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Health Care Leaders Action Guide: Hospital Strategies for Reducing Preventable Mortality

March 2011

American Hospital Association

HRET
HEALTH RESEARCH & EDUCATIONAL TRUST
In Partnership with AHA

HEALTH CARE LEADER ACTION GUIDE: HOSPITAL STRATEGIES FOR REDUCING PREVENTABLE MORTALITY

Suggested Citation
Health Care Leader Action Guide: Hospital Strategies for Reducing Preventable Mortality. Health Research & Educational Trust, Chicago, IL. February 2011. Accessed at www.hpoe.org.

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Accessible at: http://www.hret.org/mortality/index.shtml

Health Care Leader Action Guide: Hospital Strategies for Reducing Preventable Mortality

Introduction

As part of its 2011-13 strategic plan, the American Hospital Association (AHA) has established "strategic performance commitments" that identify specific targets for hospital efforts to improve patient care: reduce central line-associated bloodstream infections (CLABSIs), eliminate preventable readmissions, and eliminate preventable mortality. AHA members can review more details about these commitments at http://www.aha.org/aha/about/Members-Only/strategic-plan.html?group=hospital. Through its *Hospitals in Pursuit of Excellence* initiative, the AHA will provide advocacy, resources and research to America's hospitals to help them improve quality and patient safety and achieve these commitments. The *Health Care Leader Action Guide: Hospital Strategies for Reducing Preventable Mortality* provides a broad overview of key steps that hospital and health system leaders should take in developing a strategy for reducing preventable mortality. Additional resources, covering all three commitments, can be found at www.hpoe.org.

Why Is Focusing On Preventable Mortality Important?

Hospital leaders work hard every day to provide high quality care to the patients that they treat. They do this with the goal of providing care that is free of injury and harm. Nonetheless, much has been written about the numbers of patients that die unnecessarily in our nation's hospitals. The publication of the 1999 landmark Institute of Medicine report, *To Err is Human: Building a Safer Health System*, brought attention to this problem with the estimation that between 48,000 and 98,000 deaths from medical errors occur each year in U.S. hospitals (IOM, 1999). Since then, much attention has been focused on ways to improve quality and patient safety. While most hospital deaths are not due to failures in care delivery, many deaths are preventable and this presents an important opportunity for hospital leaders to address. By collectively pursuing improvement strategies in a visible and measurable way, hospitals will be joining forces to advance a health care system that delivers the right care, to the right patient, in the right place. Hospital mortality is also an issue that easily resonates with the public.

Demonstrable improvement in this area will go a long way towards maintaining and strengthening public confidence in our nation's hospitals. It is the right thing to do.

So Where Should Hospital and Health System Leaders Begin?

There are eight steps that hospitals and health system leaders should consider when thinking about ways to reduce preventable mortality. These steps are outlined below.

- **Start by looking at your data**. Understand how your hospital compares to the national average mortality rate for each condition. Remember that there is a lag time between the provision of care and reporting on Hospital Compare, so it will not be possible to do real-time or near real-time monitoring of the condition-specific risk-adjusted 30-day mortality rate. Explore other proxy measures to monitor mortality on a more timely basis. Some hospitals monitor raw mortality and others work with a performance measurement data vendor to obtain mortality data that may be applicable for monitoring mortality for these conditions. Be aware that Hospital Compare includes mortality rates for Medicare patients only and other proxy measures of mortality may include all patients.

- **Set a specific, visible, and measurable goal with timelines for reducing mortality.** Make this a strategic priority for your organization and be persistent about communicating the goal and your progress organization-wide.

- **Decide where to focus your hospital's improvement efforts.** Begin with the obvious. For example, how does your hospital perform on care process measures, particularly the Joint Commission Accountability Measures for patients treated for heart attack, heart failure, and pneumonia? Are there opportunities for improvement?

- **Consider cross-cutting concerns.** Several fruitful areas of focus described in the literature to prevent unnecessary deaths involve such cross-cutting issues as healthcare-associated infections, delays in responding to patients with deteriorating conditions, poor communication, surgical complications, and medication and medical errors. The literature is filled with examples of interventions aimed at these problems. How is your hospital addressing these concerns?

