

Delivering Better Value in U.S. Health Care: The Role of Physician Performance Measurement

American Enterprise Institute
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Questions for the day

- ▶ *what should be measured?*
- ▶ *how to do it*
- ▶ *how to aggregate and pool data from multiple sources, including Medicare claims data*
- ▶ *how to interpret and use the findings*
- ▶ *and what level of transparency is needed to ensure that performance measures are fair, sustainable, and accurate.*



Vital Statistics About Atlantic Health

8,900+ employees
2,100+ physicians
219 residents
1,133 licensed beds
56,400 admissions
5,867 births
116,878 emergency visits
530,520 outpatient visits

Vital Statistics About Morristown Memorial Hospital

5,000+ employees
1,200+ physicians
154 medical residents
629 licensed beds
36,756 admissions
3,414 births
72,229 emergency visits
263,886 outpatient visits

Vital Statistics About Overlook Hospital

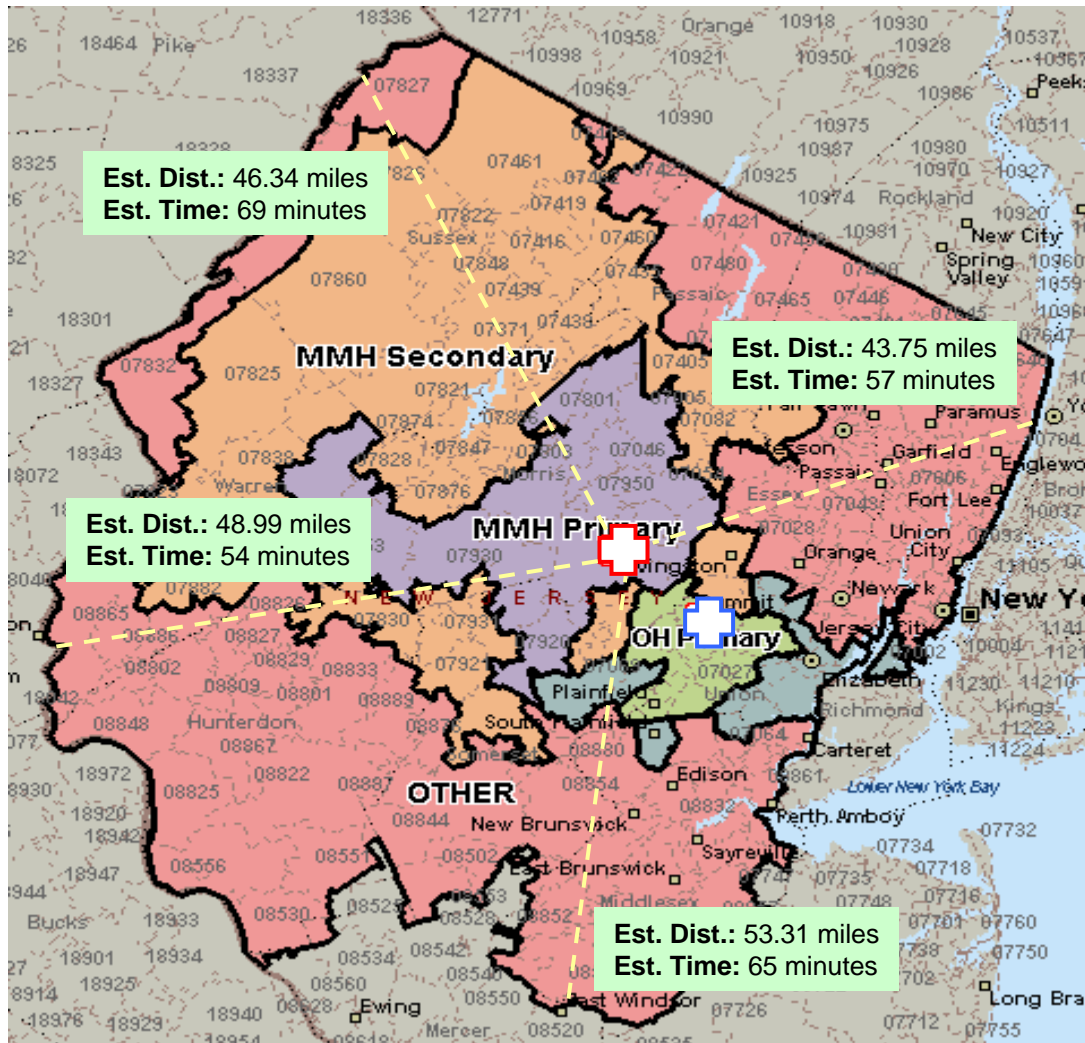
2,300+ employees
1,200+ physicians
65 medical residents
504 licensed beds
19,644 admissions
2,453 births
44,649 emergency visits
144,717 outpatient visits





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The Atlantic Health System Comprises 7 Market Areas



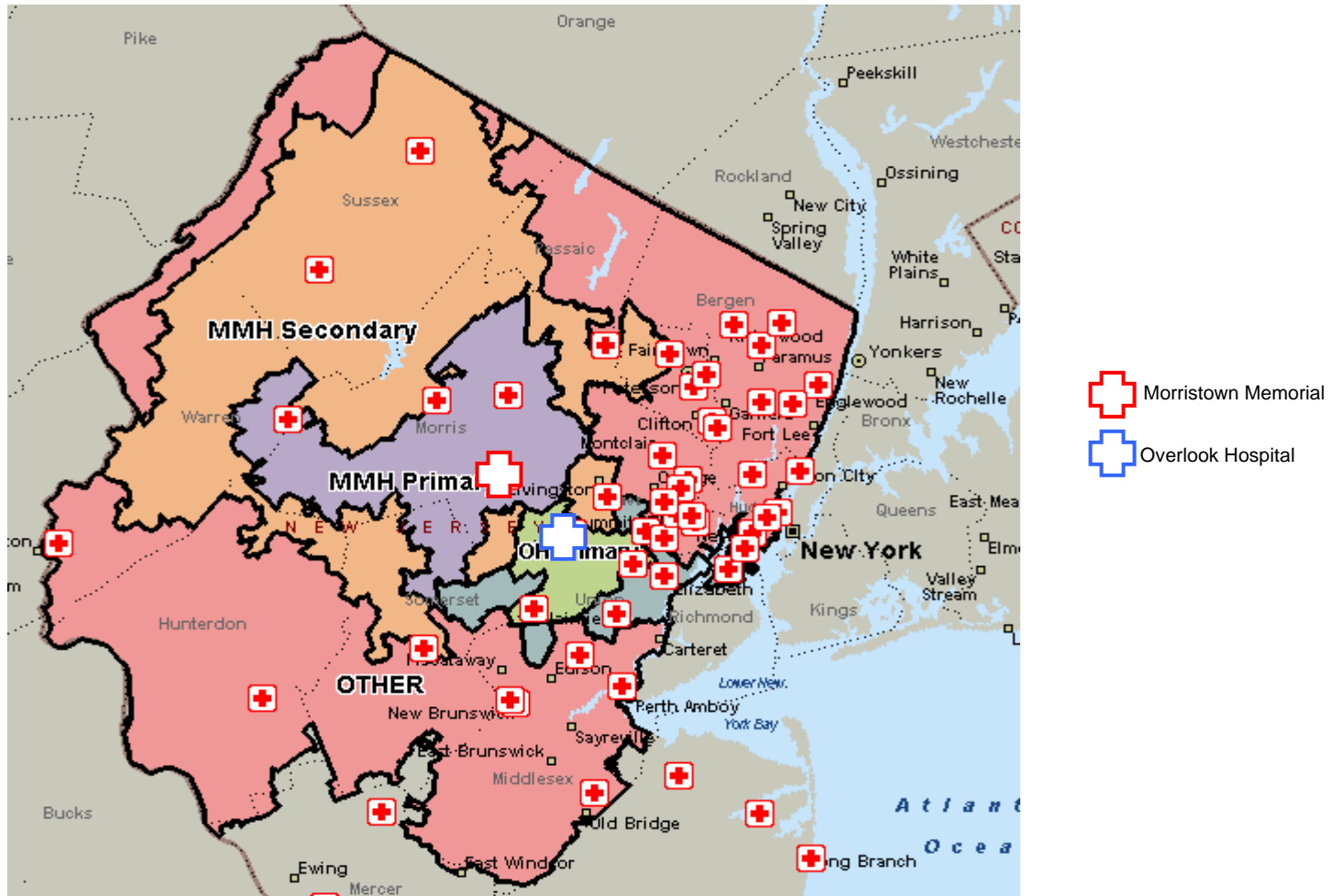
Service Area*	Population, 2006
MMH PSA	352,788
MMH SSA	517,756
OL PSA	303,913
OL SSA	493,622
OTHER	3,658,139
Total	5,326,218

