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Preconference: Designing Hospital P4P Systems to Improve Outcomes and Efficiency, and Review of Approaches Recommended for Medicare

Christopher Tompkins, Ph.D.
Brandeis University

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Social Security/Medicare Trustees Warn of Worsening Financial Conditions

- As of December 31, 2008, for the first time, the combined present value of our federal debt and the unfunded future obligations for social security and Medicare ($53 trillion) exceeded household net worth ($51.5 trillion) in the United States.

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Faced with…

- Health care in the US costs much more per capita than any other country
- Quality deficits are widely documented

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Delivery System Inertia

- Absurdly fragmented delivery system
- Obsession with the services, not the outcomes
- Predilection for autonomy over “systemness”
- Lack of accountability for critical aspects of care

Janet Corrigan, 2008

Strategic Assumptions

- Altman's Law (paraphrased)
  - The status quo is everyone's first or second choice
  - A political majority is against any particular reform
- Tompkins' Corollaries
  - Industries tend to defend the status quo
  - Inertia resists significant change

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IMPROVING THE QUALITY AND EFFICIENCY OF HEALTH CARE

LINKING PAYMENT TO QUALITY OUTCOMES IN MEDICARE

Hospital Value-Based Purchasing. The proposal would establish a value-based purchasing program for hospitals starting in 2011. Under this program, a percentage of hospital payment would be tied to hospital performance on quality measures related to common and high-cost conditions, such as cardiac, surgical and pneumonia care. Quality measures included in the program (and in all other quality programs in this section) will be developed and chosen in cooperation with external stakeholders.

Source: Senate Finance Committee, August 2009

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How to pay differently?

- “Lower quality” providers need to be paid more
  - All providers need to be paid more?
  - “Higher quality” providers need to be paid less?
- Make some portion of payments conditional on quality performance
  - Merit for “attainment” (high performance relative to other providers
  - Recognition for “improvement” (relative to own past performance)

What is the Promise of P4P?

Decreasing misuse and overuse of services

Increasing reliability

Increasing use of generic Rx

Hypothesis:
P4P will increase quality and reduce costs by…

Improving clinical outcomes

Reducing readmissions and complications

Improving coordination of care

Decreasing medical errors

Increasing investment in IT

Improving patient experience

Source: Cheryl Danberg, 2008

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CMS Quality Improvement Demonstration

Comparison of Performance on Composite of 10 Measures: Q4 2003-Q3 2005

*Study by Lindenaur et al., 2007 (*New England Journal of Medicine*), reported by Cheryl Danberg, 2008

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CMS Quality Improvement Demonstration

Comparison of Performance on Composite of 10 Measures: Q4 2003-Q3 2005

Performance rate (%)

92
90
88
86
84
82
80
78
76

Premier P4P hospitals

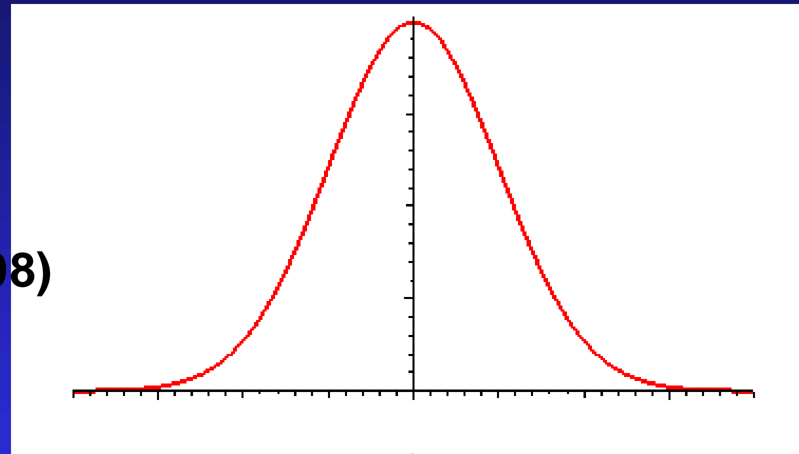
CMS P4R hospitals

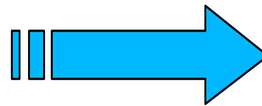
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8

