

NATIONAL PRIORITY: SAFETY

Improve the safety and reliability of America's healthcare system

OUR VISION: We envision a healthcare system that is relentless in continually reducing the risks of injury from care, aiming for “zero” harm wherever and whenever possible—a system that can promise absolutely reliable care, guaranteeing that every patient, every time, receives the benefits of care based solidly in science. We envision healthcare leaders and healthcare professionals intolerant of defects or errors in care and who constantly seek to improve, regardless of their current levels of safety and reliability.

Why is Safety a National Priority?

Patients should have the utmost confidence they will not be harmed in the places where they go for care. Still, each year more people die as a result of avoidable medical errors than they do from car accidents, breast cancer, or AIDS.⁶² Although the odds of dying in a hospital certainly hinge on the severity of a patient's condition, they also simply depend on the hospital in which that patient receives care.⁶³ Quality and safety vary from healthcare organization to organization, yet few of us have performance information we can use to

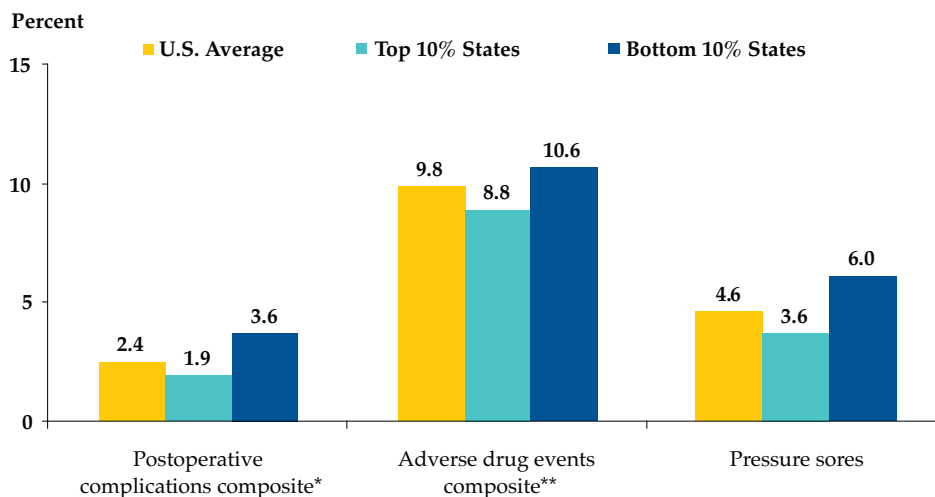
choose a healthcare organization; others have limited choices due to place of residence, health plan provider networks, and ability to pay.

The good news is that there is evidence that certain practices can help prevent many of these errors—some hospitals have reduced the incidence of harms, such as wrong-site surgeries and bloodstream infections to “zero” for sustained periods of time⁶⁴—the bad news is that there is still a significant performance gap between what the vast majority of healthcare organizations are doing and the demonstrated good works of high

Chart 3

QUALITY: SAFE CARE

Potentially Preventable Adverse Events and Complications of Care in Hospitals Among Medicare Beneficiaries, 2004–2005



* Surgical patients with postoperative pneumonia, urinary tract infection (2005 only), or venous thromboembolic event.

** Patients with serious bleeding associated with intravenous heparin, low molecular weight heparin, or warfarin, or hypoglycemia associated with insulin or oral hypoglycemics.

Data: M. Pineau, Qualidigm analysis of Medicare Patient Safety Monitoring System.

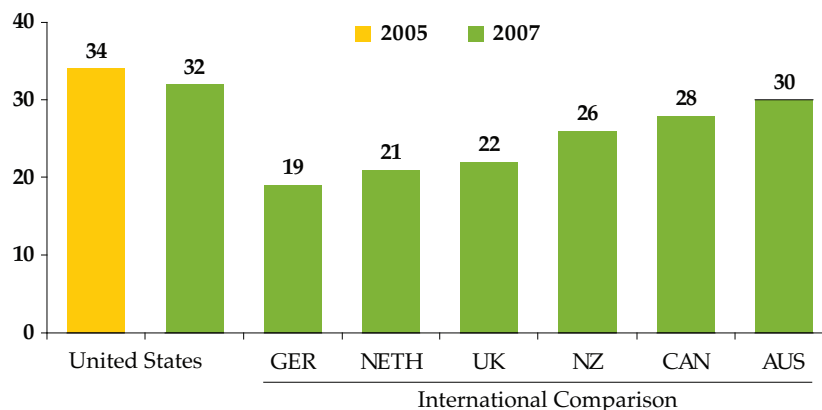
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008.