-  Morristown Memorial
-  Overlook Hospital

* The market has been redefined by Atlantic Health for the sake of this particular analysis, and therefore represents 5 non-overlapping service areas. The 'Other' service area is comprised of 11 New Jersey counties.

The Competitor Landscape in the AHS Market is Densely Populated

General Acute Care Hospital Competitors





Four Insights from “The Field”

1. Quality Measurements and Evidence-based practice guidelines are (or should be) directly linked
2. Higher aggregate levels of quality measurement performance cannot be accomplished without better systems of care
3. For health systems lacking a robust & standardized measurement framework, there is no direct link between quality & efficiency, hence incentives and reward systems should be designed to create these linkages and further support such an infrastructure
4. The Health Information Technology industry does not appear at present to be motivated by market forces to cooperate on developing and implementing interoperable data standards that supports efficient processing of quality measurement

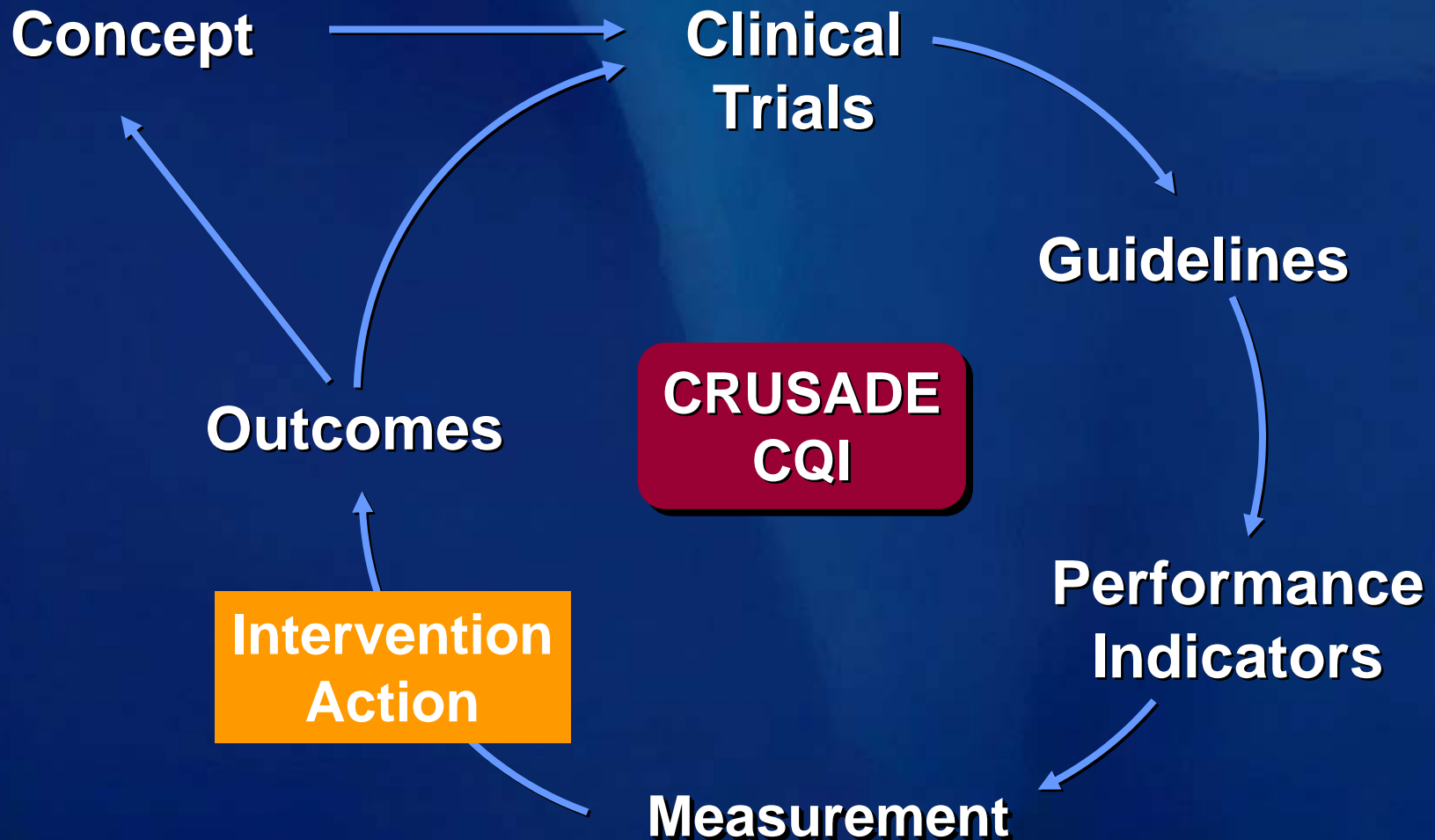
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Lesson # 1

Effective quality measurements and evidence-based practice guidelines are (or should be) directly linked

Lesson 10: Improving Care:



Adapted from Califf RM, Peterson ED
et al. JACC 2002;40:1895-901

ACC/AHA Practice Guideline

ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult—Summary Article

A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Update the 2001 Guidelines for the Evaluation and Management of Heart Failure)

Developed in Collaboration With
the American College of Chest Physicians and the International Society for Heart and Lung Transplantation

Endorsed by the Heart Rhythm Society

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ACC/AHA HEART FAILURE CLINICAL PERFORMANCE MEASURES

ACC/AHA Clinical Performance Measures for Adults With Chronic Heart Failure

A Report of the American College of Cardiology/American Heart Association
Task Force on Performance Measures (Writing Committee to Develop Heart
Failure Clinical Performance Measures)

Endorsed by the Heart Failure Society of America

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ACC/AHA HEART FAILURE CLINICAL DATA STANDARDS

ACC/AHA Key Data Elements and Definitions for Measuring the Clinical Management and Outcomes of Patients With Chronic Heart Failure

A Report of the American College of Cardiology/American Heart
Association Task Force on Clinical Data Standards (Writing Committee
to Develop Heart Failure Clinical Data Standards)

Endorsed by the Heart Failure Society of America

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Performance Measurement #1: Attributes (derived from ACC)

- ▶ **Useful in Improving Patient Outcomes:**
 - ▶ **Evidence-based:** The scientific basis for the measure is well established, including a strength of evidence weighting system
 - ▶ **Interpretable:** The results of the measure are interpretable by practitioners
 - ▶ **Actionable:** The measure addresses an area that is under the practitioner's control
 - ▶ **Reliability:** The measure is likely to be reproducible across organizations and settings



