. Data ranging from surgical infection rates to mortality rates is available on its website for anyone to view.

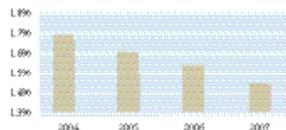
“Sharing our performance data is not about showing how good or bad we are, but to make ourselves more accountable and promote improvement,” says President Alan D. Aviles.

While NYCHHC is required to submit some performance data to state or federal agencies, that data has not typically

been easily available to the public. Public reporting of other data, particularly its mortality rate, is not required.

“At first we were kind of nervous,” says Ramanathan Raju, MD, Executive Vice President and Chief Medical Officer. Even though the data compares favorably with national and state averages, there were internal sensitivities. “We are an 11-hospital system and one has to be number one, and one has to be number 11. So we worked internally to help people understand what we are doing and why. It’s been quite an educational experience for us, and it focuses people’s attention on what needs to improve. If you want to move an organization of 40,000 people in one direction, public accountability is a powerful tool.”

NYCHHC: MORTALITY RATES, CORPORATE TOTALS



Geisinger Medical Center, where a surgery warranty signals a commitment to excellence

John Podgursky, 62, did not know there was a warranty on the bypass surgery he had in the summer of 2007 at Geisinger Medical Center in Danville, PA. But even if he had, he would not have needed it. His surgery and recovery went just fine.

It all started when he was mowing his lawn in Elysburg, PA, a quiet community about an hour southwest of Scranton, in the heart of the anthracite coal region. Semi-retired from a lifelong career in the Bureau of Mines, Podgursky says he felt some tightness in his chest. He felt it off and on for the next few days.

A series of examinations and tests revealed that Podgursky needed triple bypass surgery. “One artery was 100% blocked, and two others were pretty blocked up as well,” he recalls. The surgery was booked for the very next day.

Podgursky was twice lucky. First, to get on the surgical schedule so quickly, and second to be at Geisinger, where the warranty itself is far less important than what it symbolizes.

“The warranty is our sign to the outside world about our values,” says Karen McKinley, RN, MBA, Vice President, Division of Clinical Effectiveness, and Patient Safety Officer. “We have identified 40 best-practice steps in the process of bypass surgery, and it is our commitment to hit those 40 metrics each and every time.” Under the terms of the warranty, which Geisinger calls ProvenCare™, Geisinger charges insurers a flat fee for a bypass that includes 90 days of routine follow-up care. If a patient suffers complications, Geisinger pays for the treatment at its facilities.

Albert Bothe, MD, Geisinger’s Chief Quality Officer, says that the bypass warranty is just the beginning. “We have other groups of physicians queuing up to get their version of a warranty done,” he says. Bothe says plans are underway to add other procedures, including cataract surgery and total hip replacement.

While the warranty has attracted media attention as well as significant interest from other health care organizations, its main goal — to promote perfect care — is working. In 2005, Geisinger’s three hospitals performed all 40 bypass components 59% of the time as a composite measure. Since the warranty was implemented in February 2006, that composite score hovers around 100%.



John Podgursky

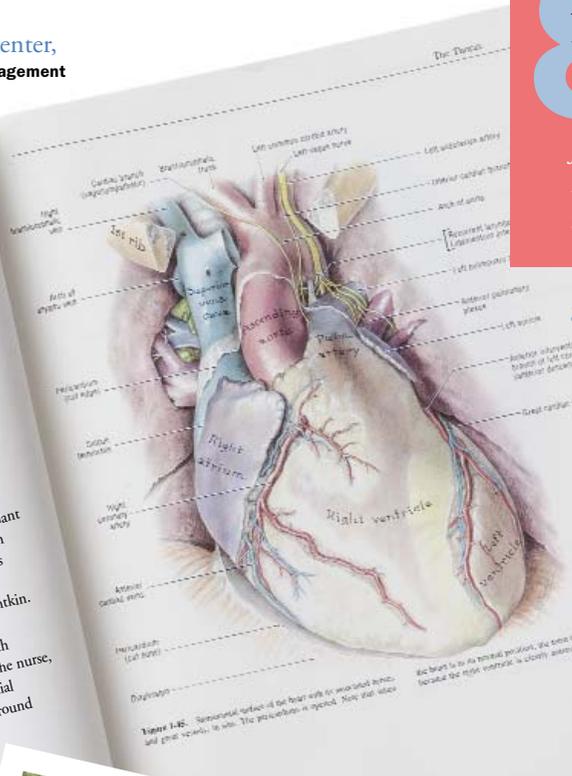
OSF St. James – John W. Albrecht Medical Center,
where patients receive focused outpatient medication management

