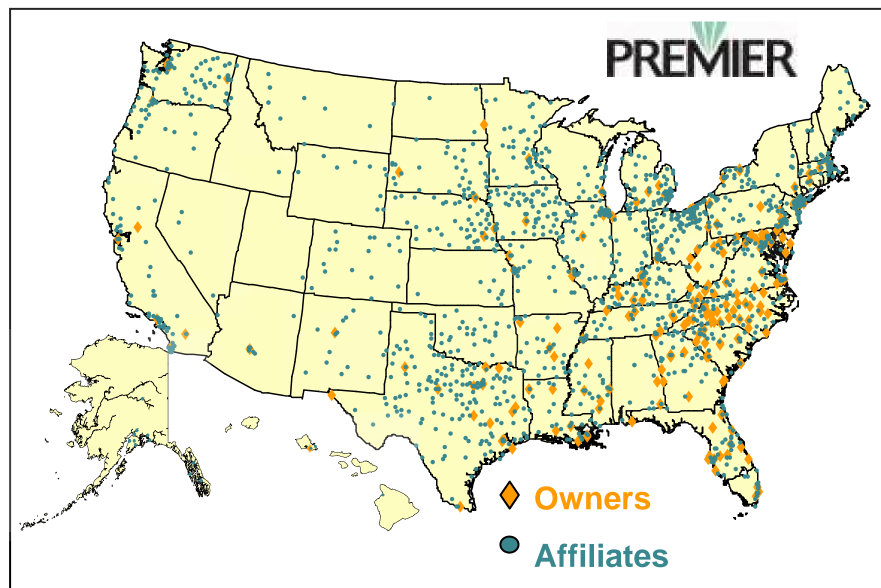
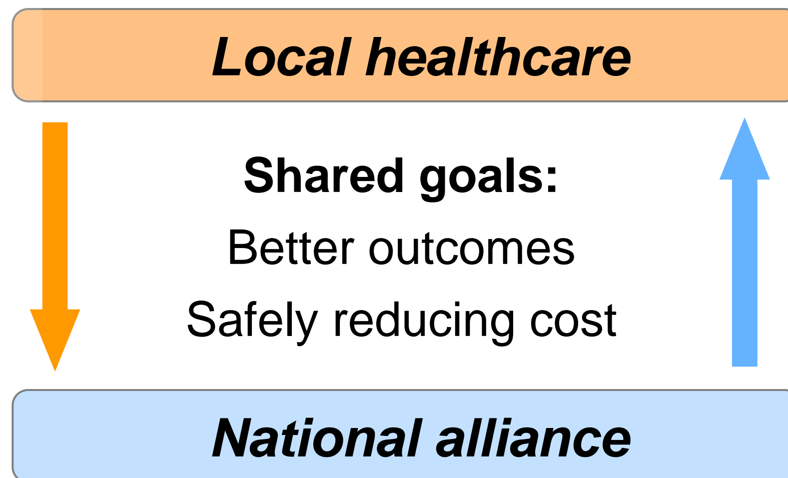
Pay for Performance:
Driving Improvement in Cost and Quality

Richard A. Norling
President and CEO
Premier Inc.

Hospital Authority Convention 2008
May 5, 2008

Bringing nationwide knowledge to improve local healthcare





- Owned by 200+ not-for-profit hospitals and health systems
- Serving more than 1,900 hospitals and 49,000 other providers
- Sharing of clinical, labor and supply chain data for benchmarking
- $31 billion in group purchasing volume – largest in U.S.
- Highest ethical standards - leading Code of Conduct
- Diversity, safety and environmental programs
- Recipient of 2006 Malcolm Baldrige National Quality Award

Topics

1. Quality and the bottom line
2. P4P as a quality driver
3. Overview of Premier/CMS P4P project
4. Improving quality improves mortality and costs

Value Based Purchasing
CMS moving from being a passive to an active payer

Goal: Improve quality and lower costs by rewarding:

- Publicly reported quality information
- Evidence-based healthcare

Generation 1: Pay for reporting:

- Started 10/2004
- Now 27 measures
- Physicians are now also reporting quality measures

Value Based Purchasing (continued)

Generation 2: Hospital Acquired conditions

"For discharges occurring on or after October 1, 2008, the diagnosis-related group to be assigned shall be a diagnosis related group that does not result in a higher payment based on the presence of a secondary diagnosis code." Deficit Reduction Act, Section 5001, 2005

Hospital Acquired Conditions subject to provision:

- Catheter associated UTI
- Vascular catheter associated blood stream infection
- Pressure ulcers
- Object retained during surgery
- Air embolism
- Blood incompatibility
- Injuries occurring in hospital
- Mediastinitis

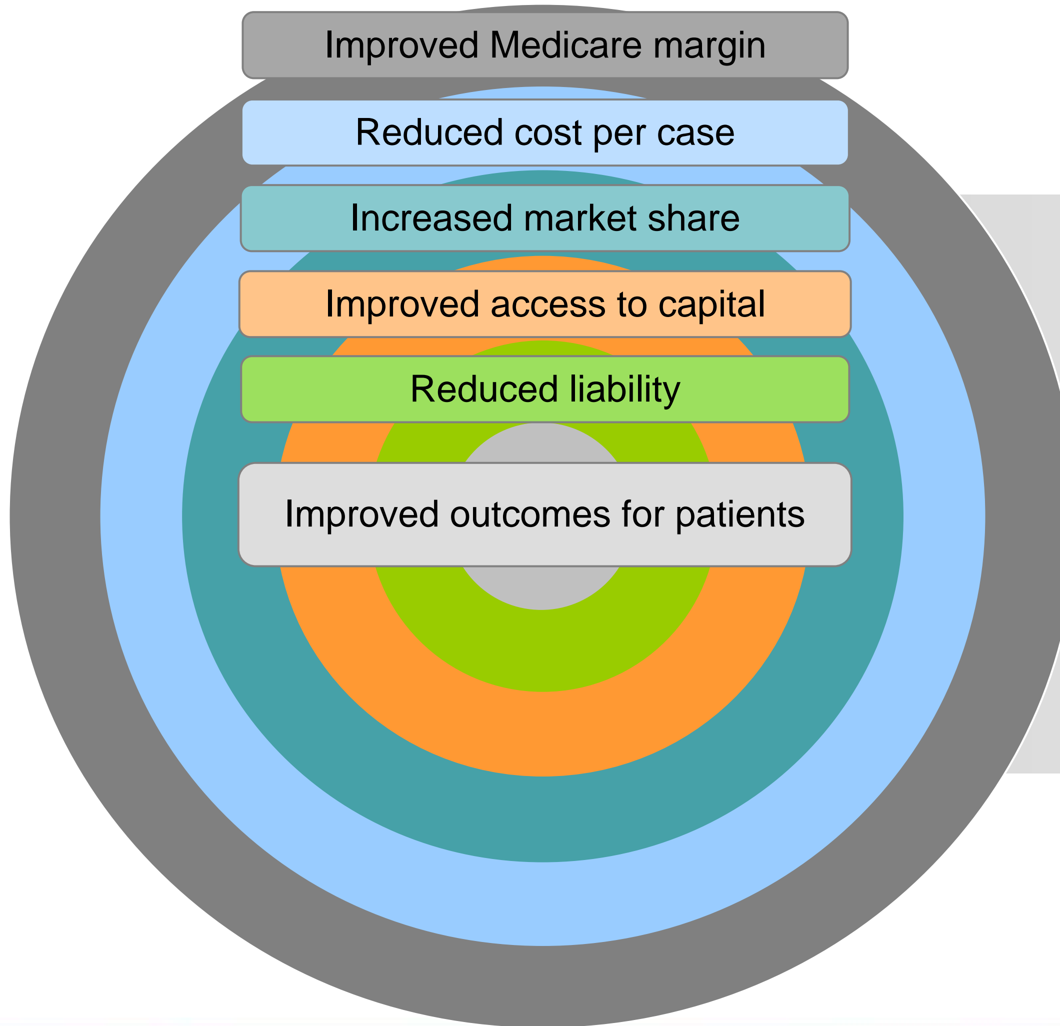
Value Based Purchasing (continued)