Performance Measurement #2: Attributes (derived from ACC)

▲ Measure Design

- ▲ **Denominator:** The patient group to whom this measure applies is clinically meaningful
- ▲ **Numerator:** The definition of conformance for this measure is clinically meaningful
- ▲ **Validity:**
 - ▲ The measure appears to measure what it is intended to (face validity)
 - ▲ The measure captures most meaningful aspects of care (content validity)
 - ▲ The measure correlates well with other measures of the same aspect of care (construct validity)



Performance Measurement #3: Attributes (derived from ACC)

- ▶ **Measure implementation**
 - ▶ **Feasibility**
 - ▶ **The data required for the measure is likely to be obtained with reasonable effort**
 - ▶ **The data required for the measure is likely to be obtained at reasonable cost**
 - ▶ **The data required for the measures is likely to be obtained within the period allowed for data collection**
 - ▶ **System availability: Standardized evidence-based systems and tools have been developed to support successful implementation**

The GAAP in Quality Measurement and Reporting

Peter J. Pronovost, MD, PhD

Marlene Miller, MD, MSc

Robert M. Wachter, MD

CATALYZED BY EVIDENCE OF POOR-QUALITY CARE AND remarkable variations in processes and outcomes, the interest in quality measurement has increased exponentially. Manifestations of this interest include widespread promulgation of quality measures, an increase in public reporting of these measures, and early experiments in paying for quality.^{1,2} Now that quality of care is being measured rather than assumed, there seems little doubt that better quality scores will lead to major competitive advantages for clinicians and organizations.

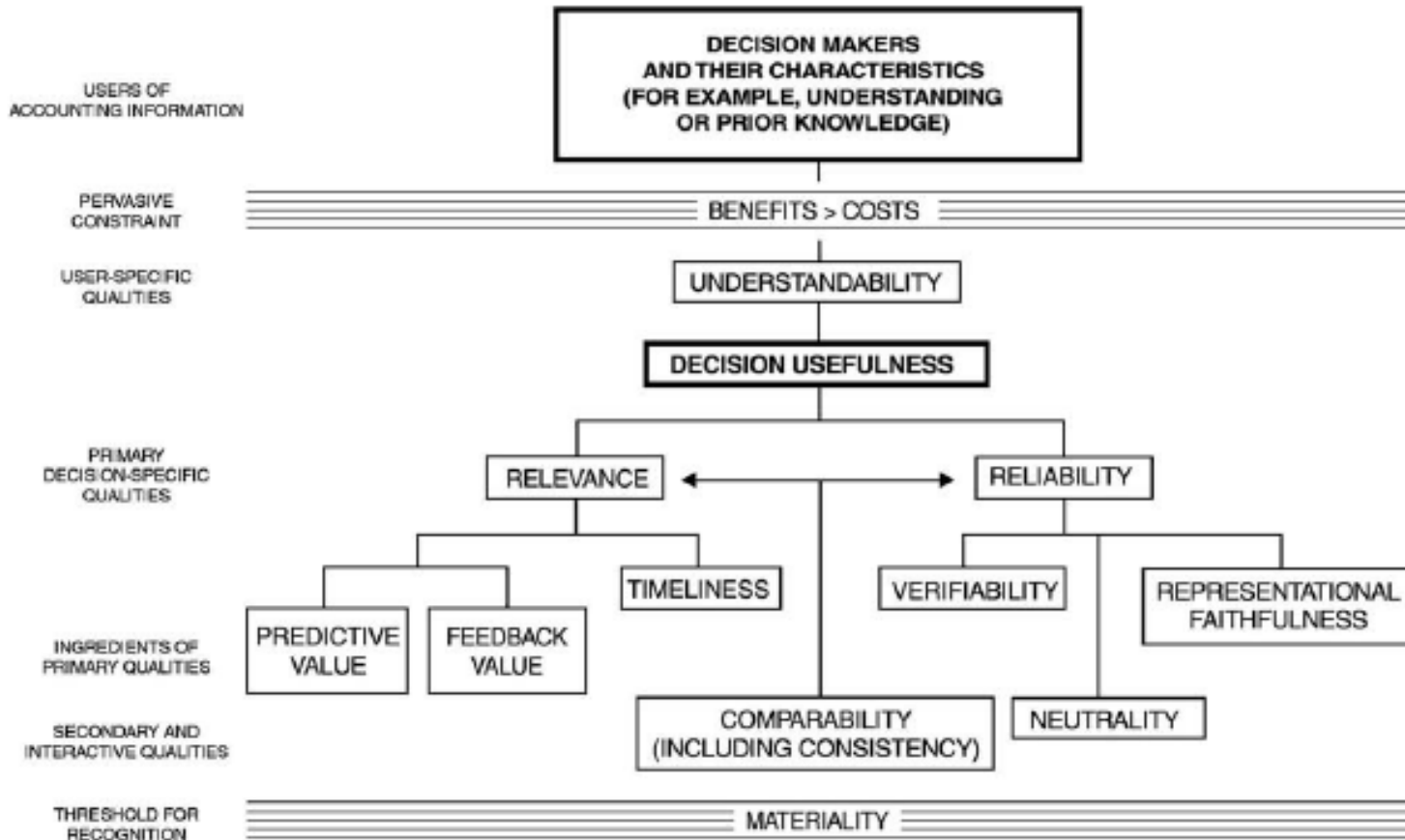
Although many quality measures are used internally by health care organizations to improve quality of care, an increasing number of measures are being reported publicly. Yet the measurement of quality in health care is neither stan-

of 2 issues that markedly influence the validity of quality measures: do the measures truly represent the quality of care provided, and are the results tainted by systematic and random error?⁸ This first issue has experienced considerable flux after recent statements that certain widely promoted measures are problematic.⁹ For example, the measure of door-to-antibiotics time for patients with pneumonia (publicly reported by the Centers for Medicare & Medicaid Services [CMS]) has been critiqued as being poorly supported by the literature and promoting significant amounts of antibiotic overuse.¹⁰ Even better-established measures, such as those targeting acute myocardial infarction management, have demonstrated marginal relationships to ultimate outcomes.¹¹ Still others, such as smoking cessation counseling, could be important if measured correctly; however, this measure is assessed by whether a box has been checked—likely a poor surrogate for the true quality and impact of counseling.¹²

To truly reflect the quality of care, measures must not only be supported by evidence but also capture the phenomenon

FIGURE 1

A HIERARCHY OF ACCOUNTING QUALITIES



<http://fasb.org/pdf/con2.pdf>



FASB Crosswalk: Concepts for Quality Measurement

- ▶ Relevance: “the capacity of the information to make a difference in a decision”
- ▶ Timeliness: As the future becomes the present, past data becomes increasingly irrelevant (Auditing of data that is old does not compensate for improved data quality)
- ▶ Reliability: verifiability, representational faithfulness, neutrality: has care been measured accurately and is an adequate reflection of care delivered
- ▶ Neutrality: FASB should consider only the relevance and reliability of the data, but not the economic impact
- ▶ Consistency & Comparability are pervasive problems
- ▶ Materiality: It makes a difference in valuation of the firm
- ▶ Qualitative characteristics of information are as important as quantitative interpretations

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Lesson # 2

Higher aggregate levels of quality measurement performance cannot be accomplished without better systems of care

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DRAFT
– to be completed once
project is approved by CMS

