



PENNSYLVANIA HOSPITAL QUALITY:

Achieving More Together



Pennsylvania Hospital Quality: *Achieving More Together*

Executive Summary

According to the Institute of Medicine (IOM), an independent, nonprofit organization that works outside of government to provide unbiased and authoritative advice to decision makers and the public about informed health decisions, quality is “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

This inaugural report on hospital quality and patient safety provides an overview of the quality and patient safety initiatives being undertaken in hospitals across the commonwealth. Urban, suburban, and rural hospitals—from large academic medical centers to small critical access hospitals—are engaged in various efforts to constantly improve the quality of care they deliver to their patients.

There is a collective recognition in Pennsylvania’s health care community that quality improvement is a continuous process with no end. There are changing health care needs, changing patient populations, and ongoing challenges such as new strains of infections and viruses. Hospitals also recognize that accountability is critical in this process to ensure patients have the best data possible to make informed health care decisions; to identify system breakdowns and make improvements; and to benchmark efforts and learn from others’ best practices.

Pennsylvania hospitals have been leaders in health care quality and patient safety initiatives for decades.

Pennsylvania was the first state to create a patient safety organization, the Pennsylvania Patient Safety Authority, where hospitals report serious events and near-miss information, which result in recommendations on how to improve care and prevent medical errors.

Pennsylvania was the first state to require the reporting of all health care-associated infections, and to release the first hospital-specific health care-associated infection report.

- ▶ According to the 2010 Pennsylvania Patient Safety Authority Annual Report, between 2008 and 2010, hospitals reduced catheter-associated urinary tract infections by 26 percent, central line-associated bloodstream infections by 44 percent, and ventilator-associated pneumonia by 27 percent.
- ▶ In May 2010, the Centers for Disease Control and Prevention (CDC) released data showing that Pennsylvania continues to be a leader in the prevention of central line-associated bloodstream infections, with Pennsylvania’s hospitals reporting infection rates below the national average. Pennsylvania’s standardized infection ratio was 0.70, significantly below the national average of 0.82.
- ▶ In June 2010, the Pennsylvania Department of Health released a report documenting its first full year of information on health care-associated infections (HAI). The report showed continued progress by Pennsylvania hospitals in reducing and preventing infections with an overall 12.5 percent reduction in hospital HAIs in 2009.

In 2008, Pennsylvania was the first state to develop and implement a payment policy with the state’s Medical Assistance agency that would reduce payments to hospitals when a Medical Assistance patient experienced a preventable serious adverse event.

Every hospital is different, just as every region across this diverse state is different. Health care needs vary depending upon the populations served, socio-economic factors, community health care priorities, challenges, and barriers.



Hospital resources are focused on how to best meet the health care needs in their community, which means that quality and patient safety initiatives will vary from hospital to hospital. In addition, hospitals may be implementing nationally-recognized best practices—hand hygiene, preventing falls, surgical care improvement checklist, care standardization such as color-coded wristbands, and population-based quality improvement efforts— but may not be part of a formal collaborative that is employing those practices.

The information in this report represents a sample of hospital quality and patient safety initiatives being implemented across Pennsylvania. Periodic public reports laudably strive to capture a snapshot in time around such issues as infections, mortality rates, and clinical outcomes. Those reports and measures are important for public education and health care provider accountability. However, those reports are based upon publicly reported data that lag behind the real-time data that hospitals use to address health care delivery. Hospitals act on real-time information to identify and address quality issues.

Policymakers need to understand that quality and patient safety efforts do not occur in a vacuum. They are impacted by health care policies, regulations, laws and standards of practice. When changes are implemented through government intervention, they can help or sometimes adversely slow quality and patient safety efforts. Everything from the financial health of a hospital—via state and federal budgetary decisions—to flexibility for staffing and clinical integration— via regulatory requirements—can impact a hospital’s ability to adopt, sustain, or expand quality and patient safety initiatives.