Louis Lyons likes to work — at 76 he still sells real estate — and he likes to play, with a special fondness for fishing. He knows he's lucky to be doing both these days, after having endured more than his share of health challenges in the past three years.

He's had major heart surgery twice, spending 30 days in intensive care the second time. Now, to help prevent blood clots, he is on a precise regimen of powerful anticoagulant medications. "Patients are understandably scared to take blood thinners," says Bill Wightkin, PharmD, RPh, Director of Pharmacy at OSF Saint James — John W. Albrecht Medical Center in Pontiac, IL. "Too much, and you could bleed. Too little, and you could have a clot." Anticoagulants are tricky to dose and to monitor, because they can take from one to three days to take effect. Many factors can influence a patient's anticoagulant level, measured by a blood test known as an INR. It can be difficult to determine the cause of an INR that is out of therapeutic range.

That's why for patients like Lyons and others requiring anticoagulant therapy, the OSF Medical Group — Pontiac region's Anticoagulation Clinic is so important. "Research shows that dedicated care models keep patients in the therapeutic range 60% of the time or better, compared to 40% to 50% for primary care providers," says Wightkin. "Clinic patients also have fewer clotting and bleeding episodes."

Lyons visits the clinic at least once a month, gets an INR with immediate results and consults about adjusting his dose with the nurse, pharmacist if necessary, both of whom have received special training in anticoagulation management. The nurse travels around the region to OSF's other sites, holding regular half-day clinics. "We don't have to train nurses at every site in anticoagulant management," says Wightkin. "It's a very efficient model." The hospital serves as a 5 Million Lives Campaign Mentor Hospital for safe use of high-hazard medications.



Needs Are Anticipated

Traditionally, health care is reactive: resources are marshaled when patients present with a problem. But a proactive care system tracks patients' status, draws them in for preventive care, and anticipates their needs for self-management support. Predicting patients' needs enables the system to allocate resources more appropriately and keep patients healthier.

St. Luke's Hospital, where patients' home care needs are anticipated at discharge

For some patients, being discharged from the hospital is a mixed blessing. It can feel both great and scary to return home, especially for those who need to take on new and potentially confusing responsibilities for self-care.

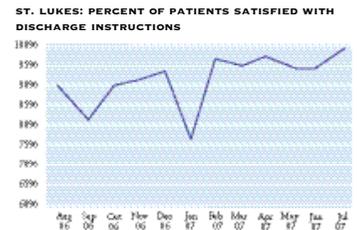
At St. Luke's Hospital in Cedar Rapids, IA, part of the Iowa Health System, a program called Transitions Home is addressing these concerns for patients with heart failure. By providing self-management support for patients at home, the hospital is reducing its rate of readmissions for heart failure patients.

The program includes a combination of patient-friendly written information along with a home visit from a nurse, a physician office visit, and follow-up telephone calls. There are also weekend classes on heart failure management and diet, designed to anticipate patients' need for ongoing reinforcement and support.

The written materials are short and clear. "We really looked at how to succinctly get across the information we want patients to know," says Peg Bradke, RN, MA, Director of Heart Care Services at St. Luke's. Using feedback from focus

groups, the team designed simple information packets using a "green-yellow-red zone" graphic showing patients how to interpret daily symptoms.

In all stages of the program, staff use a technique called Teach Back to gauge patient understanding. "We use it in the hospital, at the home visit, and in follow-up phone calls," says Bradke. "We ask them the same set of questions about symptoms, diet, and medication. In the home visit and phone calls, we get complete responses more than 80% of the time."