Chart 4

QUALITY: SAFE CARE

Medical, Medication, and Lab Errors, Among Sicker Adults

Percent reporting medical mistake, medication error, or lab error in past two years



AUS=Australia; CAN=Canada; GER=Germany; NETH=Netherlands; NZ=New Zealand; UK=United Kingdom.
Data: 2005 and 2007 Commonwealth Fund International Health Policy Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008.

performers.⁶⁵ This performance gap is evident when comparing preventable adverse event rates in top-performing states to those in low-performing states (see Chart 3).⁶⁶ Safety has long been a focus of quality improvement in the United States, and many initiatives have been successful in improving the safety of our healthcare system. Still, we have not seen the degree of success that is possible, in large part because the routine use of evidence-based practices that can improve safety has not been as widespread as it should be. For example, studies have long shown that shaving surgical sites prior to surgery actually increases the risk of infection,⁶⁷ but many surgeons still have not adopted clipping as a preferred method of hair removal; the percentage of patients receiving appropriate hair removal continues to increase steadily, but it is still less than 100 percent.⁶⁸ National data suggest that although our healthcare expenditures are growing at more than 7 percent per year, patient safety is improving at only 1 percent per year.⁶⁹

Critical to improving safety is the establishment of a culture that supports the reporting of situations

that threaten, or potentially threaten, the safety of patients or caregivers and that views the occurrence of errors and adverse events as opportunities to make the healthcare system better. Although the primary concern of this Priority relates to safety events resulting in harm, all learning organizations must also focus on opportunities to learn from experiences that have the potential to cause harm, even though they may not directly result in harm (e.g., “near misses”). Although we may never be able to claim that no patient ever suffers a preventable infection or harm, or a preventable or premature death, to aim for anything short of this is unacceptable.

Making Safety a National Priority Will:

REDUCE HARM. Approximately 1.7 million healthcare-associated infections (HAIs) occur annually in U.S. hospitals and are responsible for nearly 99,000 deaths;⁷⁰ patients who survive them frequently have longer and more expensive hospital stays and longer recovery times.⁷¹ Beyond HAIs, an estimated 44,000 to 98,000 Americans die each year as a result of preventable medical errors.⁷² Compared

to other developed countries, American patients experience more medical mistakes, medication errors, and laboratory errors (see Chart 4).⁷³ But known interventions can make a difference.

Evidence suggests that use of computerized physician order entry and perioperative antibiotic protocols may result in up to an 81 percent reduction in medication errors and a 93 percent reduction in surgical site infections, respectively.⁷⁴

REDUCE DISPARITIES.

Racial, ethnic, and socioeconomic minorities still do not receive equal care, and they face higher rates of disease, disability, and mortality resulting in part from a greater likelihood of suffering from avoidable errors that occur in the delivery of healthcare.⁷⁵ For example, African Americans have higher rates for postoperative surgical and central venous catheter complications and are more likely to have adverse drug events associated with insulin or oral hypoglycemics; Hispanics and Asians have lower rates of appropriately timed antibiotics.⁷⁶ It has also been demonstrated that the hospitals that care for the vast majority of elderly African American and Hispanic patients often provide a lower quality of care.⁷⁷ Additional quality issues may arise because

of bias, racism, or intercultural communication difficulties, which may be reflected in greater disparities more in communication-sensitive areas, such as patient counseling.⁷⁸

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REDUCE DISEASE

BURDEN. More than 70 percent of adverse events may result in disability lasting up to six months, and more than 15 percent of serious adverse events may lead to permanent disability or death.⁷⁹ Ventilator-associated pneumonias (VAPs), which in many cases are preventable, result in an estimated additional length of stay of nearly 2 weeks and

an additional cost of \$40,000 to a hospital admission.⁸⁰ The use of a VAP bundle protocol may decrease VAP by 62 percent.⁸¹

REDUCE WASTE. Beyond the toll of human life, preventable errors have been estimated to cost the United States \$17 billion to \$29 billion per year in healthcare expenses, lost worker productivity, lost income, and disability.⁸² Preventable errors have opportunity costs as well—healthcare dollars spent to counter adverse drug events or to treat complications is money that is not available for other interventions.