- **Align your quality improvement activities and create a visual map.** Many hospitals are already engaged in improvement work around the cross-cutting issues described above. Creating a visual map will help to give them a sense of priority and awareness of how many of the activities they are working on fit into the organization's strategic goals.

- **Establish an organized process for reviewing mortality.** Many hospitals are implementing a structured process for monthly mortality case review. Unlike the mortality reviews of the past, these new efforts involve structured review forms, interdisciplinary committees, and identification of systemic opportunities for improvement. Nursing departments are also reviewing mortality as a way to identify system issues in care and improve nursing practice.

- **Integrate these improvement efforts into your hospital's quality improvement program and develop an action plan for implementing these strategies.** Establish improvement teams where you need them, populate these teams with caregivers affected by the improvement process, and make sure there is visible executive leadership support.

- **Be accountable.** Put this on the agenda of your board and senior leadership meetings, and actively review progress.

Source: Original, IHI 100K Lives Campaign Materials, and HRET's *A Guide to Achieving High Performance in Multi-Hospital Health Systems.*

Best Practices, Case Studies, Literature, and Resources

There are a number of resources available to help hospitals and health systems reduce preventable mortality. These resources are provided in the attached table and include the following:

- General Resources with examples of best practices and toolkits;
- Case Studies illustrating how hospitals and health systems are working to improve compliance with care processes and reduce preventable mortality;
- Use of checklists, bundled protocols, teams and communication tools;
- Examples of structured processes for mortality review; and
- Literature and articles on reducing preventable mortality.

Resources on Mortality Reduction

Program Name/Study	Summary of Findings	Citation/Link
General Resources		
Agency for Healthcare Research and Quality (AHRQ)	AHRQ is a federal agency that supports research to help people make more informed decisions and improve the quality of health care services. The AHRQ website includes literature, evidence-based practices, and online journals and primers.	http://www.ahrq.gov
Commonwealth Fund	The Commonwealth Fund supports independent research and provides grants to organizations to improve health care by achieving better access and improved quality and efficiency in our nation's health care system. The Fund's website highlights practical tools, case studies, and state strategies that focus on reducing preventable mortality.	http://www.commonwealthfund.org
Hospitals in Pursuit of Excellence (HPOE)	*Hospitals in Pursuit of Excellence* is the American Hospital Association's strategic platform to support hospital and health system efforts to accelerate performance improvement and delivery system transformation. The HPOE website includes case studies, resources, and toolkits to help hospitals improve care and reduce mortality.	http://www.hpoe.org/hpoe
Institute for Healthcare Improvement (IHI)	IHI is a not-for-profit organization working to improve health care and eliminate harm to patients. Its website includes white papers, case studies, and toolkits gathered through the testing and implementation of innovative concepts and improvement strategies.	http://www.ihi.org
National Patient Safety Foundation	The National Patient Safety Foundation's mission is to improve the safety of care provided to patients. The website offers access to a listserv, online patient safety resources, a twice-monthly annotated bibliography, toolkits for engaging patients, and additional publications.	http://www.npsf.org
National Quality Forum (NQF)	NQF is a nonprofit organization that works to build consensus on national priorities for performance improvement and endorses consensus standards for measuring and publicly reporting on performance. NQF has endorsed a list of serious reportable events and a list of safe practices for better health care.	http://www.qualityforum.org/