Generation 3: Pay for quality

•Now before Congress
•Elements of plan

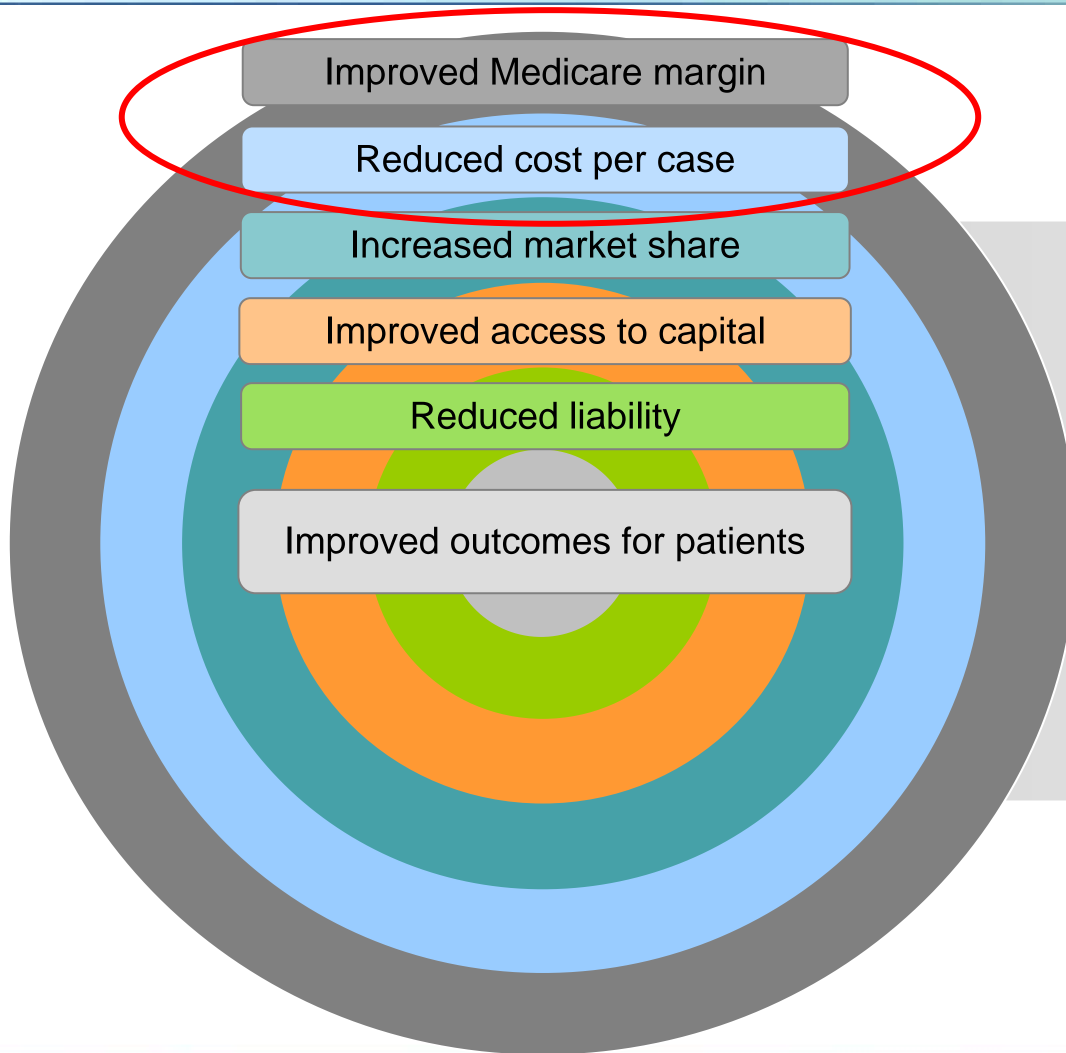
- A specified percentage of hospital payment would be conditional on performance
- Would reward both improvement and attainment
- Would use both financial incentives and public reporting to drive quality improvement
- Infrastructure - Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU)
- Revenue neutral – No additional Funding
- Building a "new money" incentive pool from savings

The business case for quality



- Quality and financial performance are inseparable
- As healthcare leaders, we are equally responsible for both

The business case for quality



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Payers are going to stop paying for low quality

Starting in October 2008, when a hospital fails to prevent specified types of hospital-associated infections, payment will be at the rate for conditions without complications, instead of the higher rate for conditions with complications

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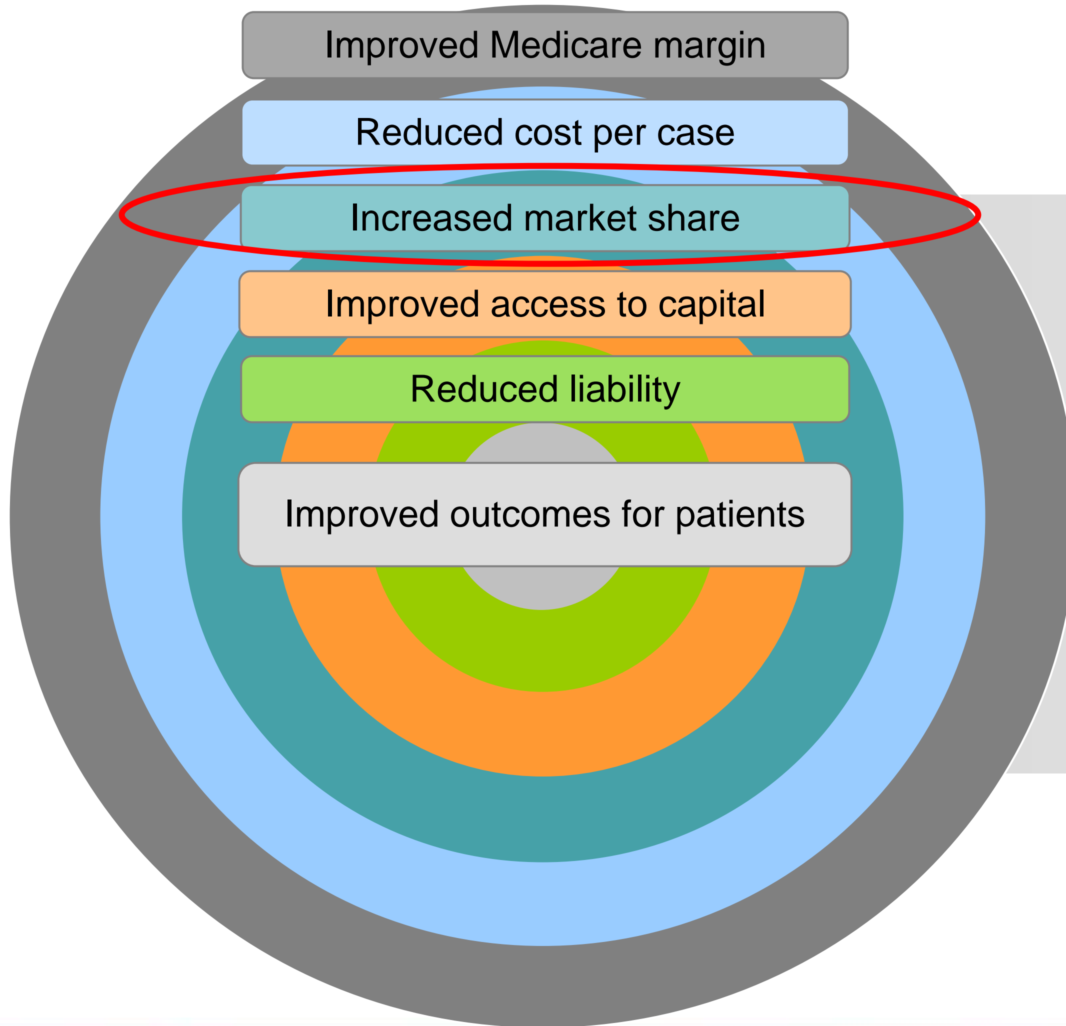
Recent studies state that infection is largely the result of processes of care, rather than the medical condition of the patients upon admission

