The Hospital Value-based Purchasing Program.

What the Internist needs to know.

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Speaker Disclosure

I have no relevant financial relationships or affiliations to disclose.

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Objectives

- Discuss the background of the hospital value-based purchasing program.
- Articulate the differences in the Hospital Value-based Purchasing Program (HVBP), Hospital Readmissions Reduction Program (HRRP), and the Hospital-acquired Condition (HAC) Program that impact hospital payment.
- 3. Understand controversies related to risk-adjustment related to sociodemographic patient characteristics.



A case.....

John, a 69-year-old Medicare patient was admitted for elective CABG surgery following a recent 5-day hospitalization which included two days in the ICU for an episode of unstable angina. John is a Type 2 diabetic patient (101.4 kg, BMI 32 kg/m²) with a history of intermittently treated hypertension.



A case.....

- Surgical episode
 - Not prescreened for S. aureus colonization
 - Received cefazolin 1 gram IV for surgical prophylaxis but not started prior to incision – no intraoperative dosing
 - Postoperative blood sugars consistently documented in excess of 300 mg/dL for the first 48 hours after surgery
- On the 7th hospital day, the sternal incision dehisced and the patient developed MRSA bacteremia



Background on Value-based Purchasing – why do we have it?



There are a lot of reasons.....

- Costs of care
 - Current system rewards volume of care over quality or outcomes of care
 - Rate of growth in healthcare spending is not sustainable
- Disconnect between research and translation into bedside care
 - Historically, there were no incentives to adopt evidence-based care into practice
 - Multiple studies have consistently shown opportunities to improve care and unexplained variation in practices



It takes too long to get evidence into practice!

- The passive strategy of guideline publication and dissemination does not effectively change clinical practice
- The time lag between publication of evidence and incorporation into care at the bedside is very long



ASHP REPORT

Joint guideline of the American Society of Healthsystem Pharmacists, Infectious Diseases Society of America, the Society for Healthcare Epidemiology of America, and the Surgical Infection Society.

Clinical practice guidelines for antimicrobial prophylaxis in surgery

DALE W. BRATZLER, E. PATCHEN DELLINGER, KEITH M. OLSEN, TRISH M. PERL, PAUL G. AUWAERTER, MAUREEN K. BOLON, DOUGLAS N. FISH, LENA M. NAPOLITANO, ROBERT G. SAWYER, DOUGLAS SLAIN, JAMES P. STEINBERG, AND ROBERT A. WEINSTEIN

Am J Health-Syst Pharm. 2013; 70:195-283

- 89 pages long; 1075 references
- In reality, most physicians will never take the time (or have the time) to read the entire guideline
- Even if they did, this only covers one aspect of preventing surgical infections.



Consumers demanding transparency!

- Consumer groups are demanding transparency – particularly about complications of care
- When consumer groups have a consistent message, legislators respond...
 - The Medicare Program and other agencies then are required to <u>adopt</u> standardized measures that reflect the quality of medical practice



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WORKING PAPER

An Environmental Scan of Pay for Performance in the Hospital Setting: Final Report

CHERYL L.DAMBERG, MELONY SORBERO, ATEEV MEHROTRA, STEPHANIE TELEKI, SUSAN LOVEJOY, AND LILY BRADLEY

WR-474-ASPE/CMS

July 2007

Prepared for the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services

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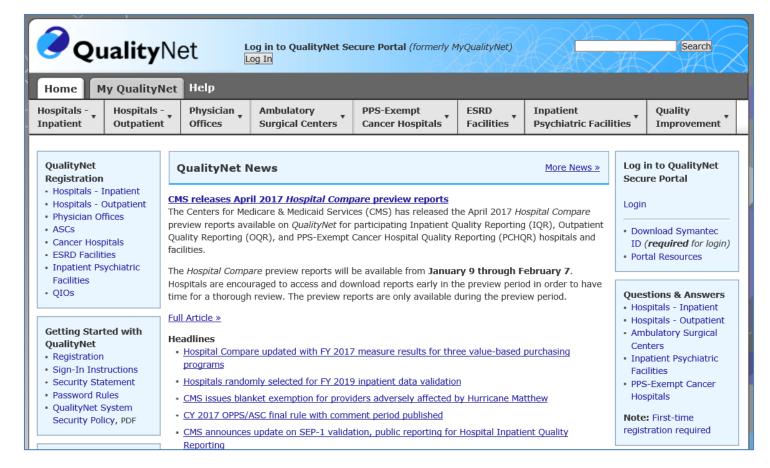
The 2005 Deficit Reduction Act required then Secretary of HHS, Mike Leavitt to submit to Congress a plan for value-based purchasing. U.S. Department of Health and Human Services

REPORT TO CONGRESS: Plan to Implement a Medicare Hospital Value-Based Purchasing Program

November 21, 2007







Payment programs that impact hospitals:

- Hospital Value-Based Purchasing Program
- Hospital-Acquired Condition (HAC) Reduction Program
- Hospital Readmissions Reduction Program



Five Categories of Required Measures Hospital IQR Program

- Chart abstracted actual review of the medical record
- Patient survey data (HCAHPS)
- 3. Infection data reported to the CDC's National Healthcare Safety Network (NHSN)
- 4. Claims-based measures (mortality, readmission, AHRQ measures)
- 5. Cost Efficiency Measures
- 6. Structural Measures

"Outcome measures are priority areas for the hospital IQR program."