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Pittsburgh Regional Health Initiative	The Pittsburgh Regional Health Initiative (PRHI) is a group of medical, business, and civic leaders that have come together to improve care and reduce costs for their community. This website includes information and resources for the Perfecting Patient Care Quality Improvement Method, which has been successful at improving care in participating hospitals and health systems.	http://www.prhi.org/
Premier Healthcare Alliance	The Premier Health Care Alliance is a membership organization with the goal of improving the health of communities. Through Premier's data collection and web-based tools, member hospitals are able to compare their performance to best performers and identify strategies for improvement. Non-members are able to find toolkits and case studies on successful strategies for reducing health care associated-infections.	http://www.premierinc.com/
Why Not the Best?	The Commonwealth Fund created this website to provide hospitals and health systems with a resource for tracking performance on health care quality measures and includes data on the incidence of central line-associated bloodstream infections. It highlights successful interventions from the nation's top performing hospitals through case studies and improvement tools.	http://www.whynotthebest.org
Case Studies		
Carolinas Medical Center: Demonstrating High Quality in the Public Sector - A Commonwealth Fund Case Study	This case study describes how a public health system used multidisciplinary teams to lead efforts in improving performance in the core measures involving acute myocardial infarction, heart failure, pneumonia, and surgical care. Two specific interventions cited include engaging nursing in the quality improvement process and the implementation of practice changes to support nurses, such as use of standing orders for administration of antibiotics before surgery. Since implementation of the project, there have been fewer complications and deaths across the Medical Center's hospitals.	http://www.commonwealthfund.org/Content/Publications/Case-Studies/2010/Jul/Carolinas-Medical-Center.aspx
Committed to Safety: Ten Case Studies on Reducing Harm to Patients	This report produced by the Commonwealth Fund chronicles the strategies taken to reduce harm to patients in 10 health care organizations and the lessons learned. Specific interventions discussed include building a culture of safety, rapid response teams, multidisciplinary rounds, and preventing health care-associated infections.	http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2006/Apr/Committed-to-Safety--Ten-Case-Studies-on-Reducing-Harm-to-Patients.aspx

Program Name/Study	Summary of Findings	Citation/Link
IHI Improvement Map	The IHI Improvement Map is an interactive, web-based tool that allows the user to access best practices, resources, and case studies on key process improvements that impact patient care. The Improvement Map encompasses the work of the learning network that was created through the work of IHI's 100,000 Lives Campaign and 5 Million Lives Campaign.	http://www.ihi.org/IHI/Programs/ImprovementMap/
IHI Improvement Stories - Intensive Care	Interventions that can help reduce ICU length of stay, ICU mortality, and overall hospital mortality are detailed extensively in this section of the IHI website that focuses on improving ICU care. Examples of interventions, such as the use of bundles, rapid response teams, multidisciplinary rounds, daily goals assessment, an intensivist model, and effective glucose control are described.	http://www.ihi.org/IHI/Topics/CriticalCare/IntensiveCare/
IHI Improvement Stories-Reducing Mortality	Fourteen hospitals that participated in IHI programs submitted improvement stories summarizing their efforts to test and implement changes to reduce mortality in their organization.	http://www.ihi.org/IHI/Topics/ReducingMortality/ReducingMortalityGeneral/ImprovementStories/
IHI Improvement Stories - Reliability	Eighteen hospitals working with IHI on improving the reliability of care share their stories on the IHI website. Many of the case studies, including Hackensack University Medical Center, describe how using quality improvement techniques and multidisciplinary rounds reduced mortality rates.	http://www.ihi.org/IHI/Topics/Reliability/ReliabilityGeneral/ImprovementStories/ImprovementStoriesIndex.htm?Page=1&cbUser=1&cbIHI=1
IHI Pursuing Perfection Success Stories	IHI has compiled Pursuing Perfection success stories, which describes case studies of the hospitals participating in the IHI Pursuing Perfection Initiative.	http://www.ihi.org/IHI/Programs/StrategicInitiatives/PursuingPerfection.htm
The Joint Commission Journal on Quality and Patient Safety – Ascension Health Case Studies	A series of 10 articles chronicles one health care system's journey to achieving clinical excellence with no preventable deaths or injuries. The series describes how Ascension Health, a 67-hospital not-for-profit health care system went from vision to action and set a clinical performance agenda that focused on preventable mortality, adverse events, Joint Commission Safety Goals and Core Measures, nosocomial infections, falls, pressure ulcers, surgical complications, and perinatal safety. The series can be found on the health system's website.	http://www.ascensionhealth.org/index.php?option=com_content&view=article&id=26&Itemid=139
Lessons from the Pioneers: Reporting Healthcare-Associated Infections	This report from the National Conference of State Legislatures describes lessons learned from state public reporting initiatives for health care-associated infections, including prioritizing reporting measures, establishing a pilot phase for reporting, and the importance of flexibility when implementing reporting systems.	http://www.ncsl.org/documents/health/haireport.pdf