- American Journal of Medical Quality,
November 27, 2006

"This one is here for the taking—and it's billions and billions of dollars,"

- Marc P. Volavka
Executive Director,
Pennsylvania Health Care Cost Containment Council
CQ HealthBeat, November 27, 2006

The business case for quality



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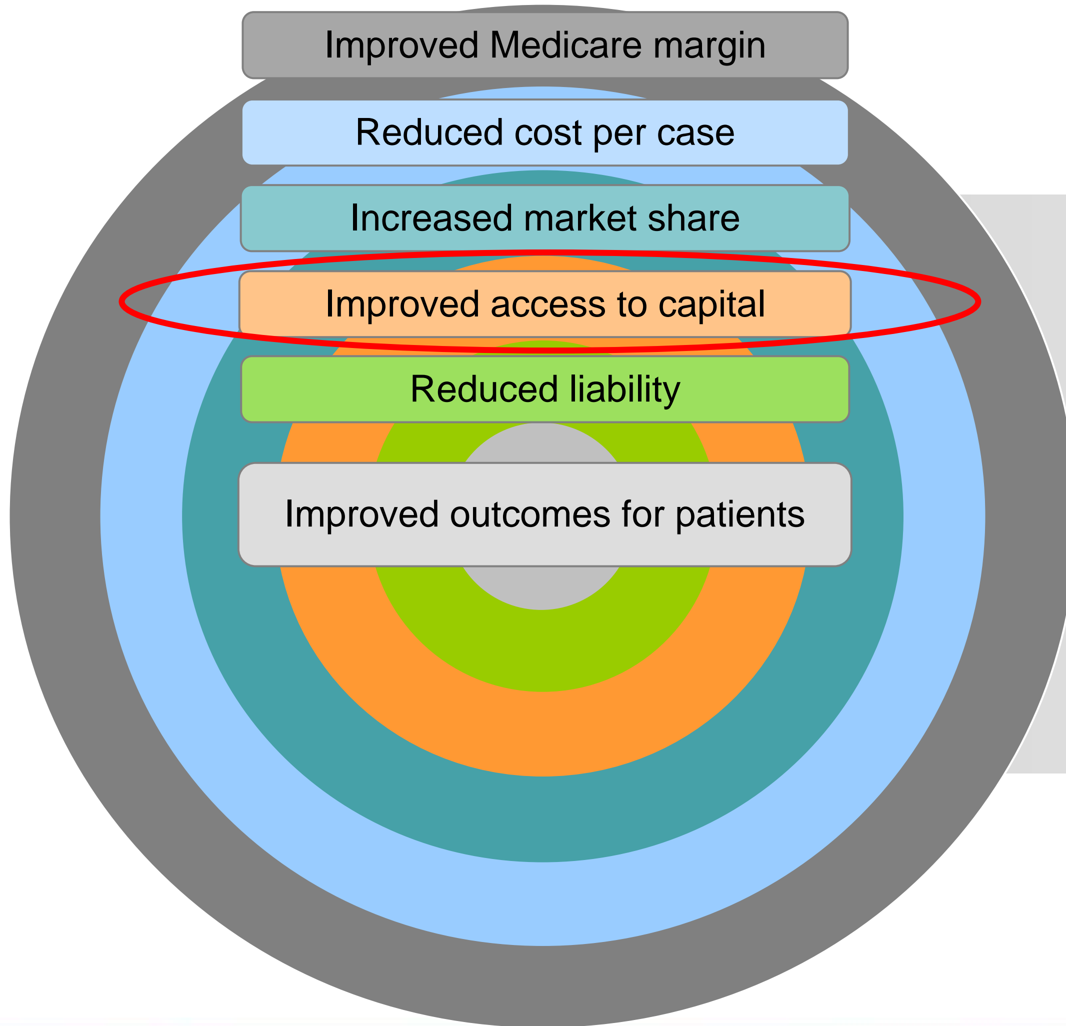
Publicly reported quality data

- Hospital Compare
- Health Grades
- HCAHPS

The business case for quality



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Quality will affect access to capital

STANDARD
&POOR'S

PUBLIC FINANCE

Quality And Transparency Could Transform U.S. Not-For-Profit Health Care

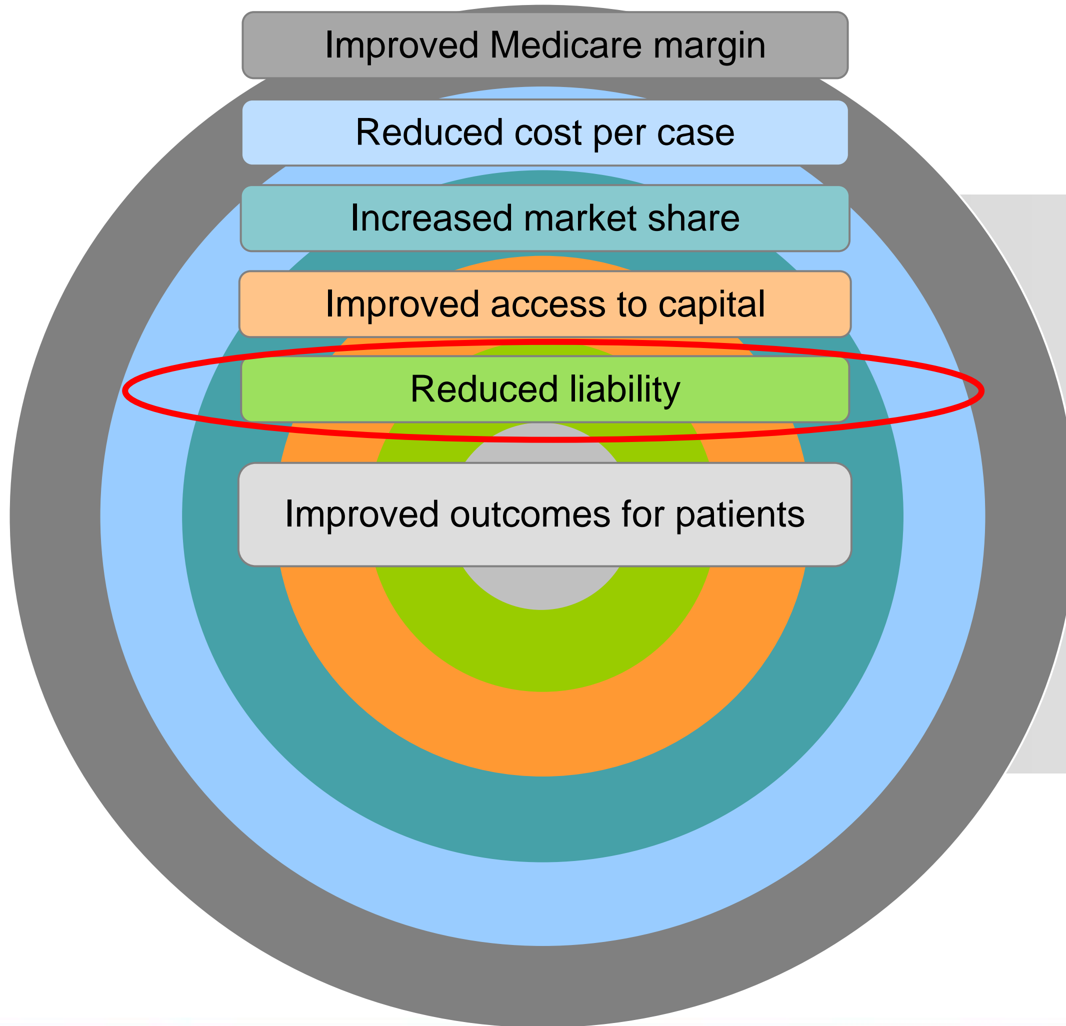
The quality and cost effectiveness of health care in the U.S. has come under increasing scrutiny in recent years from patients, payers, the press, and government agencies. Many not-for-profit health care providers are responding to the challenge by focusing on implementing quality improvement plans in an effort to improve patient safety and outcomes, and provide care in a more cost-efficient manner. The focus on quality also dovetails with the industry's greater push for transparency in a variety of areas. Taken together, Standard & Poor's Ratings Services believes quality and transparency could transform U.S. health care for the better and will become increasingly relevant in measuring credit quality.