Hospital Value-Based Purchasing Program

Clinical Care Domain Subdomain **Measure Description** Measure TD* AMI-7a Fibrinolytic Therapy Received Within 30 Minutes of Hospital Process Arrival IMM-2 Influenza Immunization Process Process PC-1 Elective Delivery Prior to 39 Completed Weeks Gestation Acute Myocardial Infarction (AMI) 30-Day Mortality Rate Outcomes MORT-30-AMI Outcomes MORT-30-HF Heart Failure (HF) 30-Day Mortality Rate Outcomes MORT-30 PN Pneumonia (PN) 30-Day Mortality Rate

HCAHPS Patient Satisfaction Survey

Medicare Spending Per Beneficiary



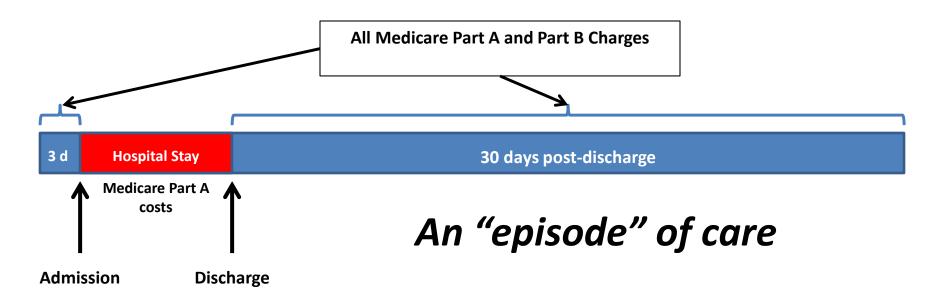
Safety Domain Measure ID** **Measure Description** AHRQ Composite (PSI-90) Complication/Patient safety for selected indicators (Composite) CAUTI Catheter-Associated Urinary Tract Infection CLABSI Central Line-Associated Blood Stream Infection CDI Clostridium difficile Infection MRSA Methicillin-Resistant Staphylococcus aureus SSI - Colon Surgery SSI SSI - Abdominal Hysterectomy

HCAHPS Domains

- Communication with Nurses
- Communication with Doctors
- Responsiveness of Hospital Staff
- Pain Management
- Communication about Medicines
- Cleanliness and Quietness of Hospital Environment
- Discharge Information
- Overall Rating of Hospital



Cost Efficiency Measure Medicare Spending per Beneficiary



Adjusted for beneficiary age, severity of illness, geographic payment differences such as wage index and geographic practice cost differences, and for Medicare payment differences resulting from hospital-specific rates, IME and DSH payments.

Ratio of individual Medicare spending per beneficiary amount divided by the median Medicare spending per beneficiary amount across all groups.



Patient Safety Indicators 90 (PSI 90)

- PSI 03 Pressure Ulcer Rate
- PSI 06 latrogenic Pneumothorax Rate
- PSI 07 Central Venous Catheter-Related Blood Stream Infection Rate
- PSI 08 Postoperative Hip Fracture Rate
- PSI 09 Perioperative Hemorrhage or Hematoma Rate
- PSI 10 Postoperative Physiologic and Metabolic Derangement Rate
- PSI 11 Postoperative Respiratory Failure Rate
- PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate
- PSI 13 Postoperative Sepsis Rate
- PSI 14 Postoperative Wound Dehiscence Rate
- PSI 15 Accidental Puncture or Laceration Rate



Scoring for HVBP Program

Domain	Weight
Clinical Care	25%
Patient- and Caregiver-Centered Experience of Care/Care Coordination	25%
Safety	25%
Efficiency and Cost Reduction	25%

Hospital Value-Based Purchasing (HVBP) will be funded through a reduction from participating hospitals' Diagnosis-Related Group (DRG) payments for the applicable fiscal year. The money that is withheld will be redistributed to hospitals based on their Total Performance Scores (TPS), as required by statute. A hospital may earn back a value-based incentive payment percentage that is less than, equal to, or more than the applicable reduction for that program year.