Overview of Hospital Quality Incentive Demonstration Project

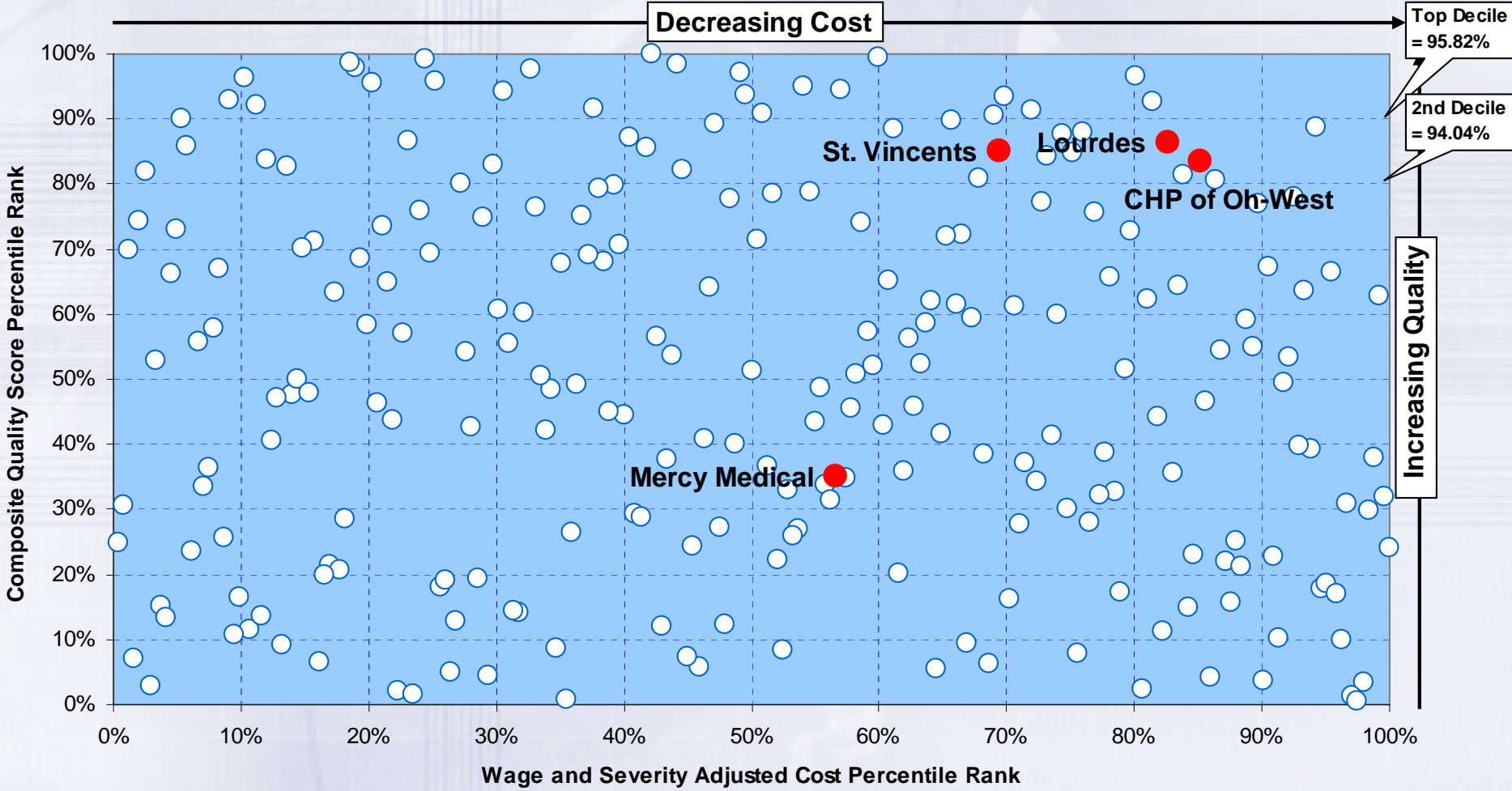
**Centers for Medicare and Medicaid Services
and Premier, Inc.**

March 25, 2003

Acute Myocardial Infarction: Cost Vs Composite Quality Percentile Rank Comparisons: Premier Hospital Quality Demonstration Project Participants