Every day, hospitals in Pennsylvania focus on continuing to improve individual patients’ care, as well as enhancing the overall safety and quality of hospital care. With the expertise of their infection control professionals and teams, as well as through regional, state, and national collaboratives, and in partnership with the Patient Safety Authority and the Pennsylvania Department of Health, Pennsylvania hospitals will continue to play a leadership role in health care quality and patient safety.

Geisinger Health System, Danville

The Geisinger Health System, including Geisinger Medical Center and Geisinger Wyoming Valley, has participated in the CUSP initiative since Pennsylvania was chosen as one of the first states in the project. Geisinger committed five of its intensive care units to participate, speaking loudly of Geisinger's administrative and clinical leadership's commitment for preventing infections. In 2009, Geisinger's work was presented as part of the Institute for Healthcare Improvement's National Forum. Working across a large health care system has its own set of challenges, but through CUSP, Geisinger has demonstrated progress toward reducing central line-associated bloodstream infections.

Crozer-Chester Medical Center, Upland

With its participation in the national CUSP initiative, Crozer Chester Medical Center became one of the first shock trauma intensive care units involved in the program. According to the clinical director of Crozer's shock trauma intensive care unit, the unit went through a transition identifying needed steps—including changes to line carts and resources, such as the availability of properly sized sterile gloves for providers—which made a difference in the clinical staff's ability to provide improved care for patients with central lines. Similar to other Pennsylvania CUSP participating units, Crozer Chester's team is led by physician and administrative champions who provided support for the CUSP program across the health system.

Punxsutawney Area Hospital, Punxsutawney

Demonstrating that small rural hospitals have the ability to implement programs with the same degree of success as larger systems, Punxsutawney Hospital's CUSP team provided staff support through patient-centered care. The staff in the intensive care unit are greeted daily by "Betty," a life-size poster that symbolizes each patient and serves as a reminder that providers are treating a person and not just a disease, an injury, or an infection...someone like your neighbor, your mother, or your grandmother.

Preventing Infections

ACHIEVEMENT: *Pennsylvania hospitals joined with nearly 350 hospitals nationwide in an initiative that reduced the rate of central line-associated bloodstream infections by an average of 35 percent and demonstrated that a project successful in one state could be replicated in other hospitals.*

According to the Centers for Disease Control & Prevention, central line-associated bloodstream infections put patients at serious risk and increase health care costs by about \$25,000 per patient episode. In June 2009, 14 Pennsylvania hospitals committed to enhancing their efforts to improve health care quality and safety by participating in a national initiative aimed at preventing these types of infections in 19 intensive care units. There were 10,267 patients cared for in the participating intensive care units representing a total of 84,136 patient days. These hospitals were joined in 2010 by 17 additional Pennsylvania hospitals. Collectively, the 31 Pennsylvania participating hospitals represent 38 intensive care units.

The goal of the initiative was to see if hospitals in other states could repeat the success of Michigan hospitals' intensive care unit infection reduction project in which hospitals improved teamwork and communication by using The Comprehensive Unit-based Safety Program (CUSP) developed by Peter Pronovost, M.D., Ph.D., at Johns Hopkins University.

The CUSP project provides guidance on how to build teams that use standardized clinical practice in a culture of safety to prevent and reduce central line-associated bloodstream infections in intensive care units. Hospitals collect data and information to evaluate the use of the standardized practices, educate direct caregivers on patient safety, and conduct thorough analyses when a patient in the intensive care unit experiences this type of infection.

Even at the start of the CUSP project, many of Pennsylvania's intensive care units had already demonstrated central line-associated bloodstream infection rates below the national average. Through the initiative, these hospitals were able to achieve further reductions in this type of infection, demonstrating that even among hospitals that have already achieved low central line-associated bloodstream infection rates, further improvement can be made.



HAP brought together the Pennsylvania Department of Health, the Pennsylvania Patient Safety Authority, and Quality Insights of Pennsylvania to support hospitals in the initiative, which was made possible through a grant from the federal Agency for Healthcare Research and Quality to the American Hospital Association's Health Research and Education Trust.