Kaiser Permanente, where patients returning home receive both human and technological support

Transitions in the location of care can create risks for patients," says Philip Madvig, MD, Associate Executive Director of The Permanente Medical Group in Oakland, CA. Patients being discharged home from the hospital "risk losing inpatient improvements when they return to the outpatient setting," he says.

At two of its locations, Kaiser Permanente has piloted a program to smooth that transition for congestive heart failure patients, using both human and technological support. "Transition nurses identify heart failure patients in the hospital, and get directly involved in providing intensive education before they are discharged," says Madvig. These nurses stay in touch with patients at home for several weeks after discharge, helping them get follow-up appointments or referring them to disease management programs.

In addition, some patients are trained at home on the use of a device that measures their weight, blood pressure, heart rate and even blood glucose if necessary. "The patient uses the device every day, and data is transmitted by modem to nurse case managers," says Madvig. Based on protocols, or in consultation with a physician when necessary, the nurse might advise patients to change their medication within a set range, or make diet changes.

This home telemonitoring not only helps prevent deterioration, but also gives patients a more sophisticated understanding of how to manage their health. As a result, most patients only need the device for three or four months.

The dual approach seems to be working. Madvig says the two medical centers have decreased their hospitalization and readmission rates for heart failure patients to about a third of Kaiser Permanente's average system-wide rate.

Fairview Health Services, where medication reconciliation improves safety and avoids additional costs



Like many people his age, Deryl Jensen, 70, takes about 10 medications. His health history includes a heart attack, bypass surgery, as well as a brain injury, and surgery on both knees from a bad fall down the stairs 20 years ago. Those injuries led to the loss of his job as a boiler engineer, and depression. He also has high blood pressure.

Nonetheless, Jensen, who sometimes works seasonally as Santa Claus, says "I feel fine." He enjoys spending time with his wife, Carol, and their "four beautiful daughters, and seven beautiful grandchildren."

When he visits his primary care doctor at Fairview Oxboro Clinic in Bloomington, MN, part of Fairview Health Services, Jensen says "we go over the list of my medications every time. They keep good track of me." Medication reconciliation, the process of making sure that medications and dosages are accurate at all transition points, may seem easy to do one patient at a time, but is far more complex on a system level, particularly as patients move in and out of the hospital.

"To do it well, you really need three important elements: good tools, the right processes, and accountability," says Steven Meisel, PharmD, Director of Medication Safety. And he should know. Using a combination of electronic medical records, inpatient pharmacy systems, and pharmacy technicians, Fairview does it very well, recently posting an average 90.6% success rate for outpatients in its 60-some clinics, and an average success rate of 74.1% for inpatients across its seven hospitals. This latter measure is an all-or-nothing metric that includes reconciling every medication for every patient on admission, transfer and discharge.

Fairview Lakes Medical Center in Wyoming, MN, routinely achieves a 100% success rate for inpatients. Pharmacy Director Mark Nelson, RPh, knows that improved patient safety is not the only benefit. Through medication reconciliation, his hospital reduced inaccurate patient records by nearly 31% between 2004 and 2006. "We calculate that we averted 95 adverse drug events in 2006, which, at an average cost of \$2,500 per event, theoretically saved \$237,500 in adverse drug event costs for the year."

Deryl and Carol Jensen with Precious



Waste Is Continuously Decreased

The U.S. spends over 50% more per capita on health care than most other Western nations. But this doesn't mean that the care patients get is reliably better. The health care system is full of wasted time, wasted resources, and wasted energy. Eliminating all forms of waste increases the value of health care, and improves patient and provider satisfaction.

Veterans Affairs New Jersey Health Care System, where patients have easy access to appointments

Timely access is the first crucial step toward the delivery of efficient health care. Improving access reduces wasted time that patients spend waiting for appointments, in the waiting room, or for test results.

The Veterans Health Administration (VHA) has collaborated with IHI for years on a national effort to improve access to more than 1,800 primary care, audiology, cardiology, eye care, orthopedics, and urology clinics, using the principles of open access or "advanced clinic access."