October 1, 2003 - June 30, 2004

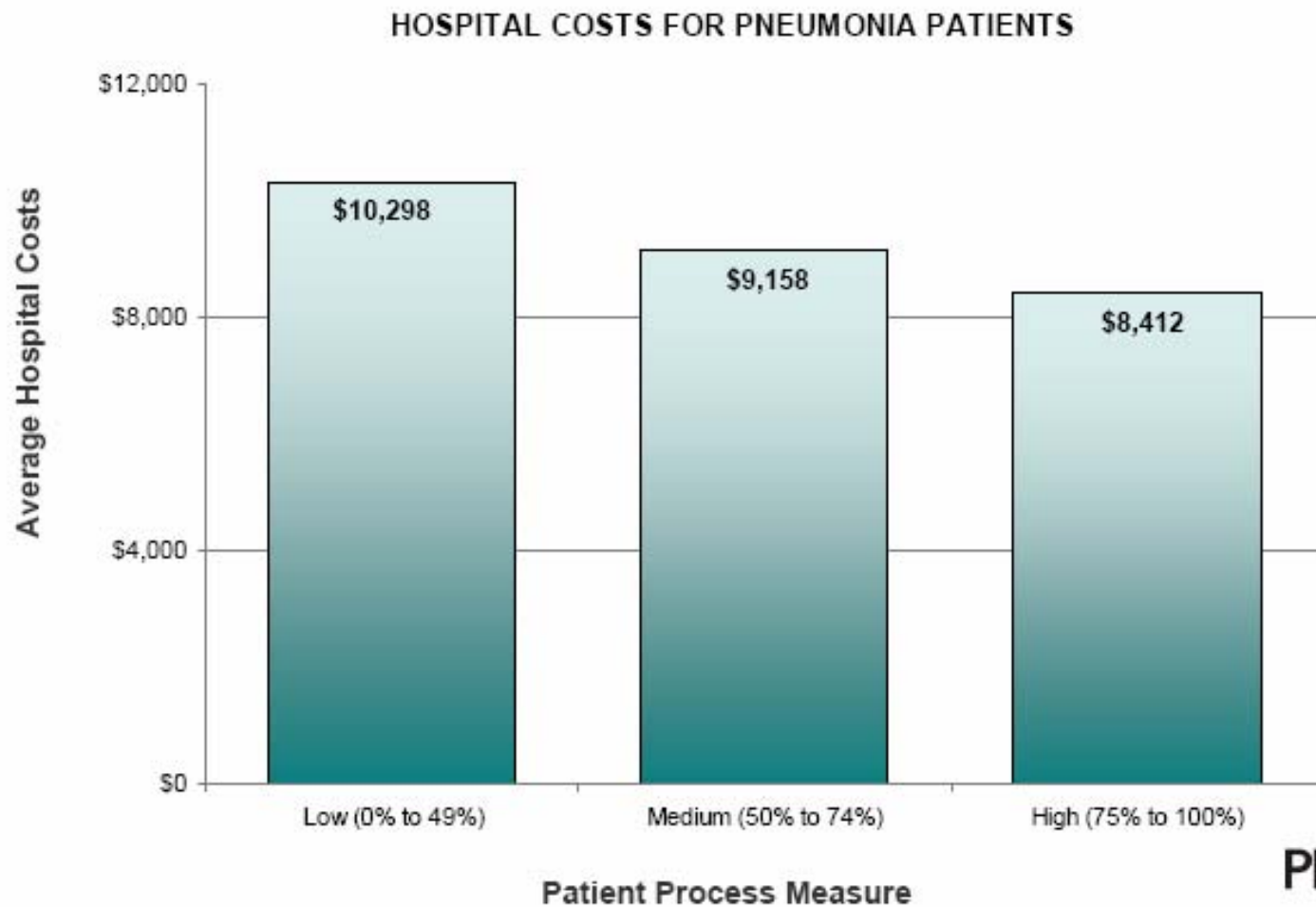
N of Hospitals = 242



Source: Premier, Inc

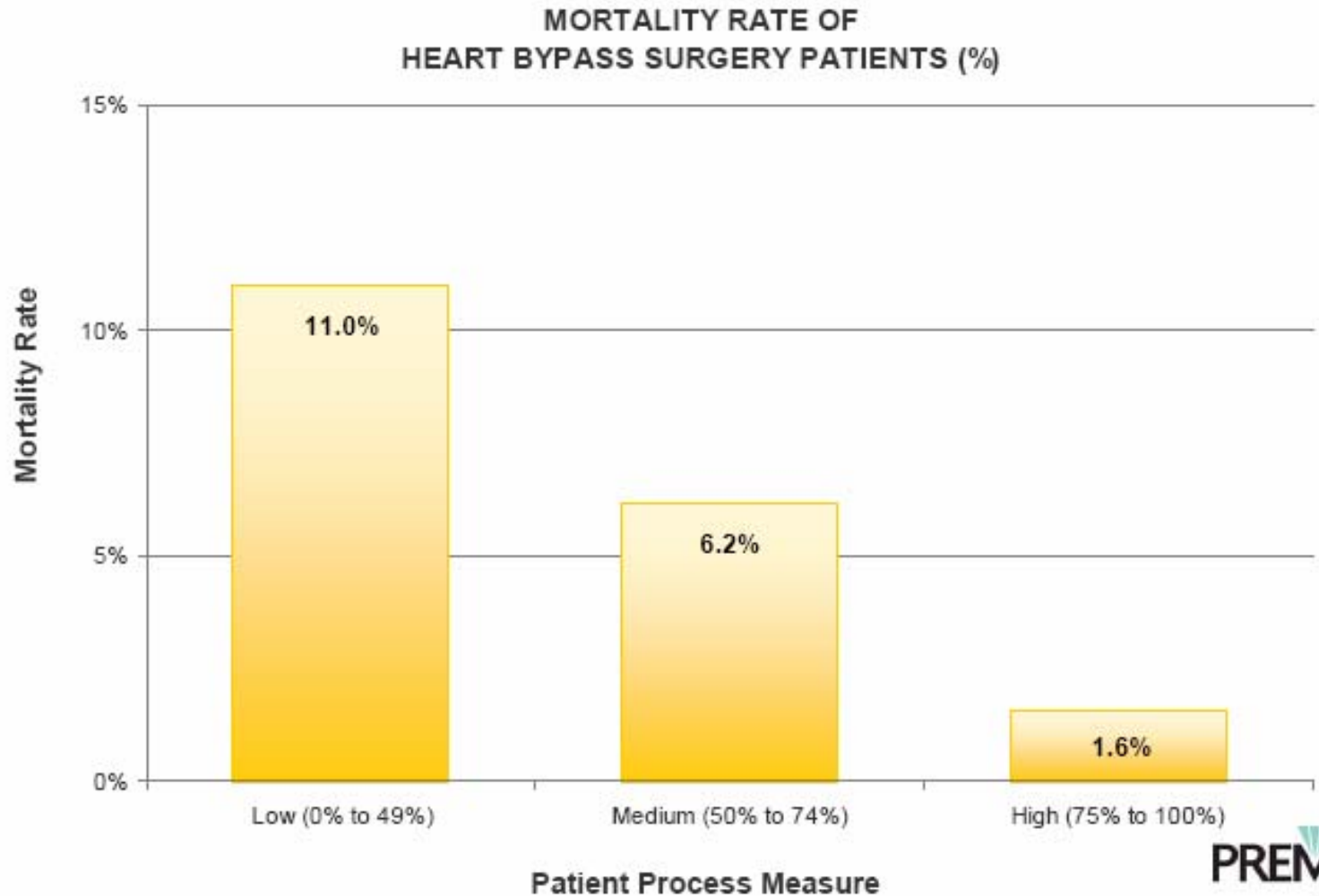
Reliable Care Costs Less - Hospital

Performance Pays. Proven.



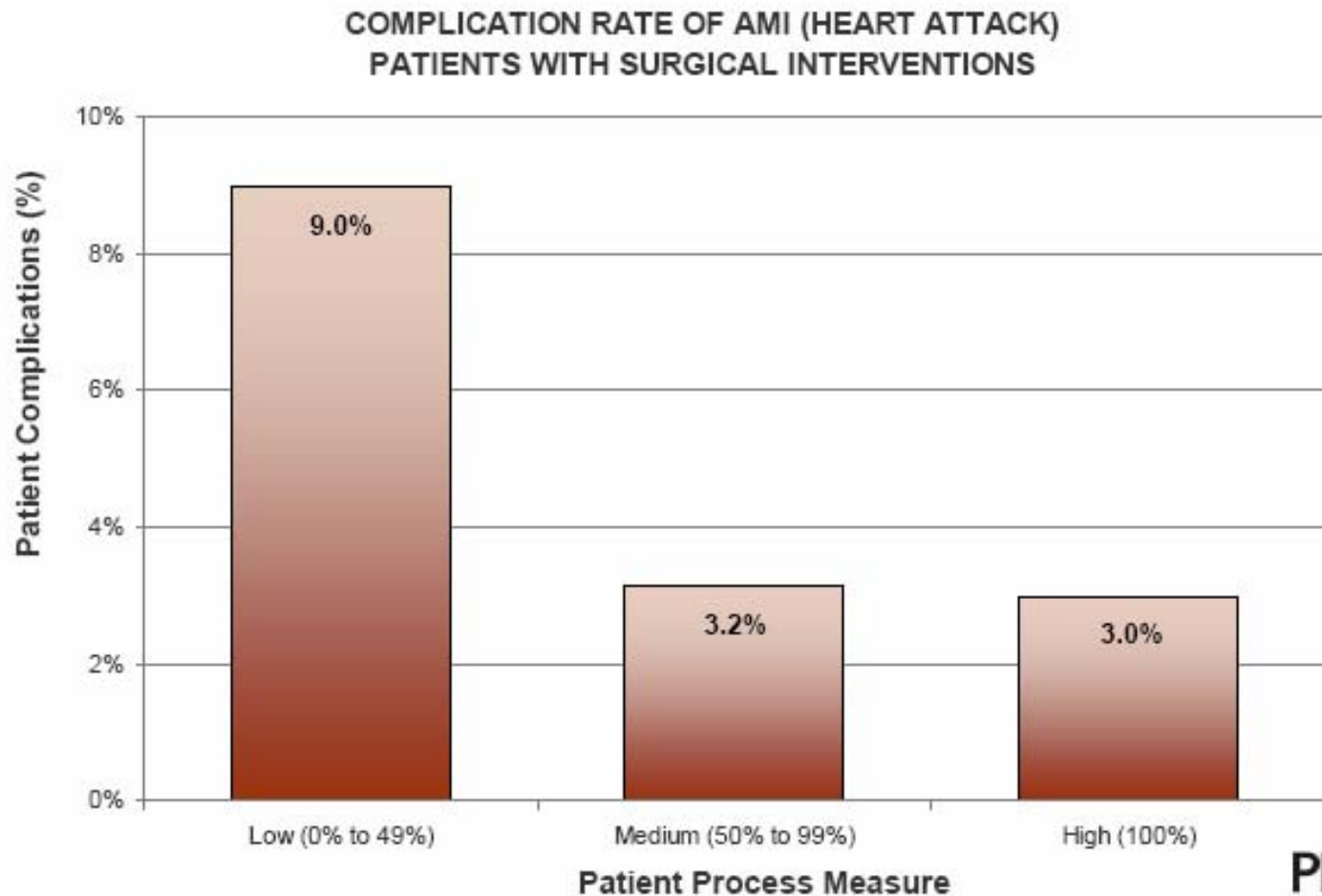
Reliable Care Lowers Mortality Rates

Performance Pays. Proven.