More recently, the project has expanded to target another type of infection, catheter-associated urinary tract infections. In January 2011, 11 Pennsylvania hospital teams have embarked on a collaborative effort to reduce this type of infection by an average of 25 percent.

CUSP is a model that can be adapted to many patient quality and safety programs. HAP continues to work with its member hospitals and health systems and other stakeholders to identify additional opportunities for its successful implementation in improving care for Pennsylvanians.

Improving the Quality of End-of-Life Care

Developed in Oregon in the 1990s, the Physician's Orders for Life Sustaining Treatment, or POLST, is a document designed for use by health care professionals through conversation

with a patient and his or her family to summarize a patient's treatment choices in the form of written medical orders about treatment goals for end-of-life care. It is designed to be used across health care settings, so that the wishes of the patient can be carried out in any setting, from hospital, to nursing home, to home health, or hospice care.

In 2010, HAP convened an advisory committee of expert representatives from the medical, legal, and insurance communities; along with state agencies, health care providers, and other stakeholder groups to educate providers about the POLST document and to gain statewide recognition for its use in improving the quality of end-of-life care. A three-part POLST educational series reached more than 300 organizations representing more than 1,500 individuals from hospitals, assisted living facilities, nursing homes, and government agencies, including emergency medical services personnel.

This statewide recognition is now being supported by regional education sessions that will help health care professionals learn how to initiate and improve end-of-life care discussions to enable patient choices, as well as how best to complete and use the POLST form.

A group of wound care, quality, and risk/legal experts from the Hospital of the University of Pennsylvania, Pennsylvania Hospital, Penn Presbyterian Medical Center, and Penn Medicine at Rittenhouse/Good Shepherd Penn Partners came together to reduce the incidence and severity of pressure ulcers throughout the health system. The collaborative began by developing a white paper to summarize evidence, practices, and recommendations for standardizing best practices across the system. Among the collaborative's main goals were to maintain a system-wide group of experts; develop prevention methods; improve assessment documentation; develop management protocols; develop education for patients, family, and staff; and improve process and outcome measures. Targets for accomplishing these goals included:

- ▶ Developing an acronym, SKINCARE, to help caregivers remember important best practices (Support surfaces, Keep repositioning, Incontinence care, Nutrition and hydration, Careful lifting, Assess risk and skin, Reduce head of bed, Elevate heels).
- ▶ Purchasing equipment proven to aid in pressure ulcer prevention and treatment, such as low air loss support surfaces and other skin care products.
- ▶ Analyzing pressure ulcer forms so that they could be standardized and incorporate best practices.
- ▶ Incorporating a “clinical nurse skin care champion” model with skin care “teams” to improve compliance and outcomes of the pressure ulcer program.
- ▶ Incorporating a “less is best” approach to layering linens, which reduce pressure and temperature.
- ▶ Developing education resources to support the involvement of patients and families in care plans.
- ▶ Developing web-based resources for staff use.

Quality improvement has been a continuous process with decreases in the incidence of hospital-acquired pressure ulcers throughout the health system. From 2009–2010, four organizations within the system—the University of Pennsylvania, Pennsylvania Hospital, Penn Presbyterian Medical Center, and Good Shepherd Rehab Hospital—experienced the following reductions in pressure ulcers: 25.5 percent, 23.2 percent, 17.4 percent and 50 percent respectively. For the three-month period between April and June 2010, the systems' overall decrease in hospital-acquired pressure ulcers was 27.8 percent.

Reducing Pressure Ulcers

ACHIEVEMENT: *Reduced the incidence of pressure ulcers, commonly known as bedsores, by 23 percent among hospitals across Pennsylvania and initiated a plan to expand the work to nursing homes across the state.*

Pressure ulcers, also known as bedsores, are among the five most common types of harm experienced by patients in health care facilities. The federal Agency for Healthcare Research and Quality estimates that nationwide, the number of hospital stays with pressure ulcers has increased, and that not only are there significant costs associated with pressure ulcers, but that they also can be attributed to longer lengths of stay, infection, and increased use of resources, including specialty beds, supplies, and providers.