For certain heart attack patients, rapid treatment with angioplasty can be lifesaving, but timing is essential. Studies indicate that faster door-to-balloon (D2B) times (the time between a patient's arrival at the hospital to the deployment of the balloon or device) are associated with meaningful differences in survival. Each 15-minute decrease in D2B time from 150 minutes to less than 90 minutes, results in approximately six fewer deaths per 1,000 patients treated. Strategies to reduce D2B times are not only available, but have been successfully implemented by hospitals across the country and are one example of how preventable mortality can be reduced in hospitals.⁸³

Since October 2008, the Centers for Medicare & Medicaid Services will no longer pay for the costs associated with several preventable serious adverse events, such as falls and trauma and foreign objects retained after surgery.⁸⁴ Many other payers have been quick to follow suit, including state Medicaid agencies and private payers. Hospital groups in nearly half of U.S. states have now developed policies to discourage hospitals from billing for such events, indicating a decreasing tolerance for preventable harms.⁸⁵

The World Health Organization has identified safe surgery as its second global patient safety challenge, intended to improve the safety of surgical care worldwide. Working groups of international experts reached consensus on four areas in which dramatic improvements could be made in the safety of surgical care: surgical site infection prevention, safe anesthesia, safe surgical teams, and measurement of surgical services. Resources, including a surgical safety checklist, are available to the public. To date, 284 worldwide organizations have endorsed this campaign.⁸⁶

Consumers Union has launched a nationwide campaign, *Stop Hospital Infections*, that encourages consumers to lobby their congressional representatives to mandate the public reporting of infection rates, reflecting the widely held perception that there is a correlation between public awareness and overall health and performance.⁸⁷

A project conducted over 2 years in more than 100 hospitals in Michigan demonstrates that implementing evidence-based practices can lead to impressive results. Participating hospitals implemented a bundle of five practices aimed at decreasing catheter-related bloodstream infections, including hand washing; full barrier protection; skin cleansing with chlorhexidine; placement of catheters in the chest or neck rather than in the groin; and the removal of unnecessary catheters as soon as possible. The results: The average infection rate fell from 7.7 per 1,000 catheter days to 1.4 per 1,000 catheter days after 18 months, and more than half of the hospitals reported that they had no infections after implementing the program.⁸⁸ This project is estimated to have saved the state of Michigan more than \$100 million and 1,500 lives over an 18-month period by simply teaching doctors and nurses to use checklists. Importantly, no new staff was added to perform the interventions, and the work can be generalized to other hospitals regardless of size or type.⁸⁹

SAFETY:

HOW WILL WE GET THERE?

The Partners will work together to ensure that:

Goal: All healthcare organizations and their staff will strive to ensure a culture of safety while driving to lower the incidence of healthcare-induced harm, disability, or death toward zero. They will focus relentlessly on continually reducing and seeking to eliminate all healthcare-associated infections and serious adverse events.

HAI include but are not limited to:

- ↑ Catheter-associated bloodstream infections
- ↑ Surgical site infections
- ↑ Catheter-associated urinary tract infections
- ↑ Ventilator-associated pneumonia

(See CDC's *Infectious Diseases in Healthcare Settings* at www.cdc.gov/ncidod/dhqp/id.htm for a more inclusive list.)

Serious adverse events include but are not limited to:

- ↑ Pressure ulcers
- ↑ Falls
- ↑ Blood product injuries
- ↑ Adverse drug events associated with high alert medications
- ↑ Wrong-site surgeries
- ↑ Air embolisms
- ↑ Foreign objects retained after surgery

(See NQF's *Serious Reportable Events* at www.qualityforum.org/projects/completed/sre/fact-sheet.asp for a more inclusive list.)

To get there, we will develop and endorse standardized individual and composite measures for HAIs and serious adverse events that build on current datasets. We will develop effective reporting mechanisms and broadly disseminate information to increase consumer understanding of the importance of these measures and how they can be used to choose healthcare organizations. We will increase support for training about interventions known to be effective in reducing harm. We will change private and public payment policies and contracting to support healthcare systems with better performance in safety and reliability.

Goal: All hospitals will reduce preventable and premature hospital-level mortality rates to best-in-class.*

To get there, we will promote consistency and transparency in performance by first encouraging hospitals to choose a standardized, risk-adjusted mortality measure for the purposes of internal quality improvement; based on this experience, we will endorse and universally adopt a single standardized measure that will be used for public reporting. We will provide training and knowledge of interventions known to be effective in reducing mortality. We will develop payment mechanisms that reward substantial improvement and outstanding performance.

Goal: All hospitals and their community partners will improve 30-day mortality rates following hospitalization for select conditions (acute myocardial infarction, heart failure, pneumonia) to best-in-class.

To get there, all hospitals and their community partners will collect standardized, risk-adjusted mortality rates and 30-day mortality rates. Mortality rates will be used for the purposes of internal quality improvement and for public reporting. We will provide training in and knowledge of interventions known to be effective in reducing mortality. We will develop payment mechanisms that reward substantial improvement and outstanding performance.

* "Best-in-class" may be determined by using an accepted methodology, such as *Achievable Benchmarks in Care (ABC)*TM, available at <http://main.uab.edu/show.asp?durki=14527>.