While disagreement continues around what data should be collected and reported, and how to best measure "quality," much of that debate is quieting down as the industry adopts standardized processes and patient safety practices, including those disseminated by the National Quality Forum (NQF) and the Leapfrog Group. There is also growing acceptance of the notion that adherence to evidence-based clinical processes is a sound proxy for quality.

Increasingly, many hospital executives come to understand that clinical, operational, and financial performance are tightly coupled. They are finding that quality improvement is not just a goal unto itself, but also good for the bottom line. As the business imperative for quality improvement grows, hospitals are paying greater attention to quality improvement programs since their long-term success could depend on it. The business imperative derives from a rapid confluence of forces, including the push for transparency by the Centers for Medicare and Medicaid Services (CMS), the public reporting of quality data by CMS and the Joint Commissions on the Accreditation of Healthcare Organizations (JCAHO), the growth in quality ranking services like HealthGrades, and increasing public awareness of the lack of adherence to evidence-based care patterns.

- S&P and other major bond rating agencies are all considering quality when evaluating creditworthiness
- Marginal quality may create a spiral of dropping market share, reduced revenue, difficulty accessing capital

The business case for quality



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Low quality drives professional liability costs

Analysis of Premier data shows birth injuries disproportionately drive large claims

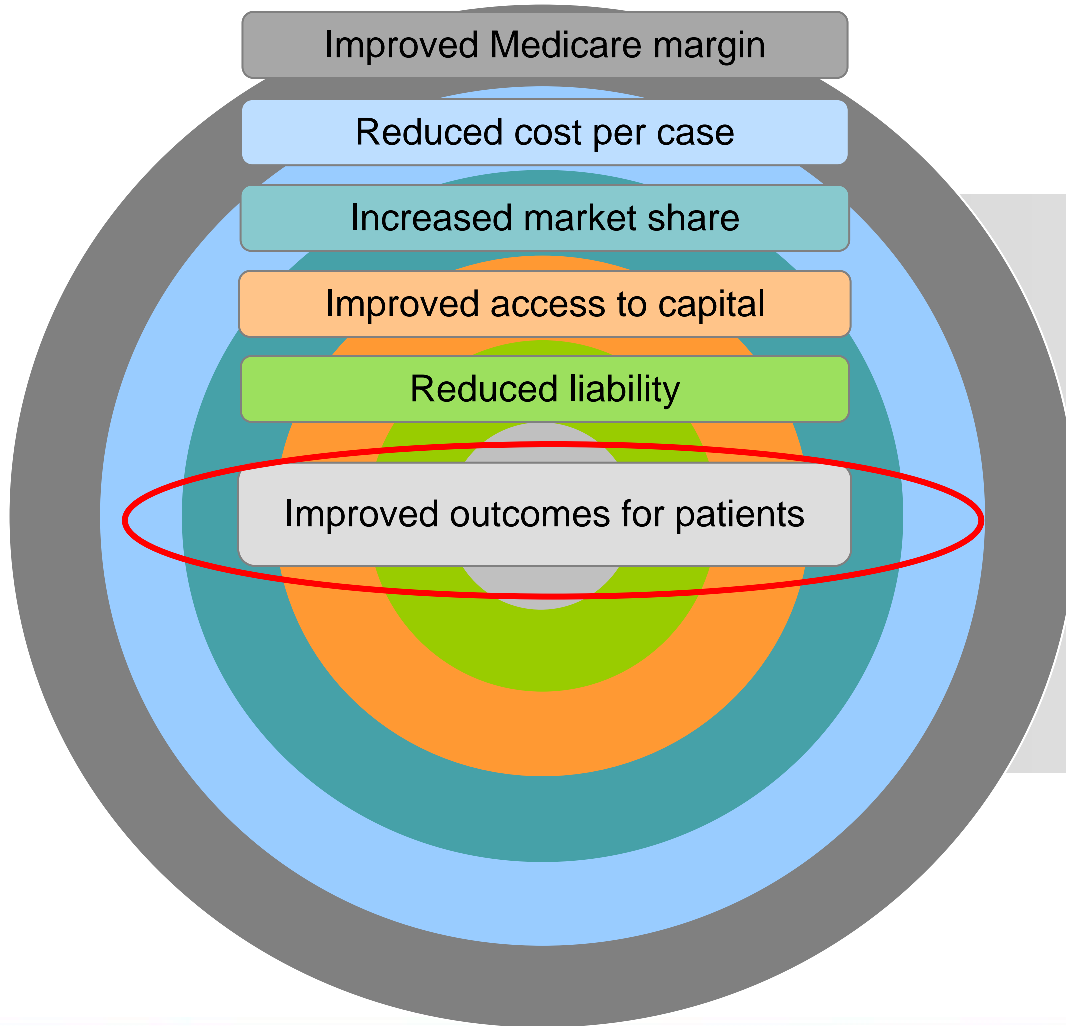
- Premier, Institute for Healthcare Improvement and Ascension Health formed project to address
  - Idealized Design of Perinatal Care
- Birth injury rate has dropped to 0.3 per 1,000 births at top-performing healthcare system in project
  - Norm is 7.3 injuries per 1,000 live births

Savings per 1,000 live births of reducing injury from 7.3 to 0.3 =

$170,000* to $950,000**

*Based on analysis of Ohio claims data, which includes all types of injuries. ** Based on AEIX data, which includes more severe injuries.

The business case for quality



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P4P accelerates quality improvement

New England Journal of Medicine

February 2007

- P4P hospitals showed greater improvement in all composite measures of quality
  - Compared to hospitals engaged in public reporting only
- P4P associated with improvements above public reporting ranging from 2.6 to 4.1% over the 2-year study period