In 2010, The Pennsylvania Pressure Ulcer Partnership completed a two-year statewide collaborative. HAP, working with the Healthcare Improvement Foundation, the Hospital Council of Western Pennsylvania, and ECRI, Inc., focused on working with Pennsylvania hospitals to reduce the incidence of pressure ulcers. With funding provided by Medline Industries, Inc., Capital Blue Cross, Highmark Blue Shield, and the Partnership for Patient Care (an initiative funded jointly by Independence Blue Cross and health systems in southeastern Pennsylvania), 92 Pennsylvania health care organizations (including hospitals, long-term care facilities, and home care agencies) received education, training, support, and resources needed to implement proven strategies for preventing, identifying, and reducing the incidence of pressure ulcers.

The partnership provided education to help participants develop skin care teams and experts; implement changes to processes of care that are linked to the reduction of pressure of ulcers; and evaluate adherence to those processes, as well patient outcomes. The processes of care included initial and ongoing assessments of patient risk; initial and ongoing skin inspections; early implementation of prevention strategies; and nutrition.

In 2010, more than 1,000 clinicians from more than 90 health care organizations across the state participated in educational conference calls, and more than 650 participated in regional meetings.

Of the nearly 60 health care organizations that collected data, they demonstrated success, including:



- › A 23 percent decrease in pressure ulcers developing within the hospital setting.
- › An 81 percent decrease in the rate of progression or worsening of existing pressure ulcers.
- › A greater than 93 percent improvement in completion of pressure ulcer risk assessments at the time of hospital admission.
- › A greater than 87 percent improvement in the completion of ongoing risk assessment of hospitalized patients.

Care Transitions

During early 2009, HAP, along with advocates for persons with disabilities, representatives from the Office of Long-Term Living, the Disability Rights Network of Pennsylvania, the Pennsylvania Association for the Area Agencies on Aging, and the Pennsylvania Health Law Project started the process to help Pennsylvania hospitals in supporting elderly patients and patients with disabilities to return to their homes following a hospitalization. HAP convened focus groups of hospitals across the state to discern what specifically hospitals could do to develop discharge plans that would successfully return elderly patients and patients with disabilities to their homes.

The focus groups uncovered issues that hindered the ability of patients to returning to their homes upon discharge, as well as issues contributing to readmissions. Participants identified challenges, as well as possible solutions, to help families, improve care transitions, address health insurance and housing and home arrangements, and secure physician involvement in developing successful discharge strategies. HAP cataloged all of this for hospitals to understand these challenges and possible solutions, as well as helped advocates and state agencies to understand issues they need to address, as well.

More recently, HAP has further initiated work through a Care Transitions Task Force to highlight successful strategies for Pennsylvania hospitals in improving care transitions and reducing hospital readmissions, building on the work that individual hospitals and regional collaboratives have achieved across the state.

Susquehanna Health, Williamsport

A team from Susquehanna Health participated in the Quality Curriculum for Trustees and has implemented numerous changes to successfully elevate the importance of quality and safety within their organization, including:

- › Appointing the health system board vice chairman to the role of quality & safety committee chairman.
- › Restructuring two hospitals' quality & safety committee meetings to allow a more tailored focus, as well as additional time for each of the respective hospital's quality and safety activities.
- › Reformatting the health system dashboard reports to the board to facilitate more focus on quality and safety, easier interpretation of the material, and better board follow-up.
- › Expanding the amount of board meeting time dedicated to quality and safety and ensuring this topic always precedes the finance report.
- › Reorganizing corporate staff to create a full-time vice president of quality & safety.
- › Moving quality and safety initiatives to a top-tier priority and making quality and safety a primary component the business model value proposition.
- › Modifying senior managements' incentive compensation program to reflect quality and safety as the most important single category of those items reviewed annually.

“The Board members and management staff that attended felt it was a very worthwhile program. It helped the Board members to define their roles and understand the questions they should be asking, and it also provided them an opportunity to meet the management team that they normally would not get a chance to get to know. Additionally, this opportunity provided the management team the opportunity to better explain the reasons some of the outcomes are what they are. And, conversely, it gave the management team the opportunity to meet the Board members and to understand their perspectives.”