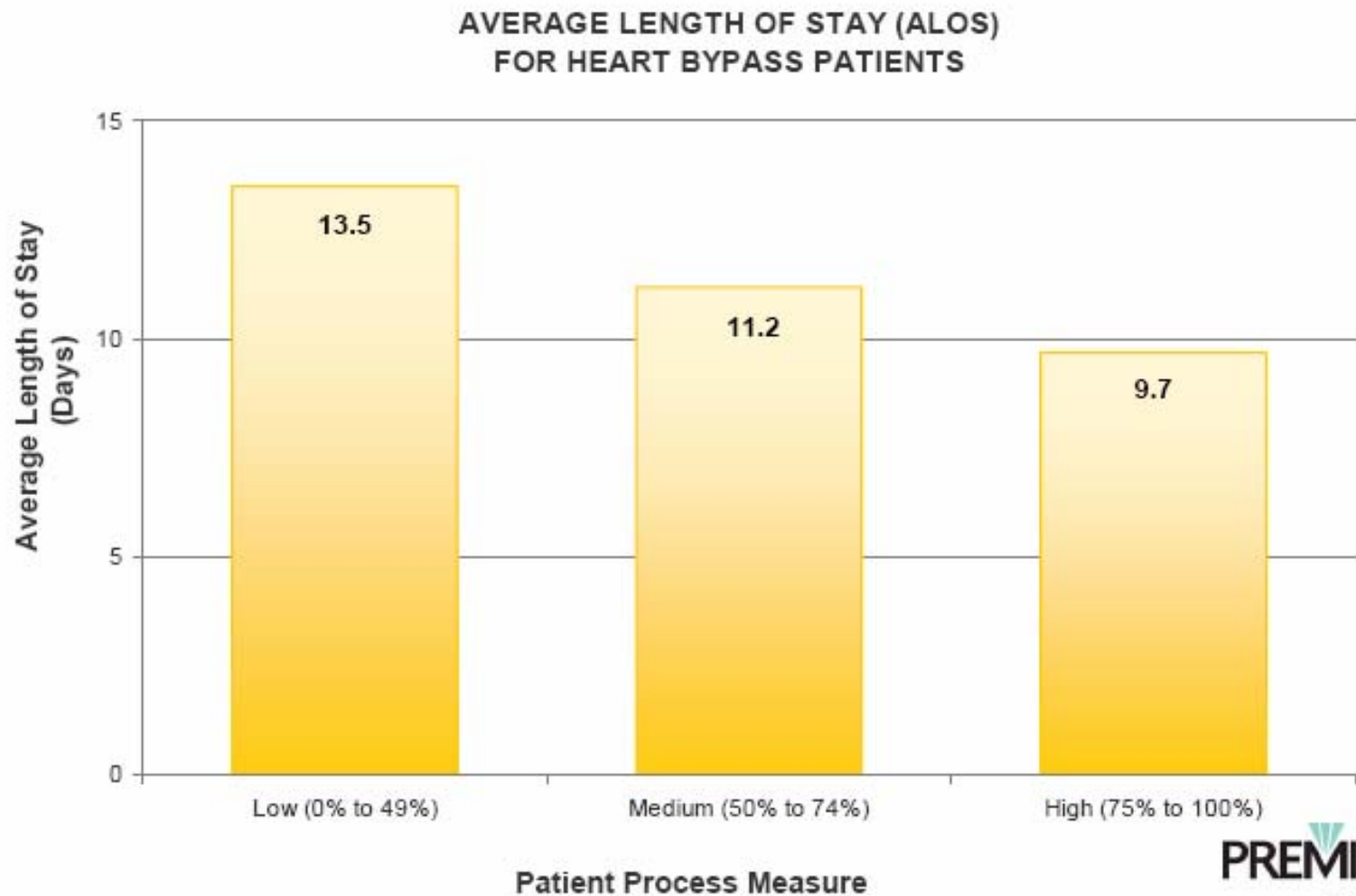
Reliable Care Reduces Complications

Performance Pays. Proven.



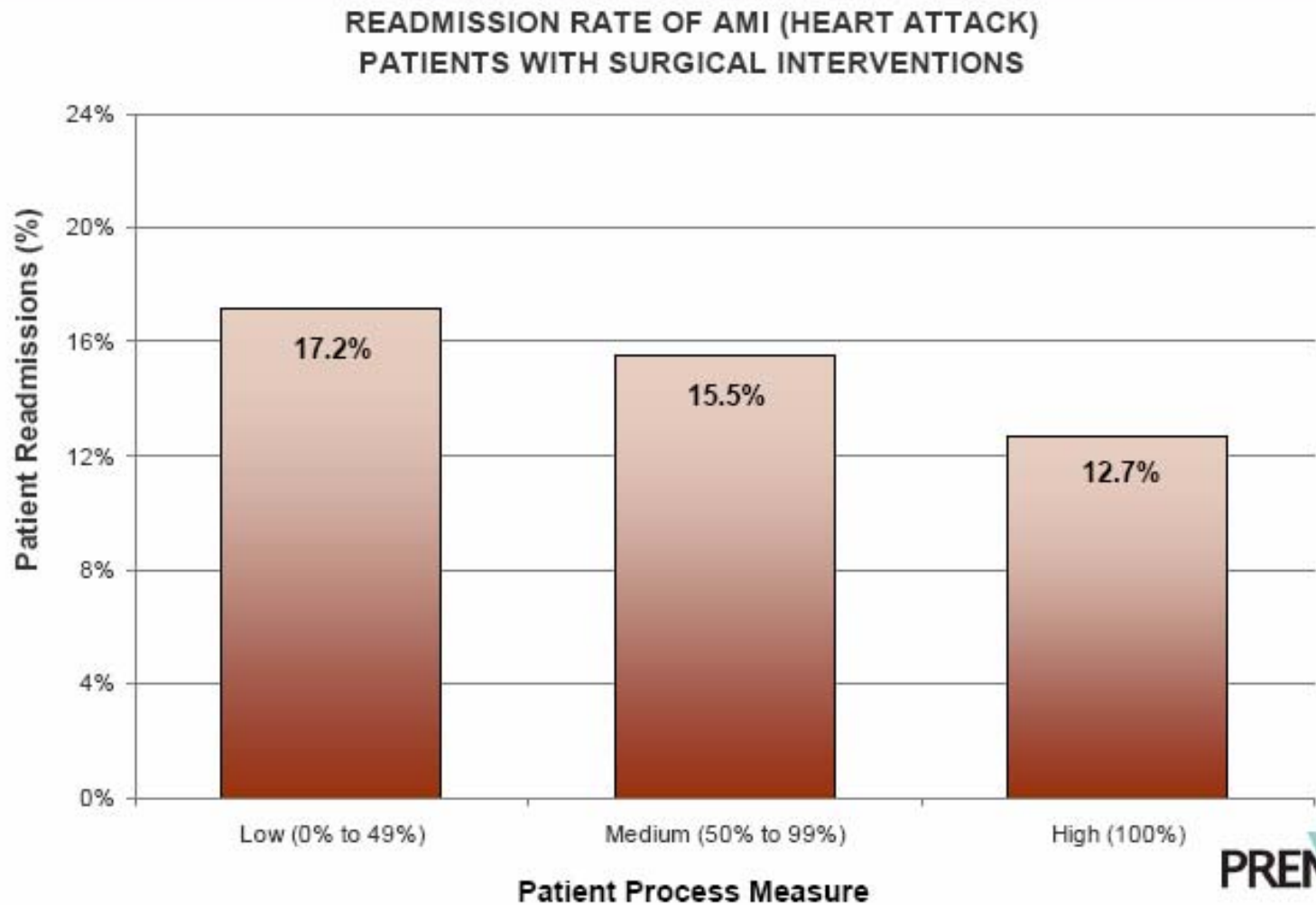
Reliable Care Shortens Hospital Stay

Performance Pays. Proven.