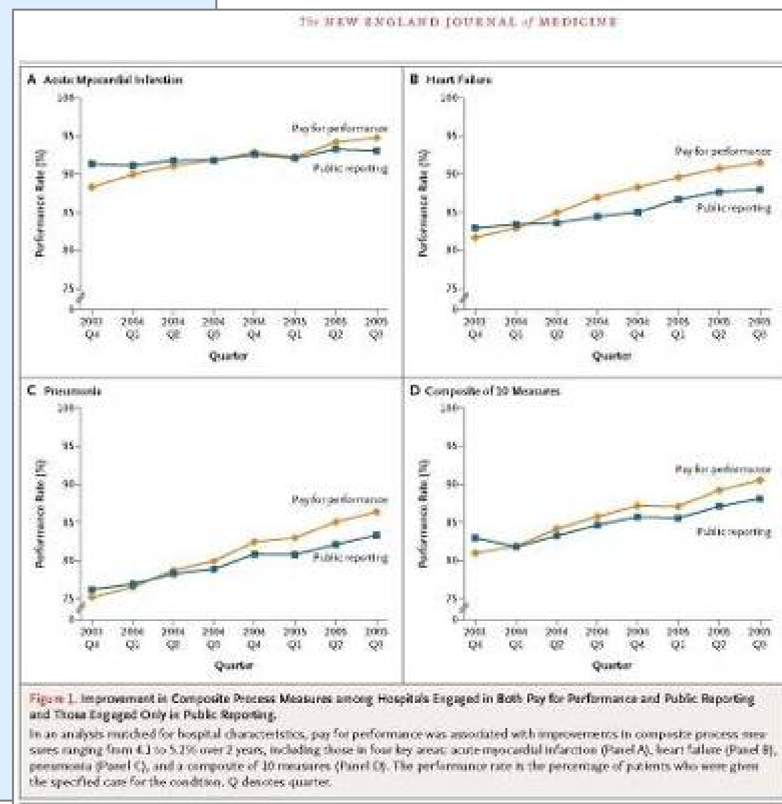
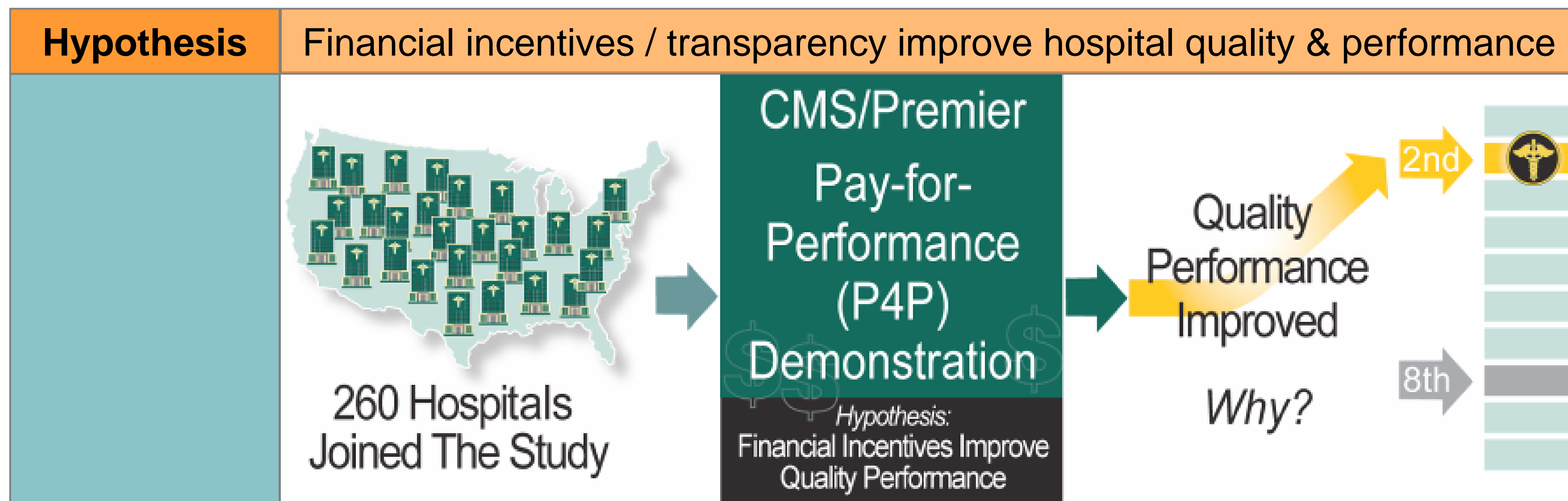


Figure 1. Improvement in Composite Process Measures among Hospitals Engaged in Both Pay for Performance and Public Reporting and Those Engaged Only in Public Reporting.
In an analysis matched for hospital characteristics, pay for performance was associated with improvements in composite process measures ranging from 4.1 to 5.2% over 2 years, including those in four key areas: acute myocardial infarction (Panel A), heart failure (Panel B), pneumonia (Panel C), and a composite of 10 measures (Panel D). The performance rate is the percentage of patients who were given the specified care for the condition. Q denotes quarter.

"Public Reporting and Pay for Performance in Hospital Quality Improvement"; New England Journal of Medicine; February 2007; 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.

Overview of Premier/CMS P4P project

Premier is leading the first national CMS pay-for-performance demonstration for hospitals. More than 260 Premier hospitals participate voluntarily.



Findings

- Financial incentives did focus hospital executive attention on measuring and improving quality.
- Hospitals performance has improved continuously over time.

Five clinical areas

Top performers identified in:

1. Acute Myocardial Infarction
2. Congestive Heart Failure
3. Coronary Artery Bypass Graft
4. Hip and Knee Replacement
5. Community Acquired Pneumonia

Transparency in measures

Evidence-based, consenus metrics w/ standardized definitions from:

- Hospital Compare
- National Quality Forum
- CMS 7th Scope of Work
- JCAHO Core Measures.
- The Leapfrog Group
- Agency for Healthcare Research & Quality

Identifying top performers

- Composite Quality Index identifies hospitals performing in the top two deciles in each clinical focus group
- "Top Performers" are defined annually as those in the first and second decile
  - Incentive payment threshold changes each year per condition
  - Top decile performers in a given clinical area receive a 2 percent Medicare payment supplement per clinical condition
  - Second decile performers receive a 1 percent Medicare payment supplement per clinical condition.

Dramatic and Sustained Improvement

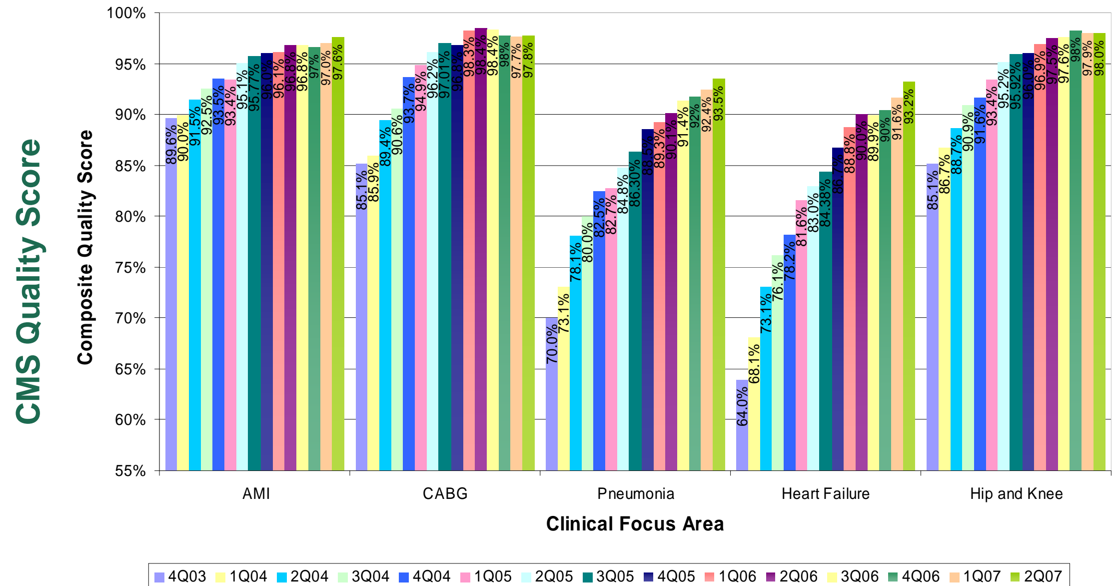
Avg. improvement across all clinical areas for median CQS (15 quarters)

17.3%

Clinical Area	Percent Improvement
AMI (heart attack)	8.0%
CABG (Coronary Bypass)	12.7%
Pneumonia	23.5%
Heart Failure	29.3%
Hip & Knee	12.9%