Program Name/Study	Summary of Findings	Citation/Link
Preventing and Treating Sepsis - HPOE Case Study	This case study describes how Piedmont Hospital in Atlanta, GA used a standardized sepsis bundle and created its own sepsis protocol for identifying patients at risk for sepsis. This allowed clinicians to identify and treat patients earlier for sepsis. By implementing these strategies, the hospital was able to reduce its mortality by 34 percent.	http://www.hpoe.org/case-studies/3280007744
Quest®: High Performing Hospitals	Premier Healthcare Alliance's Quest program includes more than 200 hospitals across the country working to reduce mortality, errors, and costs. According to Premier, "over two years, QUEST hospitals have saved 22,164 lives, an estimated $2.13 billion in costs and provided nearly 43,741 additional patients with all appropriate evidence-based care." The Quest 2010 Top Performers Booklet highlights the work of the top hospital performers and describes the most significant thing done by each hospital to reduce mortality.	http://www.premierinc.com/quality-safety/tools-services/quest/downloads/2010TopPerformers_FINAL.pdf
Reducing Hospital Standardized Mortality Rate with Early Interventions	This study describes the implementation of rapid response teams at Henry Ford Health System.	http://www.ncbi.nlm.nih.gov/pubmed/17263098
Reducing Mortality and Avoiding Preventable ICU Utilization	This study evaluated the impact of a rapid response team intervention using APR DRGs. The study found that the rate of unplanned transfers to the ICU was reduced, ICU beds were filled by more severe patients, and the hospital standardized mortality rate dropped.	http://onlinelibrary.wiley.com/doi/10.1111/j.1945-1474.2010.00084.x/abstract
Stony Brook University Medical Center - HPOE Case Study	This case study describes how Stony Brook University Medical Center successfully implemented a set of best practices for early recognition and treatment of severe sepsis and reached its goal of reducing sepsis mortality by 25 percent.	http://www.hpoe.org/case-studies/2325300708
Texas Health Harris Methodist-Cleburne: A System Approach to Surgical Improvement	This Commonwealth Fund case study focuses on how Texas Health Harris Methodist-Cleburne achieved compliance with the Surgical Care Improvement Project (SCIP) measures. The hospital set up a reporting and monitoring structure, reviewed cases concurrently, used preprinted order sets to facilitate compliance, and provided physicians with evidence-based literature as a way to engage them in the quality improvement process.	http://www.commonwealthfund.org/Content/Publications/Case-Studies/2009/Dec/Texas-Health-Harris-Methodist-Cleburne-A-System-Approach-to-Surgical-Improvement.aspx

Program Name/Study	Summary of Findings	Citation/Link
Walla Walla General Hospital: Setting Staff up for Success in Pneumonia Care	This Commonwealth Fund case study describes how Walla Walla General Hospital advanced improvements in meeting the pneumonia core measure set. The hospital established a multidisciplinary team, developed a pneumonia care order set, developed pocket cards and educated staff, integrated reminders into its clinical information system, and shared results across the system.	http://www.commonwealthfund.org/Content/Publications/Case-Studies/2010/Apr/Walla-Walla-General-Hospital-Setting-Staff-Up-for-Success-in-Pneumonia-Care.aspx
Western Baptist Hospital: Problem Solving with Pneumonia Care Performance Improvement Teams	This Commonwealth Fund case study credits physician-led performance improvement teams and integrating process improvements into staff routines for the hospital's success in achieving high performance on the pneumonia core measure set.	http://www.commonwealthfund.org/Content/Publications/Case-Studies/2010/Jan/Western-Baptist-Hospital-Problem-Solving-with-Pneumonia-Care-Performance-Improvement-Teams.aspx
Use of Checklists, Bundled Protocols, Multidisciplinary Teams and Communication Tools		
American Association for Respiratory Care	The American Association for Respiratory Care (AARC) compiled a list of resources on rapid response teams that includes links to IHI resources on establishing a rapid response team, success stories from hospitals that have implemented rapid response teams, a video describing the use and function of these teams developed by Baylor University Health Care System in Dallas, Texas, articles from AARC members, and news stories.	http://www.aarc.org/resources/rapid_response/
Association between Medical Team Training and Surgical Mortality	This study published in *JAMA* describes the impact of medical team training in the operating room (OR) on surgical mortality. The study found an 18% reduction in annual mortality in the study sites. Nationwide interventions included briefings and debriefings in the OR and use of checklists.	http://jama.ama-assn.org/content/304/15/1693.abstract
First State-Specific Healthcare-Associated Infections Summary Data Report - CDC's National Healthcare Safety Network (NHSN) January-June, 2009	These websites link to the HAIs report by state, but also include several links to each HAI intervention and guidelines to help hospital leaders lower HAIs in their hospitals.	http://www.cdc.gov/hai/statesummary.html http://www.cdc.gov/HAI/prevent/prevention.html
International Conference on Rapid Response	This website provides videos and presentation materials from five years of conferences on rapid response systems (2005-2010). Presentations	http://rapidresponsesystems.org/resources.htm