Reliable Care Reduces Readmissions

Performance Pays. Proven.



National Improvement Opportunity

Performance Pays. Proven.

For Pneumonia, Heart Bypass (CABG), Heart Attack (AMI)
and Hip and Knee Surgery patients
in one year*

If all patients nationally received high quality care

\$1.35 Billion – Hospital Costs

5,700 Avoidable Deaths

8,100 Complications

10,000 Readmissions

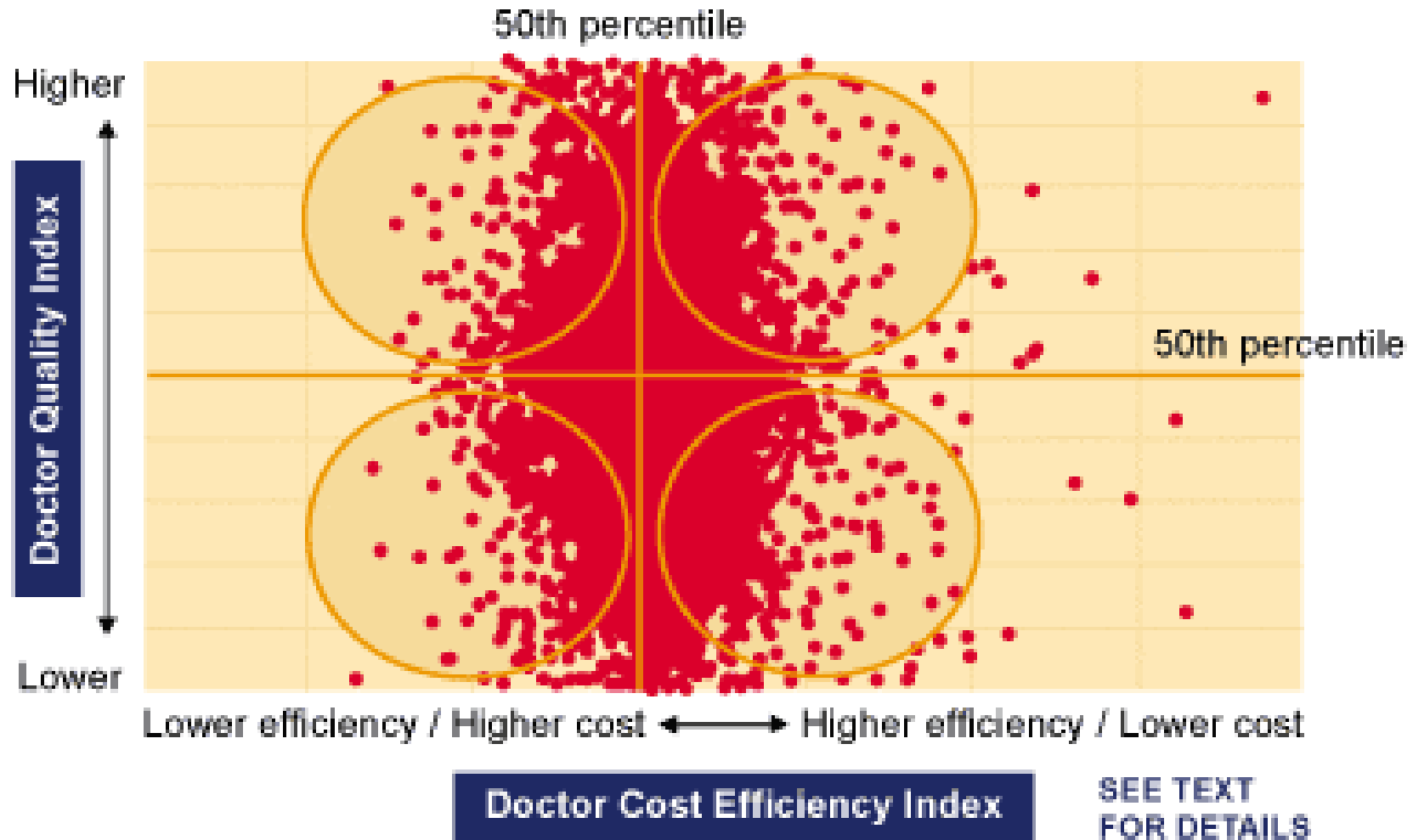
750,000 Days

* National estimate (all patients, all payers) based on discharges from the Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP) database FY 2003

Catholic Healthcare Partners (30 Hospitals in 5 States)

Year	Composite Quality Score	Inpatient Mortality	# DRG 127
2002	62%	4.1%	6,449
2003	72%	4.0%	7,839
2004	87%	3.6%	8,011
2005	92%	3.5%	7,542
2006	95%	2.6%	7,211

Ranking doctors' performance



Physicians increasingly are being monitored for quality and costs using claims data. A "scattergram" presented at NMHCC by Mercer Human Resource Consulting, based on data from a Utah Blues plan, shows hundreds of doctors portrayed as points and plotted according to adherence to evidence-based guidelines and cost-efficiency.



Lesson # 3

For health systems lacking a robust & standardized measurement framework, there is no direct link between quality & efficiency, hence incentives and reward systems should be designed to create these linkages and further support such an infrastructure

Framework for evaluation of Value

- Infrastructure
- Strategic Profitability model
 - Revenue
 - Expense
 - Cash Flow (esp. Cash Flow for Investing)
- Access to capital & capital structure
- Corporate structure
- Capacity for Innovation
- Managerial expertise & incentives
- Environmental & Market factors
- “Does Size Matter?”