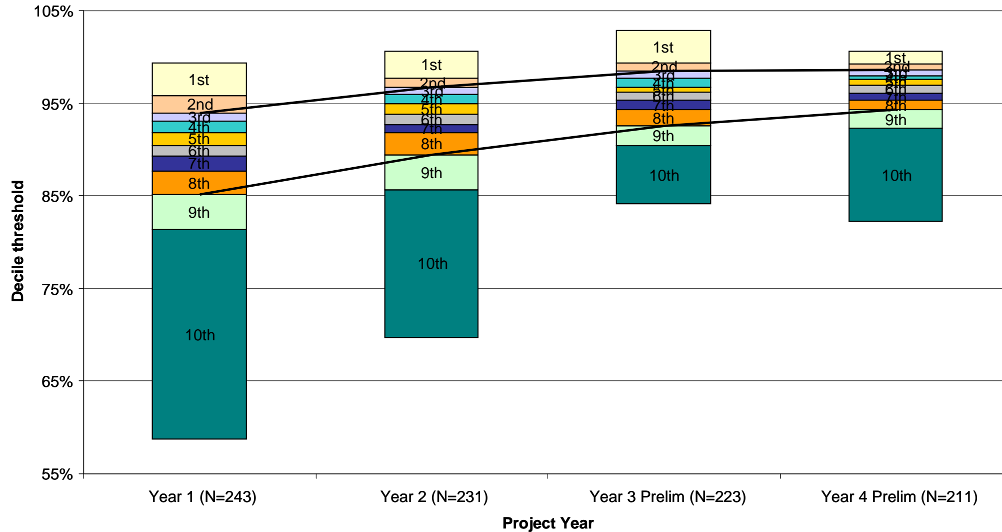
CMS HQID Composite Quality Score

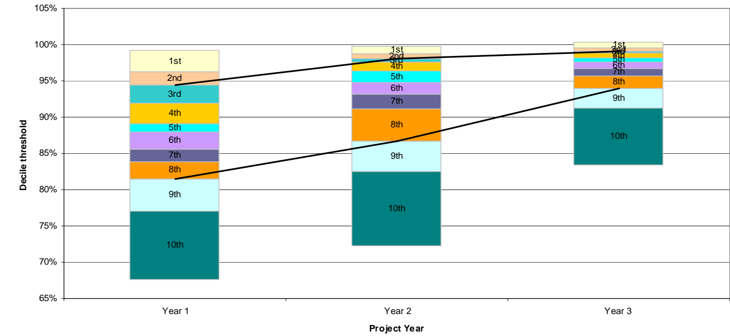
CMS/Premier HQID Project Participants Composite Quality Score: Trend of Quarterly Median (5th Decile) by Clinical Focus Area October 1, 2003 - June 30, 2007 (Year 1 and 2 Final Data; Year 3 and 4 Preliminary Data)

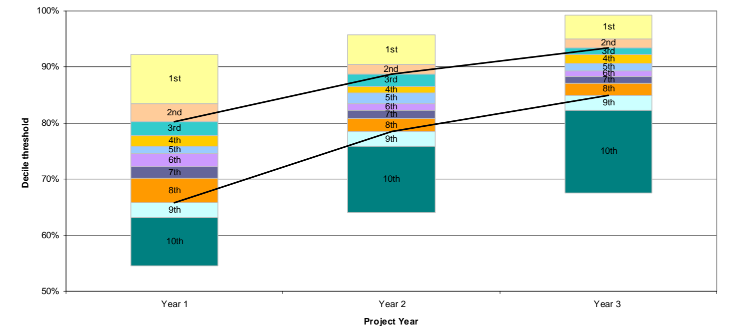


Improvement Across All HQID Participants

- Quality improvement across all hospitals
- Variation in hospital performance decreased







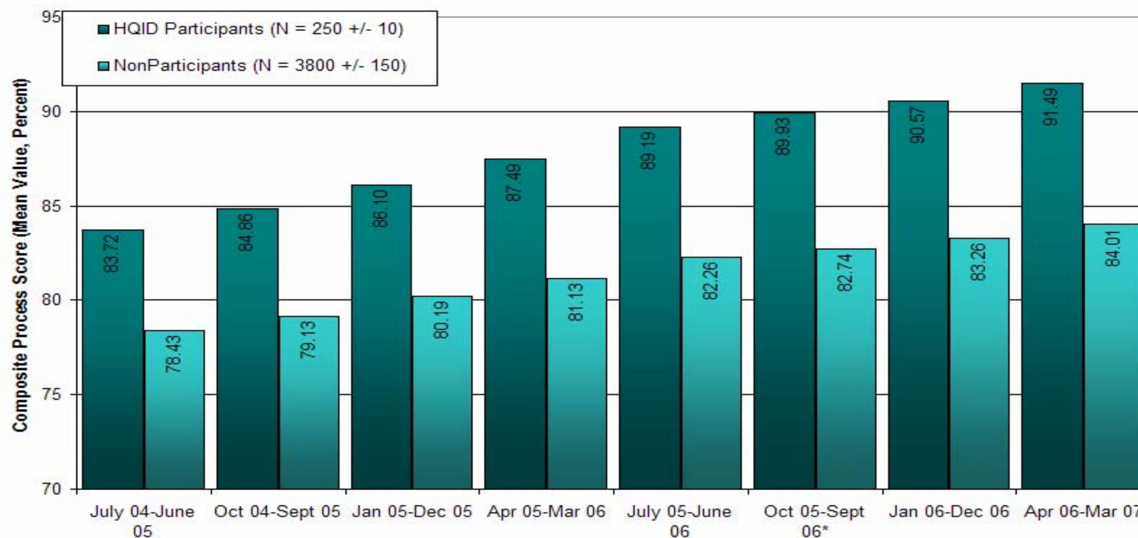
In Broader Comparison, HQID Hospitals Excel

National Leaders in Quality Performance

- HQID participants avg. 6.5% higher than Non-Participants
- Avg. improvement for HQID participants = 7.8%
- Avg. improvement for Non-participants = 5.6%
- New England Journal of Medicine publication by Lindenauer et al. (February 2007) found that hospitals engaged in P4P achieved quality scores 2.6 to 4.1 percentage points above other hospitals due solely to the impact of P4P incentives.

HQID hospitals have higher quality ratings* than national hospitals overall

*CMS process score



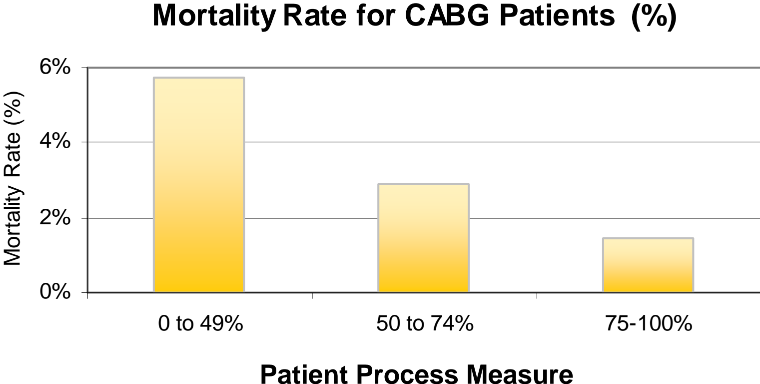
A composite of 19 measures shared in common between HQID and Hospital Compare shows P4P hospitals performing above the nation as a whole

Premier Performance Pays Research

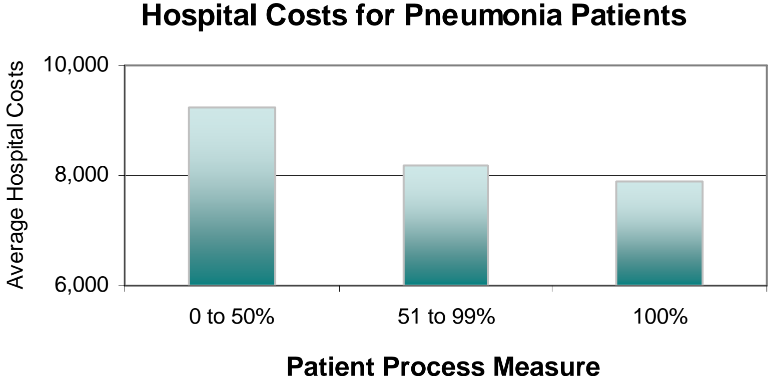
Premier's Performance Pays study demonstrated that when evidence-based care is reliably delivered, quality is higher and costs are lower.

The recently updated study using all payors and three years of data (over 1.1 million patients), confirms this result.