HVBP Program Payment Withholds

 "Base operating DRG payment amount" withholds:

$$-2013 - 1\%$$

$$-2014 - 1.25\%$$

$$-2015 - 1.5\%$$

$$-2016 - 1.75\%$$



To obtain the available funds, the Secretary of HHS is to reduce the base operating DRG payment amount for a hospital for each discharge in a fiscal year (beginning with fiscal year 2013) by an amount equal to the applicable percent of the base operating DRG payment amount for the discharge for the hospital for such fiscal year. The Secretary shall make such reductions for all hospitals in the fiscal year involved, regardless of whether or not the hospital has been determined by the Secretary to have earned a value-based incentive payment.

Hospital Acquired Conditions (HACs) *Two Programs*



Hospital-Acquired Conditions

(Present on Admission Indicator)

On February 8, 2006, the President signed the Deficit Reduction Act (DRA) of 2005. Section 5001(c) of DRA requires the Secretary to identify conditions that are:

- a) high cost or high volume or both,
- b) result in the assignment of a case to a DRG that has a higher payment when present as a secondary diagnosis, and
- c) could <u>reasonably have been prevented</u> through the application of evidence-based guidelines.



Hospital-Acquired Conditions

(Only paid for if "Present on Admission")

- Foreign Object Retained After Surgery
- Air Embolism
- Blood Incompatibility
- Stage III and IV Pressure Ulcers
- Falls and Trauma
 - Fractures
 - Dislocations
 - Intracranial Injuries
 - Crushing Injuries
 - Burn
 - Other Injuries
- Manifestations of Poor Glycemic Control
 - Diabetic Ketoacidosis
 - Nonketotic Hyperosmolar Coma
 - Hypoglycemic Coma
 - Secondary Diabetes with Ketoacidosis
 - Secondary Diabetes with Hyperosmolarity
- Catheter-Associated Urinary Tract Infection (UTI)
- Vascular Catheter-Associated Infection

- Surgical Site Infection, Mediastinitis, Following Coronary Artery Bypass Graft (CABG):
 - Surgical Site Infection Following Bariatric Surgery for Obesity
 - Laparoscopic Gastric Bypass
 - Gastroenterostomy
 - Laparoscopic Gastric Restrictive Surgery
 - Surgical Site Infection Following Certain
 Orthopedic Procedures
 - Spine, Neck, Shoulder, Elbow
 - Surgical Site Infection Following Cardiac Implantable Electronic Device (CIED)
- Deep Vein Thrombosis (DVT)/Pulmonary
 Embolism (PE) Following Certain Orthopedic
 Procedures:
 - Total Knee or Hip Replacement
- Iatrogenic Pneumothorax with Venous Catheterization



Hospital-Acquired Condition Reduction Program

Under the HAC Reduction Program, hospitals that rank in the lowest-performing quartile of hospital-acquired conditions will be paid 99 percent of what otherwise would have been paid under IPPS, beginning in FY 2015.

1% of all IPPS Payments at Risk if in the lowest quartile of performance



Hospital Acquired Condition Reduction Program

- Domain 1 Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicator (PSI) measure:
 - PSI 90 Composite
- Domain 2 National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures:
 - Central Line-Associated Bloodstream Infection (CLABSI)
 - Catheter-Associated Urinary Tract Infection (CAUTI)
 - Surgical Site Infection (SSI) colon and hysterectomy
 - Methicillin-resistant Staphylococcus aureus (MRSA) bacteremia
 - Clostridium difficile Infection (CDI)

For FY 2017, Domain 1 is weighted at 15 percent and Domain 2 is weighted at 85 percent of the Total HAC Score



Hospital Readmissions Reduction Program

- Payment implications (percentage of base operating DRG payments)
 - FY 2013 1%
 - FY 2014 2%
 - FY 2015 and beyond 3%
- Conditions (Risk-standardized Readmission Rates)
 - AMI
 - HF
 - Pneumonia
 - COPD
 - THA/TKA
 - CABG

The Excess Readmission Ratio (ERR) is calculated as the ratio of predicted-to-expected readmissions for each measure included in the Hospital Readmissions Reduction Program



So for our case......

- Payment to the hospital could be affected by:
 - HVBP program MRSA bacteremia and the PSI-90 composite (and possibly HCAHPS survey score)
 - HAC Reduction Program
 - No payment for secondary diagnosis of mediastinitis under the not present-on-admission penalty
 - HAC score both the PSI-90 and MRSA bacteremia
 - Hospital Readmissions Reduction Program
 - Only if patient was readmitted to the hospital within 30-days of discharge



How much is at stake in 2017?