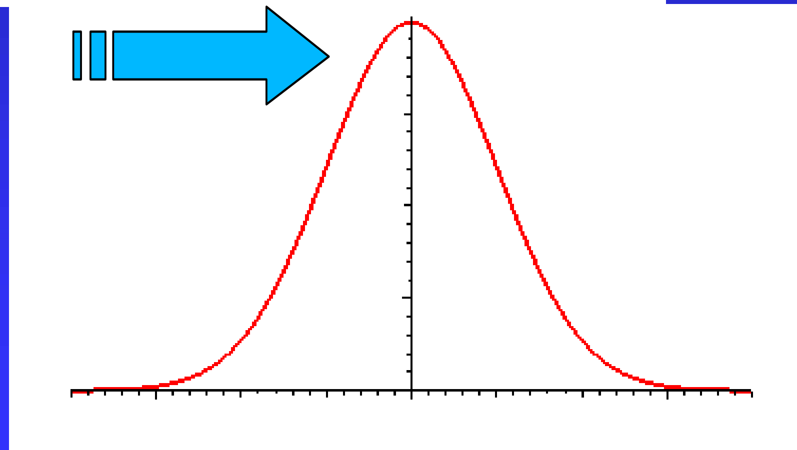
*Study by Lindenaur et al., 2007 (*New England Journal of Medicine*), reported by Cheryl Danberg, 2008

Incentives for Excellence

Baseline (e.g., 2008)







Performance (e.g., 2009)

Benchmark (excellence)

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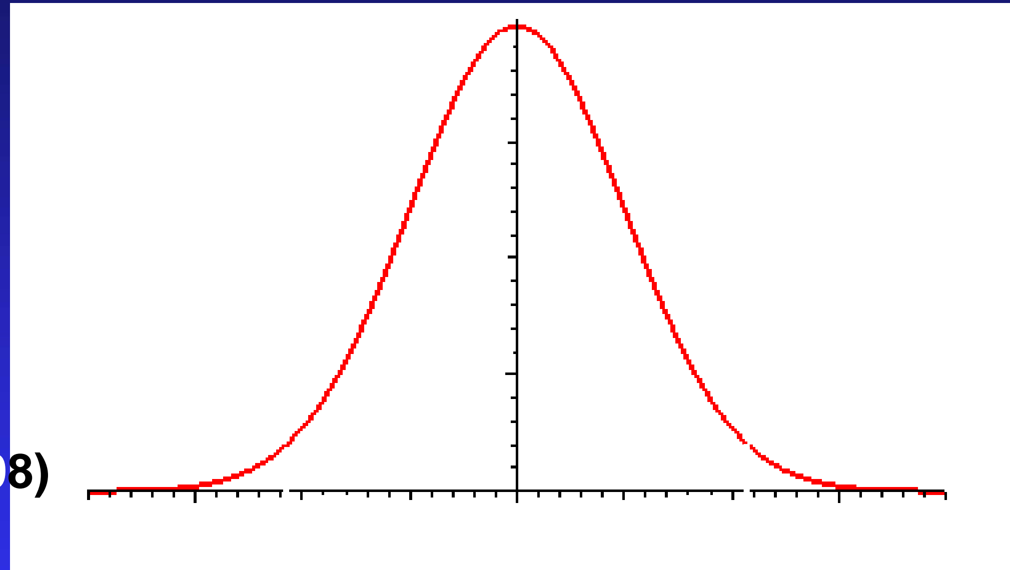
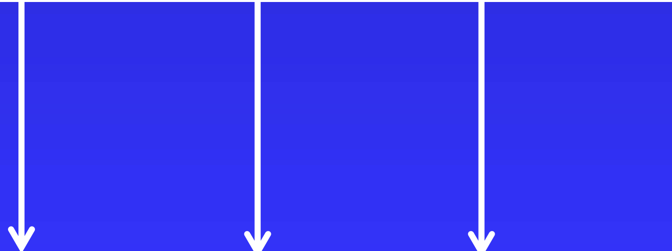
Criteria for “Points”

Baseline (e.g., 2008)





Performance (e.g., 2009)