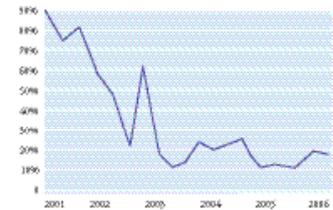
In the Veterans Affairs New Jersey Health Care System, staff applied systems redesign strategies, advanced access principles, and a "facility communication model" to improve access at two medical centers and an outpatient clinic. The facility model involved integrating performance improvement, introducing new technology, and increasing staff participation.

The strategies were applied first to primary care clinics, where same-day appointments are now routinely available, and then spread to specialty clinics, including urology. In addition to working down the backlog of appointments, staff also reduced the number of appointment types to smooth out scheduling challenges; reduced demand by creating service agreements

between primary care and urology; worked with primary care physicians on consult management; and created templates for documentation and for ordering certain medications.

The results? The average waiting time for the next available urology clinic appointments dropped by more than 80%. By the end of 2006, waiting time for a urology appointment averaged about 15 days, down from more than 90. Nor surprisingly, both physician and patient satisfaction have increased significantly.

VHA: AVERAGE DAYS TO NEXT AVAILABLE UROLOGY APPOINTMENT



The Nebraska Medical Center, where pressure ulcer prevention avoids expenses in the millions

Pressure ulcers, commonly known as bedsores, used to be regarded as an unfortunate but sometimes unavoidable result of hospitalization. The skin on vulnerable body parts with little protection such as heels, hips, shoulders, and tail bones can break down as bedridden patients remain in the same position for too long.

Fortunately, all that is changing, thanks to new understanding about how to prevent pressure ulcers. At the Nebraska Medical Center in Omaha, NE, a Mentor Hospital for pressure ulcer prevention in the 5 Million Lives Campaign, a dramatic reduction in pressure ulcers has saved patients from this painful and sometimes dangerous condition and helped the hospital avoid spending an estimated \$3.6 million over two years treating this injury.

Alan Didier, RN, Manager of the Burn Unit, Hyperbaric Unit and Wound Ostomy Services, says that the effort has

been comprehensive and has involved dozens of dedicated clinicians. Months of hard work by a multidisciplinary committee led to the development of a customized data collection tool for skin surveys, evidence-based changes to policies, complete revision of skin care plans, mandatory skin care education for nurses, and the enhancement of a skin champion role.

Now, when comprehensive skin surveys identify patients who are at risk for skin breakdown, nurses have many options, including the use of computerized, customized care plans to maintain the patient's skin integrity. "We used to have a care plan compliance rate of 14% for patients at risk for skin breakdown," says Didier. "Now we are at 98% because we've empowered the nurses with tools and knowledge, without adding more paperwork to their already busy day."

AnMed Health Medical Center, where teamwork yields better outcomes for heart attack patients

Each year, more than a million Americans have a heart attack — also known as an acute myocardial infarction, or AMI. A third of them don't survive. Paul Corn is one of the survivors: he got the right care at the right time.

A pharmacist in Clemson, SC, Corn recognized the symptoms after a morning of yard work, and went to a nearby urgent care center right away. "I didn't want to be a statistic," he says. From there he was immediately transported by ambulance to AnMed Health Medical Center in Anderson, SC.

Optimal AMI care includes a specific series of steps and components, and timing is key. Ideally, patients who require coronary angioplasty to open the blocked artery should have the procedure within 90 minutes of their arrival at the hospital.

Like a relay race, this requires carefully timed handoffs from the triage area to the emergency department physician and finally to the catheterization lab. When AnMed staff analyzed their process, they found several ways to improve, says Leigh Miller, RN, MSN, Director of Clinical Outcomes.

Steps were eliminated, such as waiting for the patient's primary care doctor to evaluate the patient and call the cardiologist; now the ED doctor does that. Preprinted orders were overhauled and their use reinforced. Schedules were rearranged based on the distance cath lab staff need to travel from home in an emergency. "We even changed the rules about where staff can park," says Miller.

For Paul Corn, "everyone was in the right place at the right time. My care couldn't have gone any better. I was back at work in three weeks." And his is not a unique outcome. While in 2005 only 37.5% of appropriate patients received their angioplasty within 90 minutes, by the end of 2006, that number had risen to 96%. In 2005, mortality for AMI patients was 13%; in 2006, that figure was below 5%.