Hospital value-based Purchasing Program – 2%

- Hospital-acquired Conditions
 - 1% of all Medicare payments (including IME,DSH)
 - Not paid for secondary diagnosis if it occurred during index admission

Hospital Readmission Reduction Program – 3%



In total, hospitals will lose about \$430 million





Medicare said the penalties are expected to total \$528 million





The number of hospitals whose payments were docked grew from 1,236 in 2016 to 1,343 in 2017







"....aims to support better and more efficient care for beneficiaries....."

The proposed rule for the CJR model was published on July 9, 2015, with the comment period ending September 8, 2015. After reviewing nearly 400 comments from the public on the proposed rule, several major changes were made from the proposed rule, including changing the model start date to April 1, 2016. The final rule was placed on display on November 16, 2015 and can be viewed at the Federal Register.

Background

Hip and knee replacements are the most common inpatient surgery for Medicare beneficiaries and can require lengthy recovery and rehabilitation periods. In 2014, there were more than 400,000 procedures, costing more than \$7 billion for the hospitalizations alone. Despite the high volume of these surgeries, quality and costs of care for these hip and knee replacement surgeries still vary greatly among providers.

wnestones & opdates

Mar 31, 2016

Updated: Spanish language beneficiary notification letters posted

Feb 24, 2016

Updated: Hospital list posted

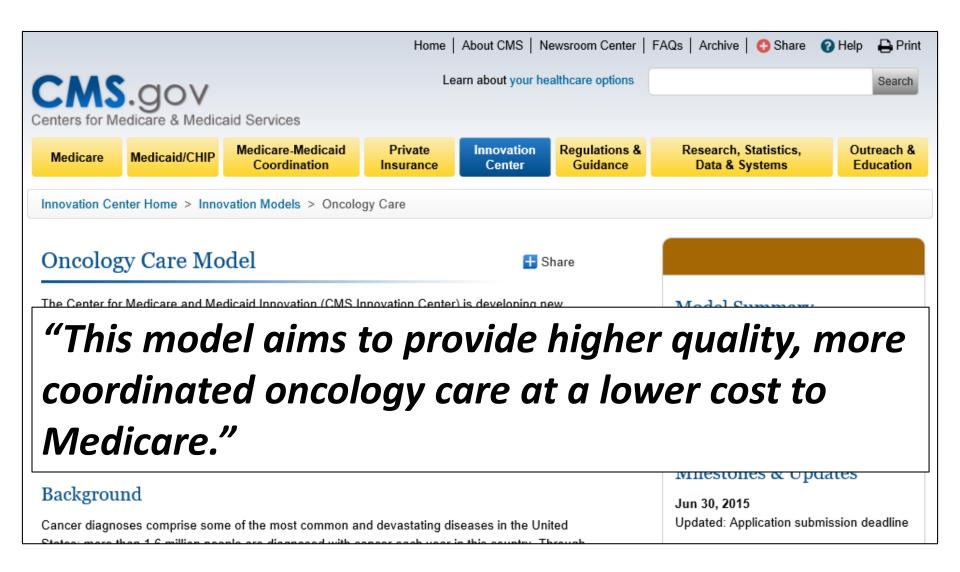
Feb 10, 2016

Updated: Hospital list posted

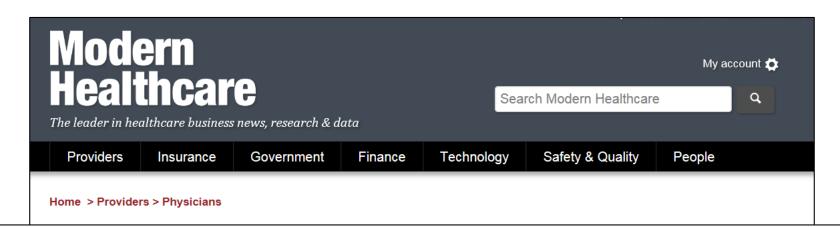
Jan 04, 2016

Undated: Hospital list posted









Bundled payment for cardiac bypass surgery and heart attack care....



RELATED CONTENT

Knee and hip bundled-payment challenge is about to start

Bundling risk: New demo program shows CMS' eagerness to ditch fee for service

A new mandatory program the CMS proposed Monday would make hospitals in 98 markets financially accountable for the cost and quality of all care associated with bypass surgery and heart attacks. "We think it's important to keep pushing forward on delivery system reform," Dr. Patrick Conway, acting principal deputy administrator and chief medical officer for the CMS, told reporters in a call. "We think this is a huge opportunity."In 2014, hospitalizations for heart attacks for more than 200,000 beneficiaries cost Medicare over \$6 billion, the CMS said. Yet for every treatment, the cost could vary by as much as 50%, the agency said. The CMS is seeking comment on the five-year demonstration, which would take effect July 1, 2017, in 98 randomly selected metropolitan areas.



Do these programs make a difference?