Program Name/Study	Summary of Findings	Citation/Link
Systems: Team Systems for Safety	summarize current research and educational issues on use of these teams.	
On the CUSP: Stop HAI	This is a joint program of the Health Research and Educational Trust, Johns Hopkins University, and the Michigan Health and Hospital Association's Keystone Center to stop hospital-acquired infections through the implementation of the Comprehensive Unit-Based Safety Program and specific strategies to eliminate central line-associated blood stream infections and catheter-associated urinary tract infections. The website includes manuals and toolkits, including science of safety videos and checklists for hospital boards and infection control staff.	http://www.onthecuspstophai.org
Patient Safety Primer on Rapid Response Teams	The AHRQ Patient Safety Network includes a primer on rapid response teams that summaries different models of response teams, criteria for calling teams, links to studies on evidence of effectiveness, case studies, and toolkits.	http://psnet.ahrq.gov/primer.aspx?primerID=4
Rapid Response Teams: A Bridge Over Troubled Waters	This document summarizes the history of rapid response teams in the United States and the work of VHA hospitals in implementing this improvement strategy, including lessons learned in building the team, securing physician and leadership support, and developing data collection and review tools.	https://www.vha.com/Solutions/ClinicalImprovement/Documents/rrt_final.pdf
Reducing HAIs: Effective Change Strategies	On September 27, 2010, Anthony Harris made this presentation at the AHRQ 2010 Annual Conference with talking points on discussion of important healthcare-associated infection (HAIs), science of how to decrease HAIs, epidemiological issues of HAI research, barriers to implementation and maintenance, and illustrative examples.	http://www.ahrq.gov/about/annualconf10/george_harris/harris.HTM
Regional and state initiatives	Six state projects and initiatives with links to download best practices for CLASBI and VAP. There is a link for national initiatives with interventions listed, as well as a link for hospital successes and resources.	http://premierinc.com/safety/topics/bundling/region-state.jsp http://premierinc.com/quality-safety/tools-services/safety/topics/bundling/national.jsp http://premierinc.com/quality-safety/tools-services/safety/topics/bundling/success.jsp