— **Staci Covey**
President and Chief Executive Officer,
Troy Community Hospital

Strengthening Leadership in Quality

ACHIEVEMENT: *Strengthened hospital quality in Pennsylvania by providing training and resources for hospital trustees that help them to inspire even greater quality performance in their organizations.*

Hospital trustees are accountable for establishing their hospitals' missions and supporting administrative and clinical leaders in being accountable for care delivery. Because quality is recognized as fundamental to a hospital's mission of providing safe, cost-effective, and affordable health care, hospital trustees must take an active role in inspiring even greater quality performance.

Using funding provided by the Pennsylvania Patient Safety Authority, the federal Health Resources and Services Administration, and the Pennsylvania Office of Rural Health, HAP partnered with the American Hospital Association's Center for Healthcare Governance to bring a national Quality Curriculum for Trustees to hospital boards of trustees, as well as administrative and clinical leaders across Pennsylvania.

This program:

- › Enhances board members' abilities to make the clear connection between their work in the boardroom, the performance of their organization, and the well-being of patients and the community.
- › Provides tools board members need to effectively advance leadership in their hospital's quality and safety initiatives.
- › Provides flexibility to be customized based on individual organizational strategy, mission, and vision.
- › Stimulates leadership and governance goal-setting around quality and patient safety improvement, including measurement, community health, and integration into strategic decision-making.

To date, leadership teams from 19 hospitals have received the training and are implementing the program in their organizations. In addition, nine individuals from across the state have been trained as program trainers and will train additional hospital leadership teams across the state.



Improving Communications and Teamwork

In 2006, the Department of Defense, in collaboration with the federal Agency for Healthcare Research and Quality, developed an evidence-based system aimed at optimizing patient outcomes by improving communications and teamwork skills among health care professionals. The Team Strategies & Tools to Enhance Performance & Patient Safety, or Team STEPPS™, has a national core group of trainers, including staff from HAP, Quality Insights of Pennsylvania, and the Pennsylvania Patient Safety Authority that provide education to frontline caregivers on how effective team work and communication can improve quality and safety of care.

Team STEPPS™ focuses on:

- › Producing highly effective medical teams that optimize the use of information, people, and resources to achieve best clinical outcomes for patients.
- › Increasing team awareness and clarifying team roles and responsibilities.
- › Resolving conflicts and improving information sharing.
- › Eliminating barriers to quality and safety.

HAP, Quality Insights of Pennsylvania, and the Pennsylvania Patient Safety Authority master trainers have collaborated to provide Team STEPPS™ training to 250 people in Pennsylvania hospitals and will continue to incorporate it in future educational programs across the state.

- › Crozer-Chester Medical Center, Upland—“humanizes” infections by giving every infection a patient name and story, auditing central lines daily during rounding, and creating a central line insertion checklist.
- › Holy Redeemer Hospital & Medical Center, Meadowbrook—believes falls can be predicted and prevented, conducts risk assessments on admission and twice daily, meets within two hours of a fall, conducts hourly rounding, and educates staff/patients/families.
- › Lewistown Hospital, Lewistown—makes it “easier” to do the right thing by having hospital leaders stress perseverance, re-educate, collaborate, have tenacity, and revise documentation practices.
- › Main Line Health/Main Line Hospitals, Bryn Mawr—emphasizes reliable quality care, eliminating preventable harm, understanding why one does not adhere to safe practices, and views problems and solutions from a human perspective.
- › Mount Nittany Medical Center, State College—uses a special pre-operative antiseptic shower/bath for patients undergoing operative procedures and stresses broad-spectrum antimicrobial activity, using several applications.
- › Punxsutawney Area Hospital, Punxsutawney—adopts a personal approach to identifying barriers in care delivery by introducing “Betty,” a life-size poster of a former patient. Her presence encourages ICU staff to care for every individual as family.
- › St. Clair Memorial Hospital, Pittsburgh—includes affected staff, departments, and front-line workers and stresses standardized processes, automation, Toyota Lean Processes, feedback/ reinforcement, and individualized options.
- › St. Luke’s Hospital & Health Network, Bethlehem—has a Perinatal Rapid Response Team that focuses on preventing emergent situations and diverting adverse outcomes, utilizing sub-acute trigger identification, brief time-outs, and a team-determined action plan.
- › UPMC St. Margaret, Pittsburgh—reduces Chronic Obstructive Pulmonary Disease readmissions by thinking across provider lines and improving patient education and self-management, medication training, influenza vaccination, smoking cessation, and home visits.
- › WellSpan Health, York—uses the “Just Culture” system where management is accountable for system design and staff are accountable for their choices, proactively search for risks (both system and behavioral), and stress thorough and credible event investigations and a systematic evaluation of errors and outcomes.