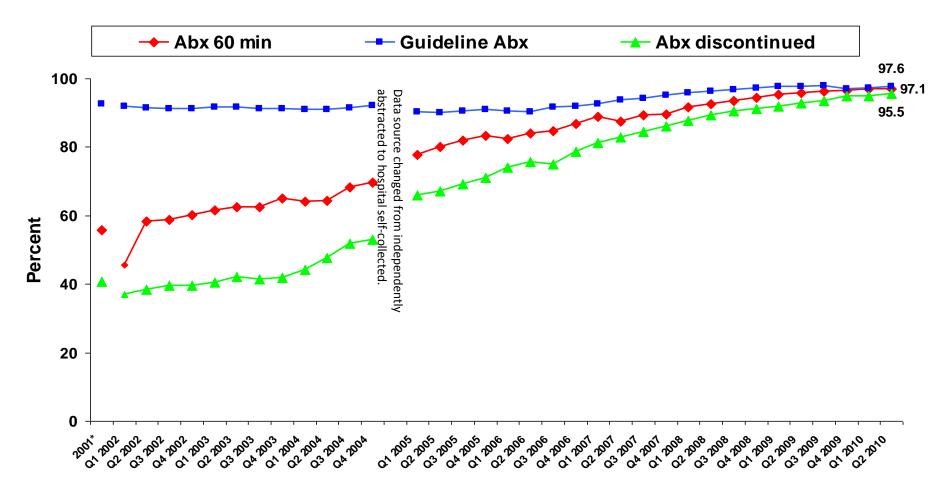
Accountability works – at least for measures of process of care!

 There is good evidence now that when you spotlight performance on nationally standardized measures of quality (reporting them in the public domain), guideline adherence improves and performance improves rapidly!

Public reporting and payment incentives change the way physicians and hospitals provide care and speeds adoption of evidence-based guidelines.

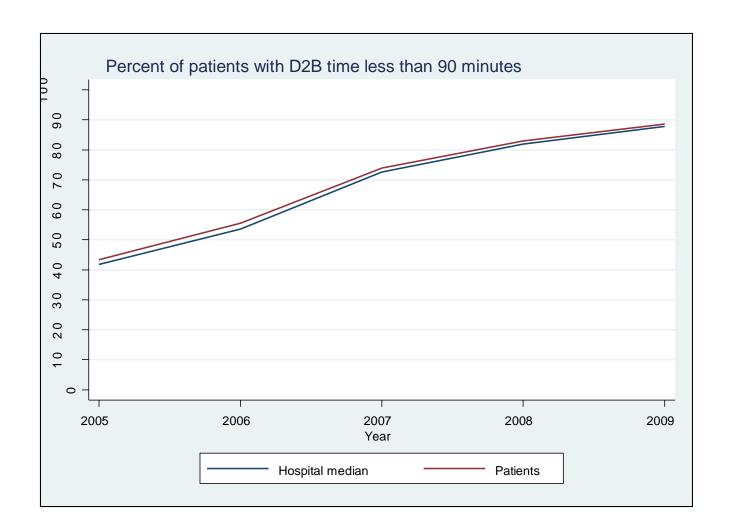


Measurement and Reporting Drive Improvement!





AMI Patients – D2B





130 Black 118 White 120 108 110 100 100 90 93 D2B Time, Median, min 80 70 60 50 40 30 20 10 0 2004-2005 2005-2006 2006-2007 2007-2008 Year

Figure. Trends in door-to-balloon (D2B) times from 2004 to 2008 stratified by race.

Performance improvement appears to reduce disparities!

"Our analysis suggests that racial disparities in D2B times have significantly narrowed over time and that improving national quality of care appears to have not only improved overall performance but also diminished disparities."

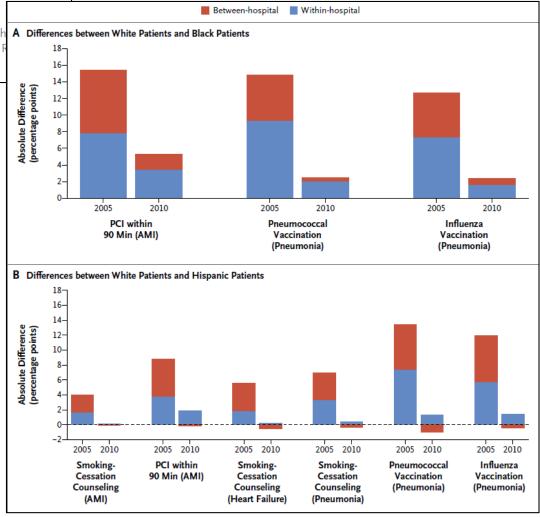


SPECIAL ARTICLE

Quality and Equity of Care in U.S. Hospitals

Amal N. Trivedi, M.D., M.P.H., Wato Nsa, M.D., Ph.D., Leslie R.M. Hausmann, Ph.D., Jonathan S. Lee, M.D., Allen Ma, Ph Dale W. Bratzler, D.O., M.P.H., Maria K. Mor, Ph.D., Kristie Baus, I Fiona Larbi, R.N., and Michael J. Fine, M.D.