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Safe Surgery Saves Lives	The goal of the World Health Organization's Safe Surgery Saves Lives Challenge is to improve the safety of surgical care around the world by ensuring adherence to proven standards of care in all countries. The WHO Surgical Safety Checklist has improved compliance with standards and decreased complications from surgery in eight pilot hospitals where it was evaluated.	http://www.who.int/patientsafety/safesurgery/en/index.html http://www.nejm.org/doi/full/10.1056/NEJMsa0810119
SBAR	SBAR – Situation, Background, Assessment and Recommendation - is a standardized method of communication originally developed by the military and later adapted for use in health care settings as part of the crew resource management curriculum. SBAR is a technique that helps facilitate clear, concise communication between caregivers about a patient's condition during times of transition as well as during critical situations.	http://psnet.ahrq.gov/content.aspx?taxonomyID=680
Surgical Care and Outcomes Assessment Program (SCOAP)	In January 2009, a coalition of major healthcare stakeholders in Washington state came together to create the SCOAP Surgical Checklist Initiative. The Surgical Care and Outcomes Assessment Program (SCOAP) is a unique, clinician-led, voluntary collaborative that links hospitals and surgeons with clinicians from across the state to increase the use of best practices in surgical care. SCOAP's goal is to provide the kind of surveillance of procedures and response to negative outcomes that exists in the world of aviation.	http://www.scoap.org/checklist/ http://www.scoap.org/downloads/SCOAP-Surgical-Checklist_v3_4.pdf
Surgical Continuum of Care (SCoC) model	The SCoC model is a patient-centered, outcomes-driven, value-based approach for hospital-wide surgical patient safety. The principles of this value paradigm are adaptable to other hospitals as demonstrated in a longitudinal study in three hospital systems. The initial experience of SCoC suggests that this model will have benefit beyond surgical hospital cohorts.	http://www.ncbi.nlm.nih.gov/pubmed/20739849
TeamSTEPPS	TeamSTEPPS is a program originally developed by the Department of Defense that incorporates the principles of teamwork training in the delivery of patient care with the goal of strengthening culture and improving patient care. TeamSTEPPS focuses on improving communication and can be implemented in a variety of care settings, such as the emergency department, intensive care units, and labor and delivery.	http://teamstepps.ahrq.gov/abouttoolsmaterials.htm

Program Name/Study	Summary of Findings	Citation/Link
Structured Processes for Mortality Review		
Aiming for Zero Preventable Deaths: Using Death Reviews to Improve Care and Reduce Harm	This article describes how a seven-hospital tertiary referral system in Canada implemented an interdisciplinary death and adverse event review process that included use of the IHI Global Trigger tool and Move Your Dot methodology.	http://www.ncbi.nlm.nih.gov/pubmed/20959735
Hospital Revamps Morbidity and Mortality Conference to Focus on System-Wide Improvement, Leading to Better Identification and Addressing of Quality Problems	Monroe Carell, Jr. Children's Hospital at Vanderbilt University transformed its Morbidity and Mortality Rounds that were educational in focus and geared towards medical residents into multidisciplinary quality improvement forums. Examples of changes that were implemented included expanding participation to include non-physician participants and implementing a process for taking action on identified problems.	http://www.innovations.ahrq.gov/content.aspx?id=2219
IHI Global Trigger Tool	The Global Trigger Tool is a structured chart review method for identifying patients who experienced an adverse event during their hospital stay. The Tool also attempts to identify whether the adverse event was due to a complication of care or the natural course of the patient's illness. The Trigger Tool Implementation Kit can be found on the IHI website.	http://www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/IHIGlobalTriggerToolforMeasuringAEs.htm
Model Principles for Medical Peer Review of Physicians for Health Care Facilities	This document developed by the Massachusetts Medical Society includes model principles for medical peer review in hospital settings and emphasizes a focus on systems as contributing factors, transparency of triggers used to identify cases for review, and the process that should be used in the event that a disciplinary hearing is required.	http://www.massmed.org/AM/Template.cfm?Section=Legal_and_Regulathttp://www.innovations.ahrq.gov/content.aspx?id=2219ory&TEMPLATE=/CM/HTMLDisplay.cfm&ContentID=36801
Move Your Dot: Measuring, Evaluating, and Reducing Hospital Mortality Rates (Part I)	This IHI white paper describes an analytical tool that helps hospitals analyze their mortality rates. Hospitals review medical records of hospital deaths and categorize them in a 2x2 matrix based on whether the patient was admitted to an ICU or regular floor and whether the patient was on comfort measures only or not. The improvement focus depends on which box in the matrix the hospital death falls. Patients admitted to Intensive Care Units for comfort measures only who die may reflect overuse of ICUs and the need to better identify and care for patients at the end-of-life. Patients admitted to ICUs who die may reflect the need for hospitals to consider implementing known safety techniques, such as ventilator bundling and multidisciplinary rounds.	http://www.ihi.org/IHI/Results/WhitePapers/MoveYourDotMeasuringEvaluatingandReducingHospitalMortalityRates.htm