Bringing Quality and Safety Leaders Together

ACHIEVEMENT: *Since 2005, convened symposiums for more than 1,000 hospital leaders to learn key strategies and best practices for improving patient safety and health care quality in Pennsylvania.*

In 2010, HAP convened its fourth annual statewide Patient Safety and Quality Symposium to enable hospital leaders to share key strategies for advancing a culture of safety and adoption of best practices for patient safety and health care quality in Pennsylvania’s hospitals.

Though there are several common themes that permeate successful patient safety and health care quality initiatives—such as leadership, long-term commitment, critical thinking, and trust—two dominant factors for success are:

- › Strong communication among providers, and between providers and patients—in the complex world of health care, the right communication provided in the right delivery mode (verbal vs. written) and at the appropriate level of comprehension is critical.
- › Health care leaders developing a “culture of safety” in their organizations—an atmosphere of mutual trust allows staff to talk freely about safety problems, minimizes blame, and assists in identifying the cause of problems and ways to avoid the same risks going forward.

HAP’s 2010 symposium focused on these common themes—with sessions conducted by state and national experts—to allow participants to harness the perspectives and insights from expert faculty; share and exchange ideas and lessons learned from other participants to prevent harm and improve patient care; build upon a framework of suggested methods to evaluate current patient safety and quality environments; identify priorities; and develop organizational safety measures and action plans.

The symposium provides a forum for frank discussions and sharing of strategies with proven successes using the goal of reaching large numbers of quality and patient safety professionals who can then share the information within their hospitals and adapt the practices to fit their community’s health care needs.



The Future

There is recognition among Pennsylvania's health care community that quality improvement is a continuous process. Hospitals are constantly responding to changing health care needs and processes that include various patient populations, new technologies to identify and treat disease, advances in pharmacology and medications, and ongoing challenges such as new strains of infections and reduced resources to provide care.

Now and always, Pennsylvania's hospitals are committed to continuous health care quality and patient safety improvement through participation in national, state, and regional programs. HAP and its member hospitals will continue to focus on evidence-based care and to support practices that improve quality and patient safety through improved communication, team building, and a culture of safety within all units, departments, organizations, and systems. Additional areas for 2011 and beyond include improving care transitions and preventing readmissions; incorporating patient perceptions; and improving health care worker immunization.

HAP will continue its leadership role in working with Pennsylvania hospitals and health systems, other care providers, state and national agencies, and community organizations and stakeholders to:

- › Continue to prevent and reduce health care-associated infections.
- › Improve patient perspectives of care through efforts aimed at improving communication among caregivers and engaging patients and their families in the care process.
- › Address end-of-life needs by supporting health care providers in recognizing an individual's care choices.
- › Provide safe environments of care where patients and families will be included in decisions about their health care.
- › Support health care professionals in working to the full extent of their education and training so that access to quality and safe care can be achieved in a timely and cost-effective manner.
- › Collaborate with state and federal agencies to align priorities and maximize resources in adopting quality and patient safety initiatives.

Individually, Pennsylvania hospitals also will continue to work on improving patient safety and quality of care, and collectively, through collaboration and sharing information and best practices, to truly achieve more together.



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