"Improved performance on quality measures for white, black, and Hispanic adults hospitalized for acute myocardial infarction, heart failure, or pneumonia was accompanied by increased racial and ethnic equity in performance rates both within and among U.S. hospitals."





But, does VBP accelerate improvements in outcomes of care and what are the pitfalls?



But, does it work?

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Public Reporting and Pay for Performance in Hospital Quality Improvement

Peter K. Lindenauer, M.D., M.Sc., Denise Remus, Ph.D., R.N., Sheila Roman, M.D., M.P.H., Michael B. Rothberg, M.D., M.P.H., Evan M. Benjamin, M.D., Allen Ma, Ph.D., and Dale W. Bratzler, D.O., M.P.H.

Pay for Performance, Quality of Care, and Outcomes in Acute Myocardial Infarction

Seth W. Clickman, MD, MBA
Fang-Shu Ou, MS
Elizabeth R. DeLong, PhD
Matthew T. Roe, MD, MHS
Barbara L. Lytle, MS
Jyotsna Mulgund, MS
John S. Rumsfeld, MD, PhD
W. Brian Gibler, MD
E. Magnus Ohman, MD
Kevin A. Schulman, MD
Eric D. Peterson, MD, MPH

Context Pay for performance has been promoted as a tool for improving quality of care. In 2003, the Centers for Medicare & Medicaid Services (CMS) launched the largest pay-for-performance pilot project to date in the United States, including indicators for acute myocardial infarction.

Objective To determine if pay for performance was associated with either improved processes of care and outcomes or unintended consequences for acute myocardial infarction at hospitals participating in the CMS pilot project.

Design, Setting, and Participants An observational, patient-level analysis of 105 383 patients with acute non–ST-segment elevation myocardial infarction enrolled in the Can Rapid Risk Stratification of Unstable Angina Patients Suppress Adverse Outcomes With Early Implementation of the American College of Cardiology/American Heart Association (ACC/AHA) Guidelines (CRUSADE) national quality-improvement initiative. Patients were treated between July 1, 2003, and June 30, 2006, at 54 hospitals in the CMS program and 446 control hospitals.

Lain Outcome Magazuros. The differences in the use of ACC/AUA class Lauide

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Effect of Nonpayment for Preventable Infections in U.S. Hospitals

Grace M. Lee, M.D., M.P.H., Ken Kleinman, Sc.D., Stephen B. Soumerai, Sc.D., Alison Tse, Sc.D., David Cole, B.M., Scott K. Fridkin, M.D., Teresa Horan, M.P.H., Richard Platt, M.D., Charlene Gay, B.A., William Kassler, M.D., M.P.H., Donald A. Goldmann, M.D., John Jernigan, M.D., and Ashish K. Jha, M.D., M.P.H.

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

The Long-Term Effect of Premier Pay for Performance on Patient Outcomes

Ashish K. Jha, M.D., M.P.H., Karen E. Joynt, M.D., M.P.H., E. John Orav, Ph.D., and Arnold M. Epstein, M.D.



The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Public Reporting and Pay for Performance in Hospital Quality Improvement

Peter K. Lindenauer, M.D., M.Sc., Denise Remus, Ph.D., R.N., Sheila Roman, M.D., M.P.H., Michael B. Rothberg, M.D., M.P.H., Evan M. Benjamin, M.D., Allen Ma, Ph.D., and Dale W. Bratzler, D.O., M.P.H.