Improvement Threshold

Attainment Threshold

Benchmark

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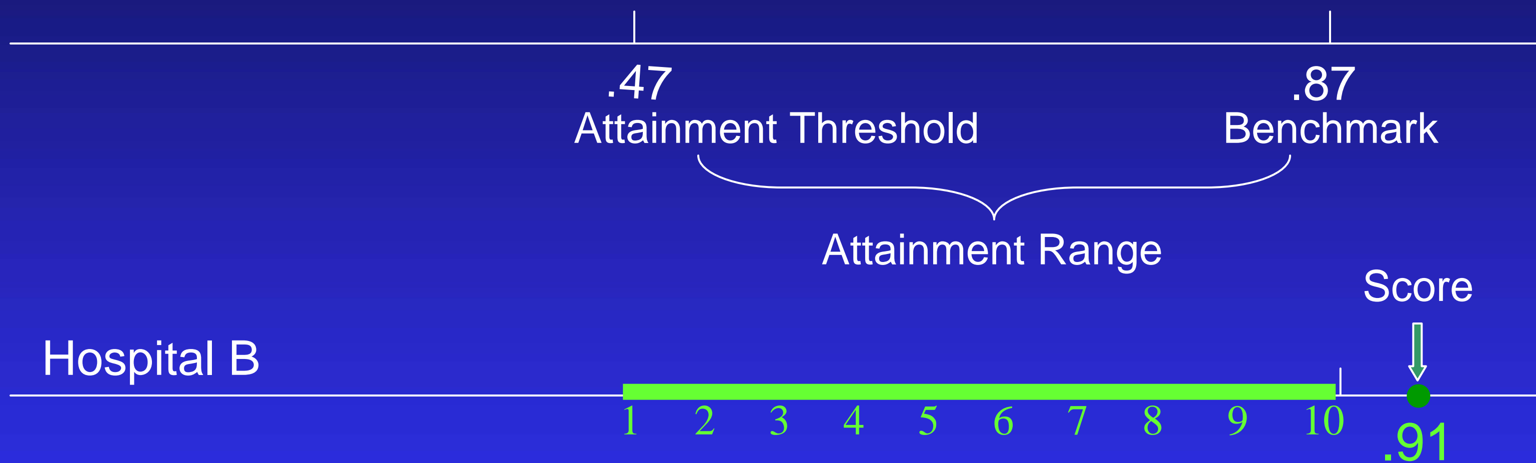
Earning Quality Points Examples

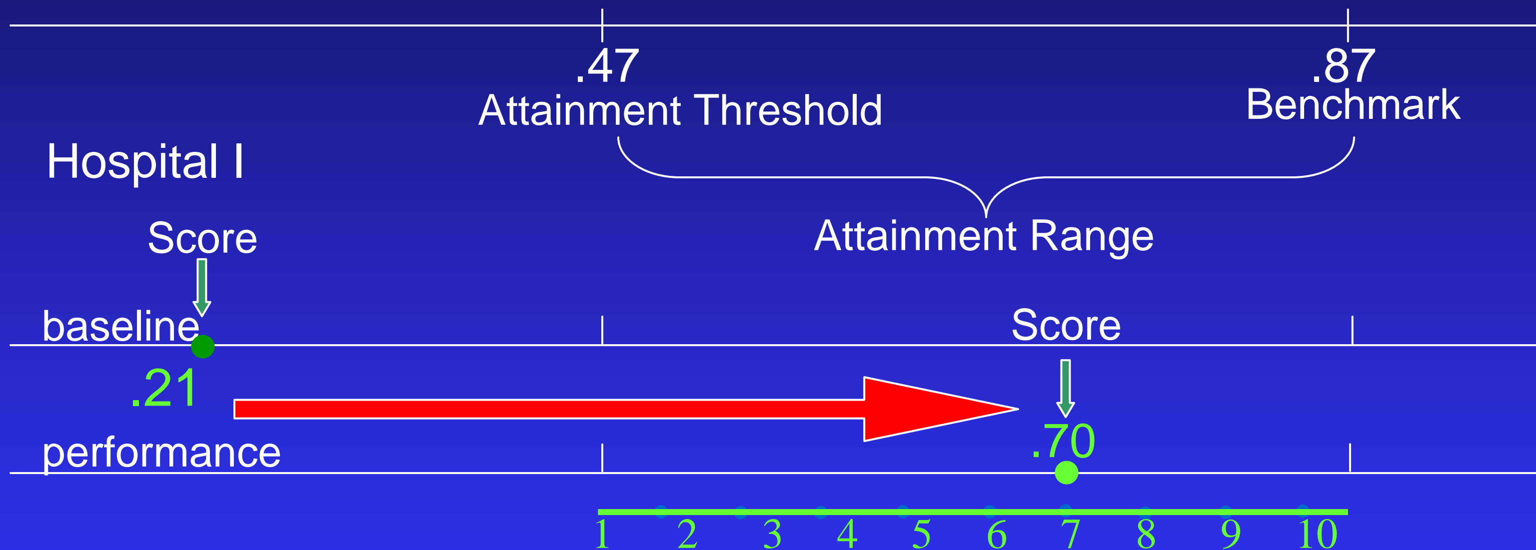


Hospital B Earns: 10 points for attainment for performance exceeding the benchmark

Hospital B Score: = 10 points on this measure

Source: CMS Report to Congress, 2007

Earning Quality Points Examples



Hospital I Earns: 6 points for attainment
7 points for improvement

Hospital I Score: maximum of attainment or improvement
= 7 points on this measure

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Earning Quality Points Examples