Program Name/Study	Summary of Findings	Citation/Link
The Process of Peer Review in US Hospitals	This study describes the results of a survey of peer review programs in U.S. hospitals. The study found that programs vary in structure, process, and governance and identified factors positively perceived by physicians as having an impact on quality. These factors include such things as recognition of excellence, standardization of process and governance, and integration of peer review programs with performance improvement.	http://www.turner-white.com/jc/abstract_new09.php?PubCode=jcom_oct09_peer
Reducing Mortality Rates (Part 2)	This IHI White Paper describes how eight pilot hospitals tested strategies for reducing mortality. After first categorizing 50 patient deaths into the 2x2 matrix described in the IHI white paper, *Move Your Dot: Measuring, Evaluating, and Reducing Hospital Mortality Rates (Part I)*, further review of the medical record was conducted using the IHI Global Trigger Tool. Cases were then validated through physician review and different change ideas were tested and implemented depending upon which box in the matrix the case was categorized. Case studies of the following three hospitals are described: Multidisciplinary Rounds at OSF St. Anthony Medical Center; Ventilator Bundle at Virginia Mason Medical Center; and Rapid Response Teams at Borgess Medical Center. Data from the three hospitals showed that implementation of these strategies could reduce mortality both hospital-wide and condition-specific.	http://www.ihi.org/IHI/Results/WhitePapers/ReducingHospitalMortalityRatesPart2.htm
Literature and Articles on Reducing Preventable Mortality		
Getting Boards on Board: Engaging Governing Boards in Quality and Safety	This article outlines the responsibilities of hospital and health system boards to make improving health care quality a top priority. It discusses six interventions that boards can do to drive improvement: setting aims, getting data and hearing patient stories, establishing and monitoring system-level "big dot" measures, changing the environment and promoting culture change, learning and upholding executive accountability.	http://198.171.49.252/trustee/Getting%20Boards%20on%20Board%20It%20Comm%20J%20Apr08.pdf
Racial and Ethnic Differences in the Treatment of Acute Myocardial Infarction: Findings from the Get With The Guidelines-Coronary Artery Disease Program	This study looked at patients from 443 hospitals participating in the American Heart Association's Get With the Guidelines Program and found that from 2002 to 2007, the overall rates of "defect-free care" increased. While a gap in defect-free care was observed for blacks in the beginning of the study, this gap disappeared by the end of the study.	http://circ.ahajournals.org/cgi/content/abstract/121/21/2294?view=short&fp=2294&vol=121&lookupType=volpage

Program Name/Study	Summary of Findings	Citation/Link
Reduction in Acute Myocardial Infarction Mortality in the United States - Risk Standardized Mortality Rates from 1995-2006	The study attempts to evaluate the hospital 30-day risk-standardized mortality rates (RSMRs) for those patients that have been discharged with acute myocardial infarction (AMI). The results indicate that there was a significant decrease in RSMRs for patients with AMI during the time period in question. The authors suggest that while a conclusion cannot be reached with certainty, the drop in mortality may be due in part to the quality improvement strategies implemented in recent years.	http://jama.ama-assn.org/content/302/7/767.abstract
Study Finds Variation in Mortality Rate for AMI	Wide variations in mortality rates for AMI were found in a study published in the *American Journal of Cardiology*, ranging from 11% to 26%. Study authors found that only 17% of mortality rates could be explained by hospital features and concluded that better understanding of the role that communication and coordination play in reducing mortality may be the next step in explaining the remaining variation.	http://www.ajconline.org/article/S0002-9149(10)01197-5/abstract
Understanding and Improving Mortality in Academic Medical Centers	This article describes the factors contributing to preventable mortality in academic medical centers, including delays in responding to deteriorating patients, suboptimal critical care, hospital-acquired infections, postoperative complications, medical errors, and availability of hospice care. Hospitals that had the greatest improvement in mortality were the hospitals with broad engagement among hospital and physician leaders.	http://journals.lww.com/academicmedicine/Fulltext/2009/12000/Understanding_and_Improving_Inpatient_Mortality_in.11.aspx
Variation in Hospital Mortality Associated with Inpatient Surgery	In addition to efforts aimed at avoiding complications in the first place, reducing mortality associated with inpatient surgery will require greater attention to the timely recognition and management of complications once they occur.	http://www.nejm.org/doi/full/10.1056/NEJMsa0903048#t=articleTop