Study finds higher reliable care yields lower mortality rates for heart bypass surgery patients



Study finds higher reliable care yields lower hospital costs for patients with pneumonia

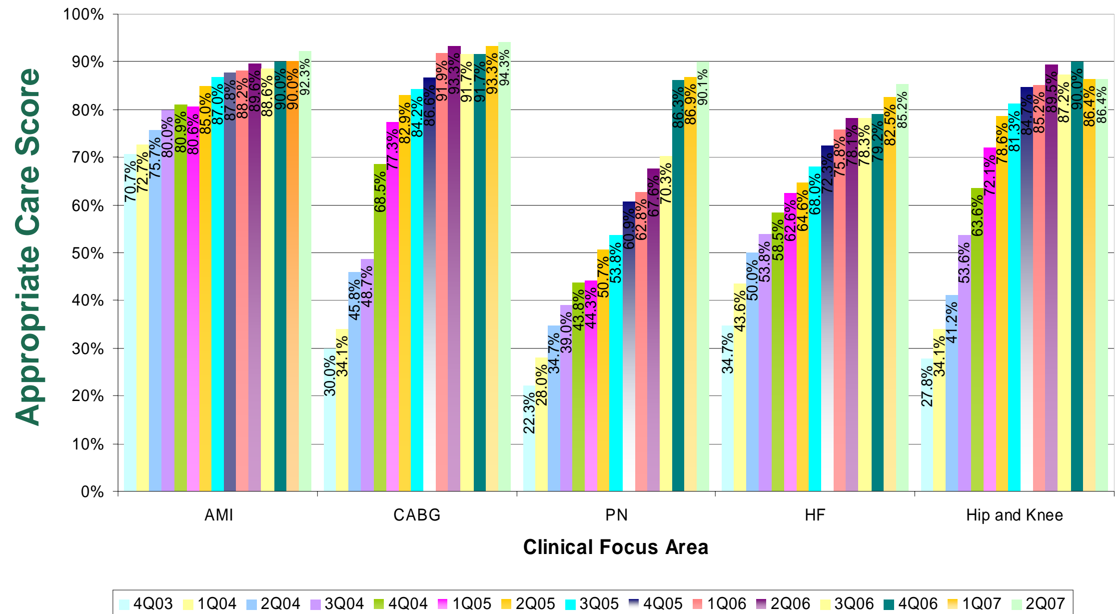


More Patients are Reliably Receiving Evidence-based Care

Avg. improvement in all clinical areas (15 quarters)
52.6%

Clinical Area	Percent Improvement
AMI (heart attack)	21.6%
CABG (Coronary Bypass)	64.3%
Pneumonia	67.8%
Heart Failure	50.5%
Hip & Knee	58.6%

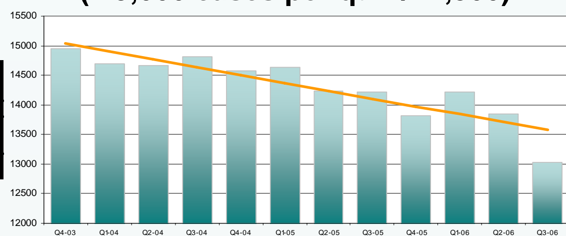
Evidence-based Care Improvements



Hospital Level Cost Trend Emerges Over 3 Years

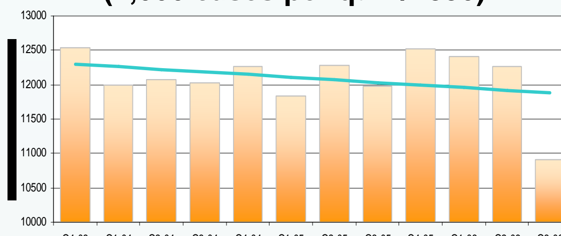
Median Severity Adjusted (APR-DRG) Cost per Case from October 2003 – September 2006

AMI Patients
(19,000 cases per qtr +/- 2,500)



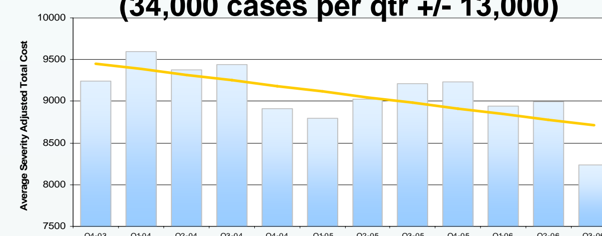
N of hospitals = 233 +/- 12

Knee Replacement Patients
(7,000 cases per qtr +/- 850)



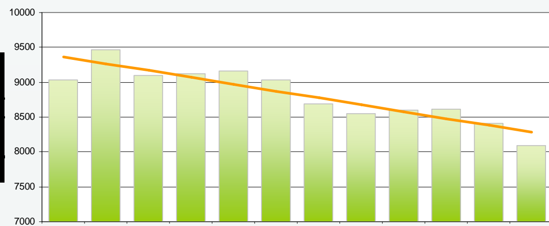
N of hospitals = 191 +/- 7

Pneumonia Patients
(34,000 cases per qtr +/- 13,000)



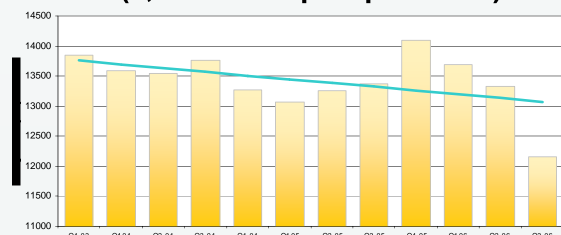
N of hospitals = 253 +/- 10

Heart Failure Patients
(27,500 cases per qtr +/- 5,000)



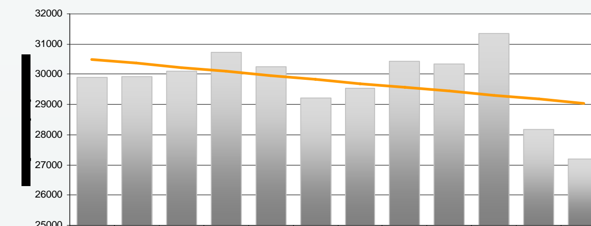
N of hospitals = 250 +/- 10

Hip Replacement Patients
(3,150 cases per qtr +/- 350)



N of hospitals = 145 +/- 8

CABG Patients
(8,300 cases per qtr +/- 1,750)

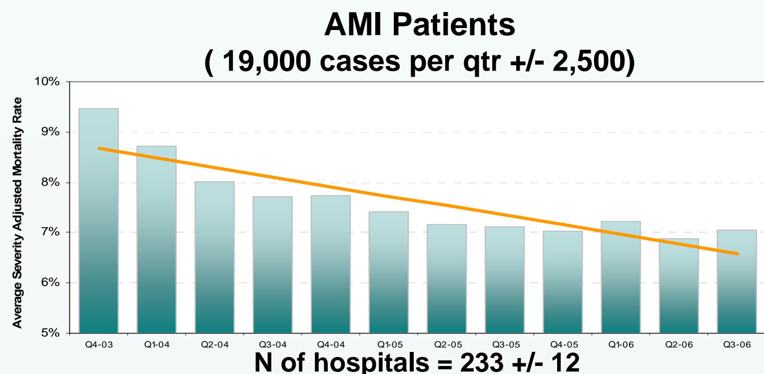


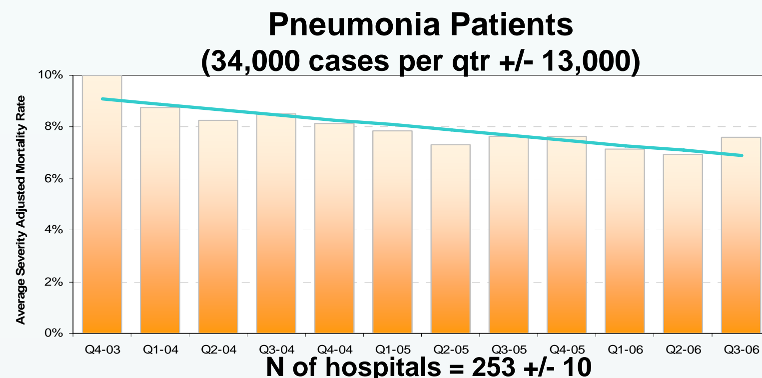
N of hospitals = 130 +/- 5

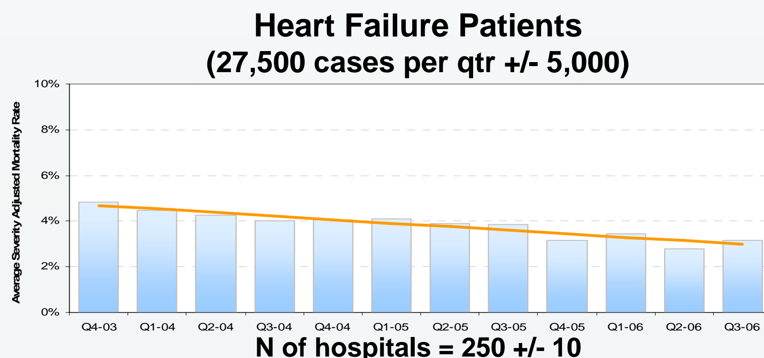
Statistical Significance: Cost -- AMI ($p<0.01$), HF ($p<0.001$), PN ($p<0.05$).