ABSTRACT



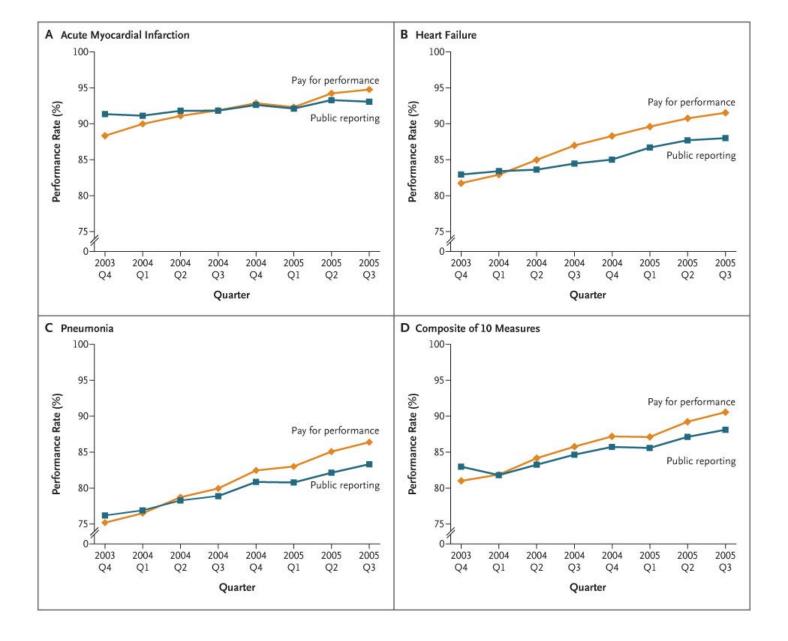
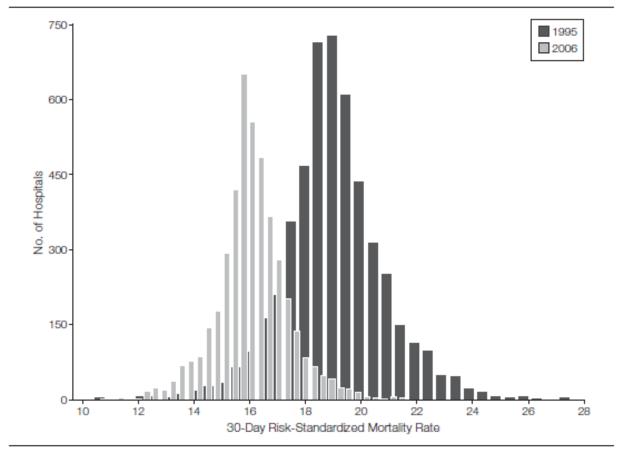




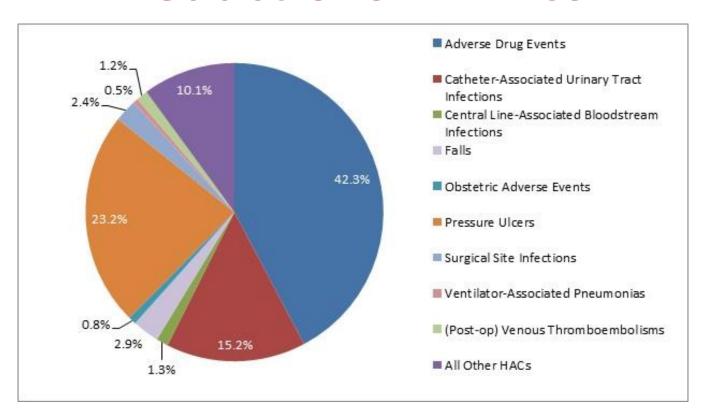
Figure. Change in Acute Myocardial Infarction 30-Day All-Cause Risk-Standardized Mortality From 1995 to 2006



Mean risk-standardized mortality rates were 18.8% (SD, 2.1%; range, 10.4%-27.5%) in 1995 and 15.8% (SD, 1.7%; range, 10.6%-21.6%) in 2006. The size of each bin reflects the number of hospitals that filled in a particular interval of risk-standardized mortality rate as well as the distributions (ranges) of rates in 1995 and 2006. Because the number of bins in each year is the same (n=35), the 1995 bin is wider than the 2006 bin to reflect the change in risk-standardized mortality rate distributions.



Reductions in HACs



Preliminary 2015 estimates indicate that more than 37,000 fewer patients died in hospitals in 2015 as a result of the decline in HACs compared with the number of deaths related to HACs that would have occurred if the rate of HACs had remained steady at the 2010 level.