10 Cooperation Among Clinicians Is a Priority

In the ideal health care system, high levels of cooperation, coordination, and communication guarantee excellence, continuity, and reliability. There is less focus on role definition and professional boundaries, and more focus on teamwork and effective communication.

Johns Hopkins Children's Center, where pharmacists on Rapid Response Teams boost effectiveness

One of the interventions of IHI's 5 Million Lives Campaign is the Rapid Response Team, a small team of critical care experts available to rush to the bedside of any patient who shows early signs of deteriorating health. Working with the patient's nurse, these teams — typically composed of a critical care nurse, a respiratory therapist, and sometimes a physician or physician assistant — can often prevent serious incidents such as cardiac arrest by intervening at the first sign of trouble.

Now, some hospitals are discovering that the Rapid Response Team that includes a pharmacist is even more effective, helping to ensure that medications are available, and, where appropriate, to determine the cause of a patient's decline and offer expert clinical advice.

At Johns Hopkins Children's Center in Baltimore, MD,

Elizabeth Hunt, MD, MPH, attending pediatric intensivist, says that pharmacists play an invaluable role on the team, helping to prepare medications so nurses can focus on attending to the patient's immediate needs. "This significantly eases the burden of the first responder nurse and the PICU nurses," says Hunt. "Now the team keeps functioning while the drug is prepared, instead of a key player turning away from the patient." In addition, says Hunt, pharmacists have quick access to drugs not typically stocked on patient units.

Having a pharmacist available for pediatric Rapid Response Team calls can be especially important because children's medication needs are harder to anticipate than adults. "In adults, you can pre-prepare some meds," says Hunt. "But because children come in so many sizes, you have to draw up the right dose for each child."

Contra Costa Regional Medical Center, where the rate of VAP dropped by more than 90%

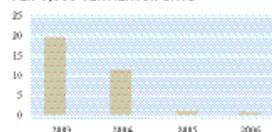
Senior Medical Director Steven Tremain, MD, says that the culture of interdisciplinary collaboration at Contra Costa Regional Medical Center in Martinez, CA, is in part a natural result of the fact that the hospital is owned and operated by the county. "Probably 90% of the people who work here are county employees, and together we own the work," he says.

But really, there is far more to it. What he describes as "tremendous collegiality" between doctors, nurses, respiratory therapists — in fact all staff — does not just happen. It is the result of a conscious effort from the top down and the bottom up to create a culture of collaboration and teamwork.

Through teamwork, Contra Costa has been able to improve care processes and patient outcomes in areas ranging from reducing surgical site infections to minimizing the complications of heart attacks. Working together to implement the bundle of steps recommended by IHI to reduce ventilator-associated pneumonia (VAP), staff reduced cases of VAP from 20 per 1,000 ventilator days in 2003, to 1.3 in 2006.

To hammer home the importance of the bundle steps, Tremain says the head respiratory therapist built a simple model of a trachea, and placed a ventilator tube into it. To show that the cuff surrounding the tube does not reliably keep extraneous material from slipping down into the lungs, he poured pea soup around the tube. "In 24 hours it had leaked past the cuff," says Tremain. "It was a visual cue that reminded everyone on the team to do the bundle elements, because we can't assume the cuff forms a perfect barrier. If we do, the patients are in trouble," says Tremain.

CONTRA COSTA: VAP RATE PER 1,000 VENTILATOR DAYS



about ihi

IHI is an independent not-for-profit organization helping to lead the improvement of health care throughout the world. Founded in 1991 and based in Cambridge, Massachusetts, IHI works to accelerate improvement by building the will for change, cultivating promising concepts for improving patient care, and helping health care systems put those ideas into action.