Measure: PN Pneumococcol Vaccination

.47
Attainment Threshold

.87
Benchmark

Attainment Range

Hospital L

Score

baseline

.57

Score

performance

.46

1 2 3 4 5 6 7 8 9 10

Attainment Range

1 3 5 7 9

Improvement Range

8

Hospital L Earns: 0 points for attainment
0 points for improvement

Hospital L Score: maximum of attainment or improvement
= 0 points on this measure

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Calculation of the VBP Total Performance Score

1. Total earned points in a domain =
   Sum of points earned across all reported measures
2. Total possible points in a domain =
   Total number of measures reported by hospital x 10 pts
3. Performance Score for Domain =
   Total earned points / Total possible points x 100
4. Weighted average of the respective domains
   - Clinical process
   - Patient-centered care
   - Clinical outcomes

Translating Performance Score into Incentives: The Exchange Function

Percent Of VBP Incentive Payment Earned

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Performance Score: % Of Points Earned

Minimum Performance

Full Incentive Earned

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Value

- “Benefits of services in relation to their costs”
- “Efficient delivery of high-quality care”

- Value can be improved…
  - Better quality for same payment amounts
  - Lower payment amounts for same quality
  - Shifting volume to higher quality providers, for the same payment amounts

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Prototype Outcomes Domain

	Ambulatory Follow-up	Complication	Emergency Department	Hospital Re-admission	Mortality
Cohort 1					
Cohort 2					
Cohort 3					

- Combines mortality, complications, and care transitions
- Risk-adjusted: observed compared to expected

Tompkins et al., 2009a

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VBP Net Incentive Payments based on Value

Hospital	Quality	Cost/patient	Benchmark $	Difference	Net Incentive
A	87%	300	300	0	$ 191
B	87%	400	300	-100	$ 91
C	87%	500	300	-200	($9)
D	80%	600	300	-300	($109)
E	65%	250	250	0	$56
F	65%	400	250	-150	($94)

Tompkins et al., 2009a

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Financial Goals Under Reform: Savings

Total Dollars Per Capita

Region or ACE Absent Reform

Goal Under Reform

2009

Years

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Total Savings (Cost Performance)

- Total Savings = [Target (j) – Actual (j)] × N,

  where Target (j) is a cost per beneficiary, risk standardized to the case mix observed for ACE(j),

  Actual (j) is the observed cost per beneficiary for ACE(j), and

  N is the number of beneficiaries attributed to ACE(j).

Tompkins et al., 2009b

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Quality Scores for Beneficiaries

Beneficiary Cohort	Providers	**Hospital**	Post-acute Care	Combined Quality Score for Cohort
AMI				
CHF				
Pneumonia				
Surgery				
Etc.				
Overall				**Total Quality Score**

Tompkins et al., 2009a

Accountable Care Entities: Quality Score Determines Share of Savings

Tompkins et al., 2009a

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Market Level Incentives

- Goals
  - Enforce Budget Targets (Neutrality or Savings)
  - Increase Value (High Quality, Efficiency)
- Move providers into accountable care
- Modify payment systems
- ACEs: providers voluntarily affiliated
  - Shared Accountability
  - Shared Revenues (VBP Incentive Payments)

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Market Level Incentives

- Three Tiers for Providers
  - Tier 3: Residual Medicare FFS
  - Tier 2: ACEs with Shared Savings
  - Tier 1: Bundled or Global Payments
- Budget targets are enforced per capita (all tiers)
- Incentive payments funded from savings (1 and 2)
- Prospective bundled payments (1)

Tompkins et al., 2009c

Summary

- Much discussion about how to change payment in order to address the problems in health care
- P4P has had modest success in the market
- Medicare could begin hospital VBP fairly soon (?)
- Physician VBP could follow and include Accountable Care Entities (ACE)
- Budget targets and incentive structures could be implemented for market level reforms

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Citations

- U.S. Department of Health and Human Services REPORT TO CONGRESS: Plan to Implement a Medicare Hospital Value-Based Purchasing Program November 21, 2007
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- Tompkins, C., A.R. Higgins, and G.A. Ritter "Measuring Outcomes and Efficiency in Medicare Value-Based Purchasing" Health Affairs (Millwood) 2009a, Jan 27. (Epub ahead of print) (PMID: 19174387) [PubMed – as supplied by publisher]
- Tompkins, C., et al., "Physician Value-Based Purchasing: A Proposed Patient-Centric Model (draft)," September 2009b.
- Tompkins, C., S. Wallack, S. Altman, M. Doonan, "Harmonizing Medicare and State Payment Reforms: A Proposed Pilot in Massachusetts," Report for Blue Cross Blue Shield of Massachusetts, June 16, 2009c.