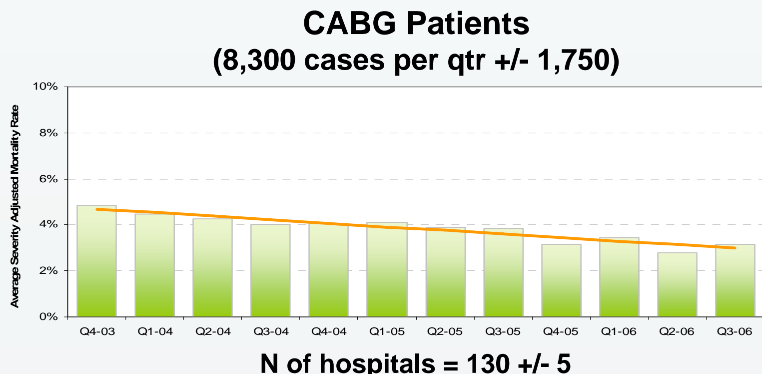
Hospital Level Mortality Trend Emerges Over 3 Years

Median Severity Adjusted (APR-DRG) Mortality from October 2003 – September 2006









Statistical Significance: Mortality -- AMI ($p<0.001$), HF ($p<0.001$), PN ($p<0.001$), CABG ($p<0.01$).

HQID based on 3M APR-DRG severity-adjustment

Hip and knee replacements had insufficient mortalities for analysis

Improvement and Savings

Avg. cost improvement per patient across all clinical areas

$1,063

Clinical Area	Improvement
AMI	$1,599
CABG	$1,579
Pneumonia	$811
Heart Failure	$1,181
Hip Replacement	$744
Knee Replacement	$463

Avg. improvement in mortality across four clinical areas

1.87%

Clinical Area	Improvement
AMI	2.27%
CABG	0.95%
Pneumonia	2.39%
Heart Failure	1.86%

If all hospitals in the nation were to achieve this improvement, the estimated cost savings would be greater than $4.5 billion annually with estimated 70,000 lives saved per year

What is QUEST?

Optimizing Quality, Efficiency & Safety

QUEST will help propel organizations across the top performance threshold in each of these measures.

Efficiency

Evidence-Based Care

Mortality Ratio

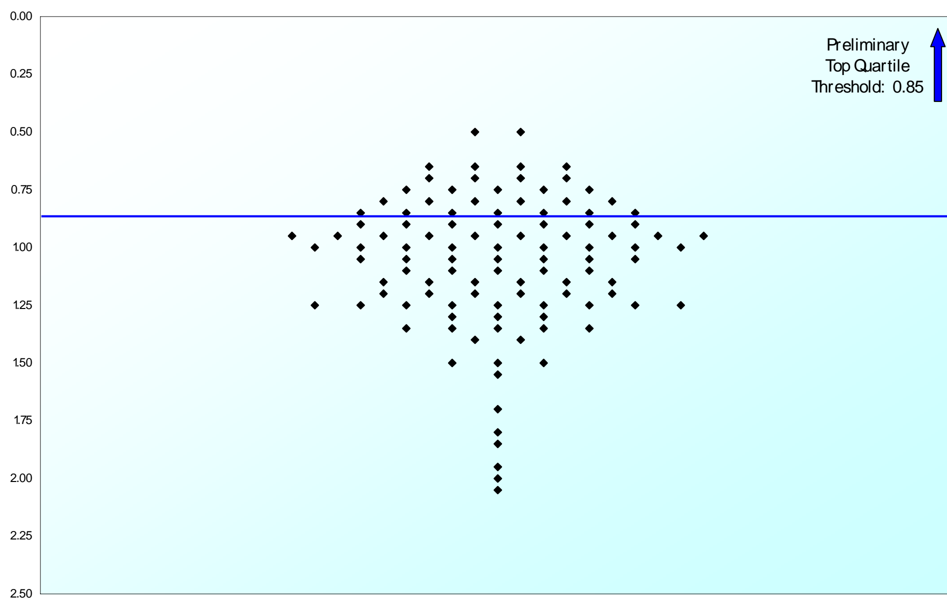
Top Performance Threshold

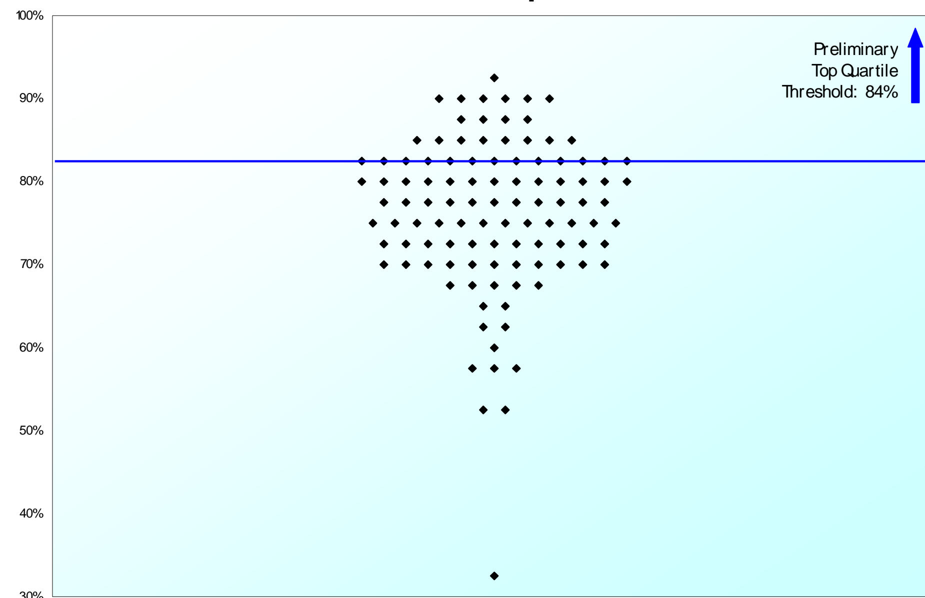
Harm Avoidance

Patient Experience

Over 100 hospitals nationwide expect to participate

Goal: Over next 3 years, hospitals strive to reach top performance from Year 1 in each of 3 QUEST metrics; evidenced-based reliable care, mortality and efficiency.





Conclusions

- Financial incentives combined with public reporting of *transparent* data can drive significant improvement in quality
  - Hospitals held the gains and continued to improve
- More patients are reliably receiving evidenced-based care
- Improved quality is associated with saving lives and reducing costs

Supported by Industry Research

Better outcomes are associated with hospitals where...

1. The Board spends >25% of time on quality issues ($p = 0.009$);
2. The Board receives a formal quality performance measurement report ($p=0.005$);
3. There is a high level of interaction between the board and the medical staff on quality strategy ($p=0.021$);
4. The senior executives' compensation is based in part on QI performance ($p=0.008$);
5. The CEO is identified as the person with the greatest impact on QI ($p=0.01$), especially when so identified by the QI executive ($p<0.001$).

Kroch, E. A., *et al.* (2006). "Hospital Boards and Quality Dashboards." *Journal of Patient Safety* **2**(1): 10-19.
Vaughn, *et al.* (2006). "Engagement of Leadership in Quality Improvement Initiatives: Executive Quality Improvement Survey Results." *Journal of Patient Safety* **2**(1): 2-9.

PREMIER

National Quality Award 2006 Award Recipient

Thank you

Questions? Comments?

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www.premierinc.com

Richard_Norling@premierinc.com