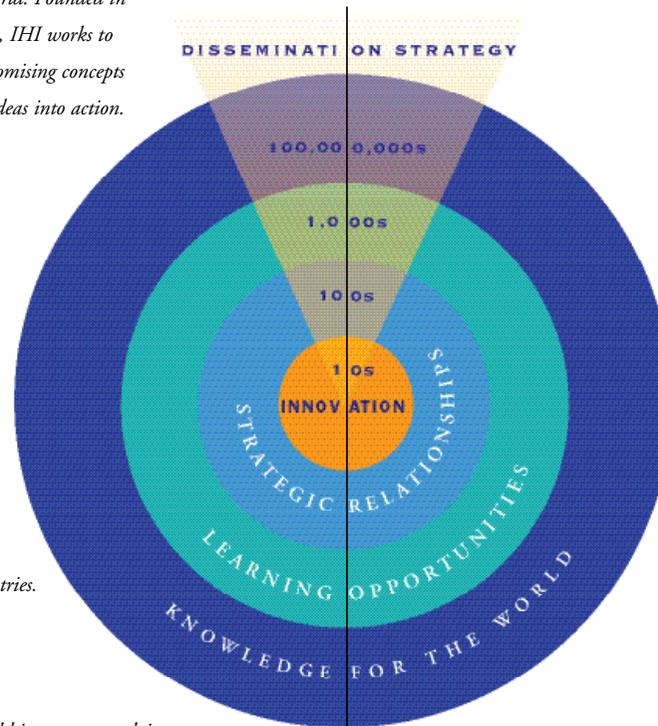
Employing a staff of approximately 100 people and maintaining partnerships with hundreds of faculty members, IHI offers comprehensive programs that aim to improve the lives of patients, the health of communities, and the joy of the health care workforce.

IHI's work is funded primarily through our own fee-based programs and services, and also through the generous support of a distinguished group of foundations, companies, and individuals. These sources enable us to provide community benefits such as program scholarships, research and development, work in professional education, and initiatives in developing countries.

Changing Health Care Together

IHI's programs and activities connect people from around the world in an ever-evolving learning system based on a philosophy of "all teach, all learn." This system allows committed individuals and organizations to collaborate on the hard, rewarding work of improving health care — because it is far easier to improve together than it is alone.

This diagram depicts IHI's strategy for transforming health care.



INNOVATION

At the center of IHI's strategy is disciplined research and development through which we discover and cultivate ideas for improving patient care. This is the innovation engine that fuels all of our work.

STRATEGIC RELATIONSHIPS

IHI maintains a variety of closely aligned, strategic relationships with dozens of organizations that work with us to test promising change concepts and spread best practices. *The most common types of relationships are:*

Strategic Partnerships – High-level relationships focused on transforming entire systems of care by concentrating on strategic objectives and system-level improvement.

IMPACT – IHI's membership network for change, where health care organizations come together to achieve dramatic improvement results.

Learning and Innovation Communities – Collaborative change laboratories focused on front-line improvement.

LEARNING OPPORTUNITIES

IHI offers a wide variety of opportunities for health care professionals to learn from expert faculty and experienced colleagues around the world. *These include:*

World-Class Conferences and Seminars –

A variety of learning opportunities, including our annual National Forum, an annual conference on clinical office practice improvement, and seminars on quality-related topics.

Web-Based Programs – Online presentations and teaching modules available at www.IHI.org.

Professional Development Programs – Designed for leaders who seek to gain specific skills required for their organization to succeed in its improvement agenda.

KNOWLEDGE FOR THE WORLD

The final step in the IHI learning system is the broad dissemination of best practice improvement knowledge. *We accomplish this primarily through:*

Campaigns – The 5 Million Lives Campaign aims to help U.S. hospitals prevent five million incidents of medical harm between December 2006 and December 2008.

IHI.org – IHI's online resource for anyone, anywhere whose aim is to improve health care.

Professional Education – Ensuring that tomorrow's health professionals are prepared to drive the improvement agenda forward.

Fellowship Programs – Year-long, on-site programs for emerging health care leaders.

Join Us!

There is a role for everyone. We invite you to be part of a global community dedicated to improving health care for patients everywhere. To learn more about IHI and our programs and services, call us at 617-301-4800 or visit us online at www.IHI.org.



Our Staff

IHI employs a staff of approximately 100 people, most of whom are based in our Cambridge, Massachusetts, office. IHI also maintains partnerships with hundreds of faculty members throughout the world.



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*“Between the health care we have and
the care we could have lies not just a gap, but a chasm.”*

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