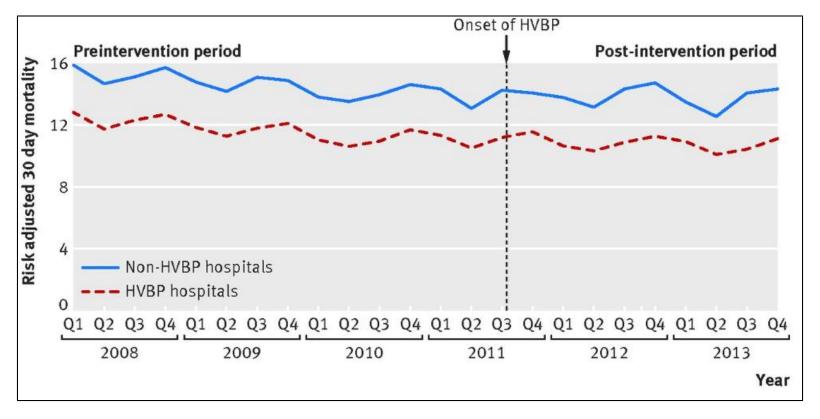






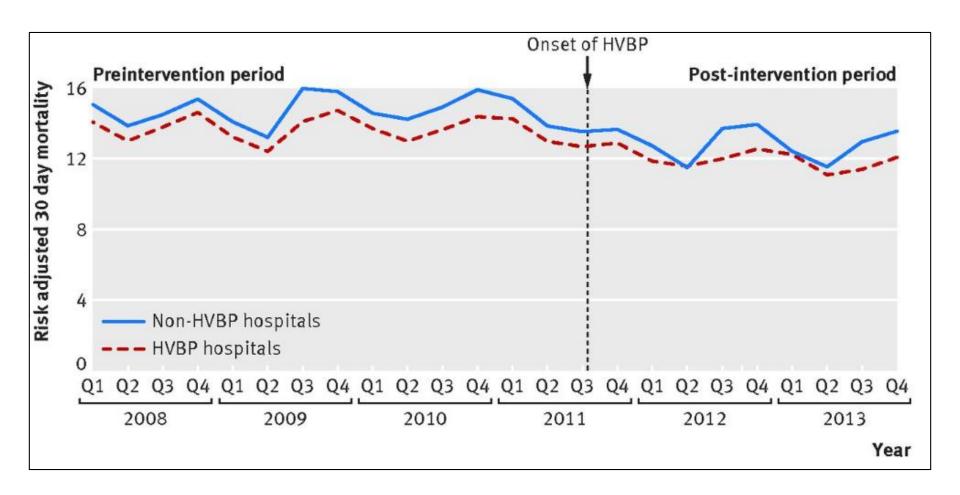
Association between the Value-Based Purchasing pay for performance program and patient mortality in US hospitals: observational study

Jose F Figueroa,^{1,3} Yusuke Tsugawa,¹ Jie Zheng,¹ E John Orav,^{2,3} Ashish K Jha^{1,4}





Impact for Targeted Conditions





Findings

"Three years after the introduction of the US national pay for performance program—Hospital Value-Based Purchasing (HVBP)—we find no evidence that it has led to better patient outcomes......

......Even among hospitals with worst patient mortality at baseline, a group of hospitals that had arguably more motivation to improve to avoid penalties, we found no evidence that HVBP drove improvement beyond secular trends observed in a matched group of non-HVBP hospitals."



Are there pitfalls?

- Concerns about unintended consequences
 - Direct harm
 - Doing things that are otherwise not necessary or even harmful in the name of high performance
 - Indirect harm
 - Much more likely
 - Diversion of resources
 - Incomplete reporting
 - "Teaching to the test"



What about sociodemographics?

HOSPITAL FINANCING

By Susannah M. Bernheim, Craig S. Parzynski, Leora Horwitz, Zhenqiu Lin, Michael J. Araas, Joseph S. Ross, Elizabeth E. Drye, Lisa G. Suter, Sharon-Lise T. Normand, and Harlan M. Krumholz

Accounting For Patients' Socioeconomic Status Does Not Change Hospital Readmission Rates

ABSTRACT There is an active public debate about whether patients' socioeconomic status should be included in the readmission measures used to determine penalties in Medicare's Hospital Readmissions

Bernheim SM, et al. *Health Aff*. 2016 Aug 1;35(8):1461-70.

DOI: 10.1377/hlthaff.2015.039-HEALTH AFFAIRS 35, NO. 8 (2016): 1461–1470 o2016 Project HOPE— The People-to-People Health Foundation, Inc.

> https://essentialhospitals.org/institute/sociode mographic-factors-and-socioeconomic-statusses-affect-health-outcomes/



Experts, including an ad-hoc committee of the National Academies of Sciences, Engineering, and Medicine, have examined how social risk factors affect health outcomes and proposed accounting for these factors in Medicare payment programs that, without risk adjustment, disproportionately penalize hospitals that serve





The law requires Medicare to account for patient backgrounds when it calculates reductions in its payments to hospitals under the Hospital Readmissions Reduction Program.



Wrapping up....

- The broad landscape change of healthcare payment is to reward keeping patients healthy, not paying for more volume of care
 - Highest quality and the lowest cost (avoiding complications and keeping patients safe)



Wrapping up....

- General movement in performance measurement away from process of care metrics to focus on outcomes
 - Mortality and readmission
 - Infection rates
 - Complications
 - Patient satisfaction
 - Overall costs of care
 - Soon....patient-reported outcomes (PROs)



Jury still out...

- While processes of care and disparities of care are improved with standardized measurement and accountability, still limited data on impact for overall costs of care and patient outcomes
 - Initial results for certain payment models (such as bundled payment and accountable care organizations is encouraging on costs)



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