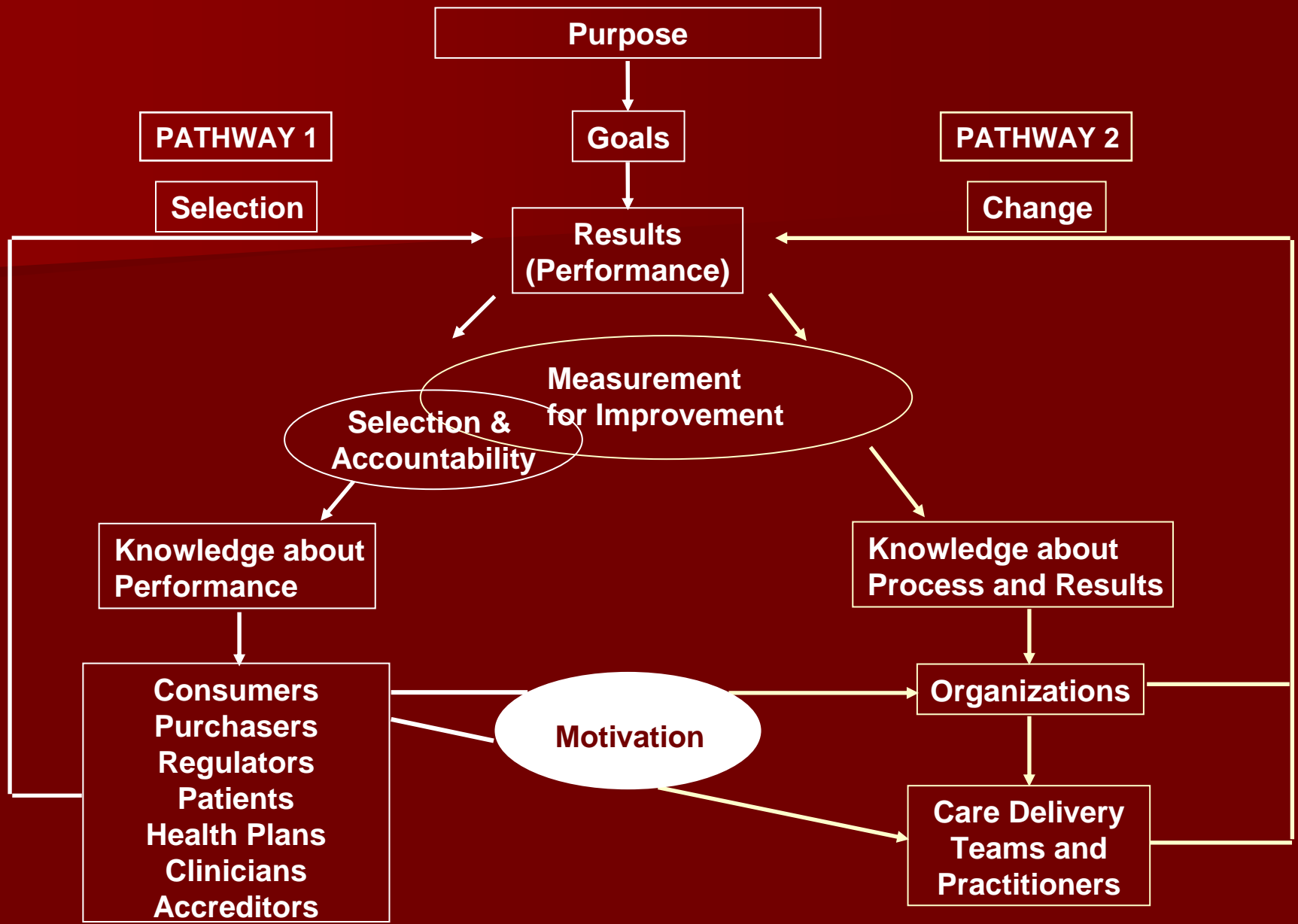
Understand which of the 4 possible key components of a health system exist

- ▶ Hospitals
- ▶ Physicians
- ▶ Health Plans
- ▶ Academic Medical Center



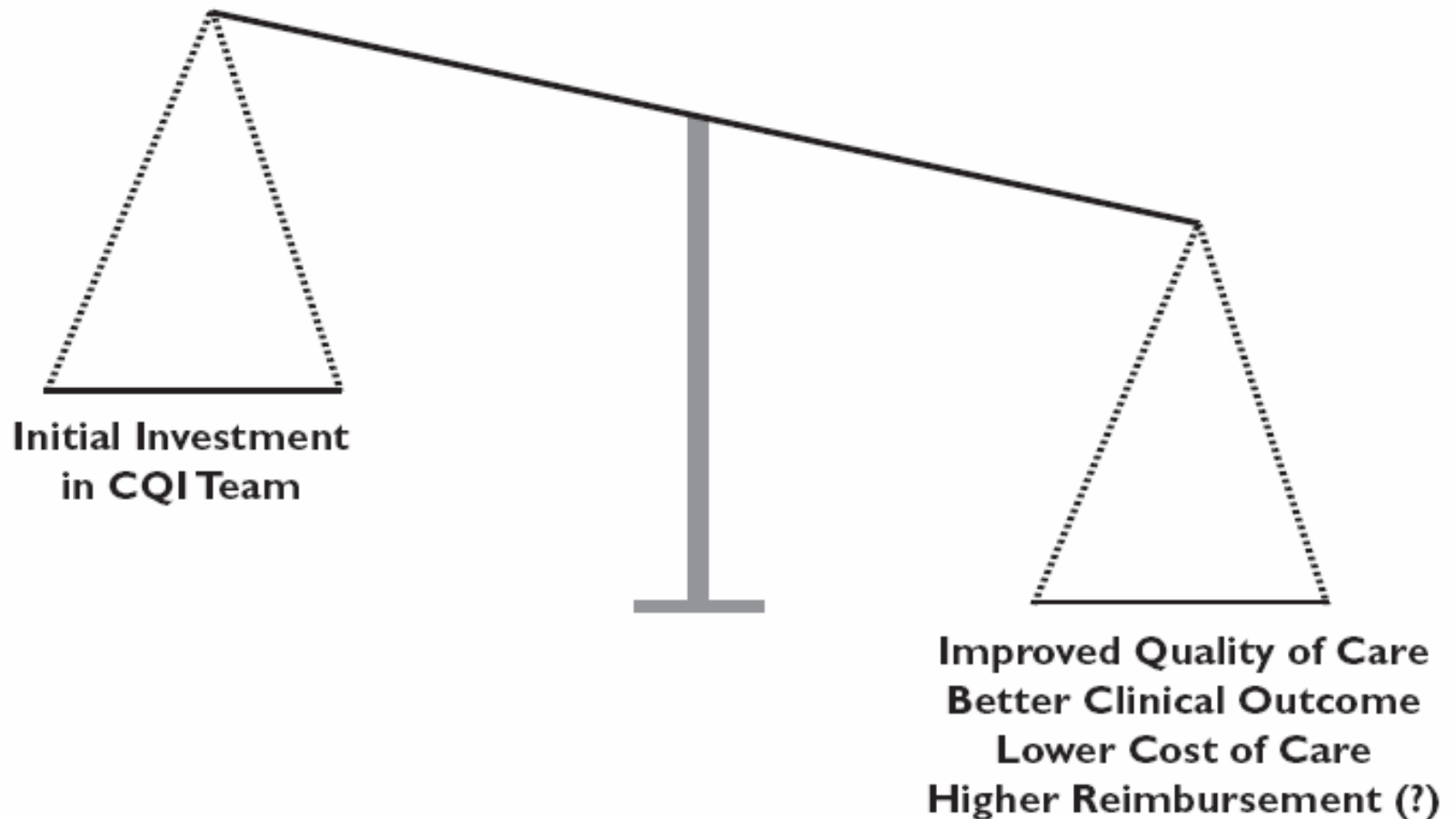
Evaluation of Efficiency: The “Key D’s”

- ▶ **Drugs**
- ▶ **Devices**
- ▶ **Diagnostics**
- ▶ **Delays in Care**
- ▶ **By Design**
- ▶ **Decision Maker(s)**
- ▶ **Demand (Technology)**
- ▶ **Demand (Services)**
- ▶ **Deficient Care**
- ▶ **Defensive Medicine**



Two Pathways to Quality Improvement

Figure. Cost-Benefit of Continuous Quality Improvement (CQI) Initiatives





Dimensions of Quality & Patient Safety Performance for Atlantic Health

- ▲ Infections
- ▲ Adverse Drug Events
- ▲ Clinical Outcomes (esp. for Service Lines)
- ▲ Perception of Care / Patient Satisfaction
- ▲ Serious Preventable Events
- ▲ Post Discharge Care Coordination
- ▲ Palliative Care
- ▲ Procedural Complications
- ▲ Hospital Readmissions
- ▲ Information Technology enablement
- ▲ Physician and Nursing specific Quality
- ▲ Safe Practices
- ▲ Revenue and cost improvements (especially “Pay for Performance”)
- ▲ “Efficiency”

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Lesson # 4

The Health Information Technology industry does not appear at present to be motivated by market forces to cooperate on developing and implementing interoperable data standards that supports efficient processing of quality measurement

Stages of EHR Development

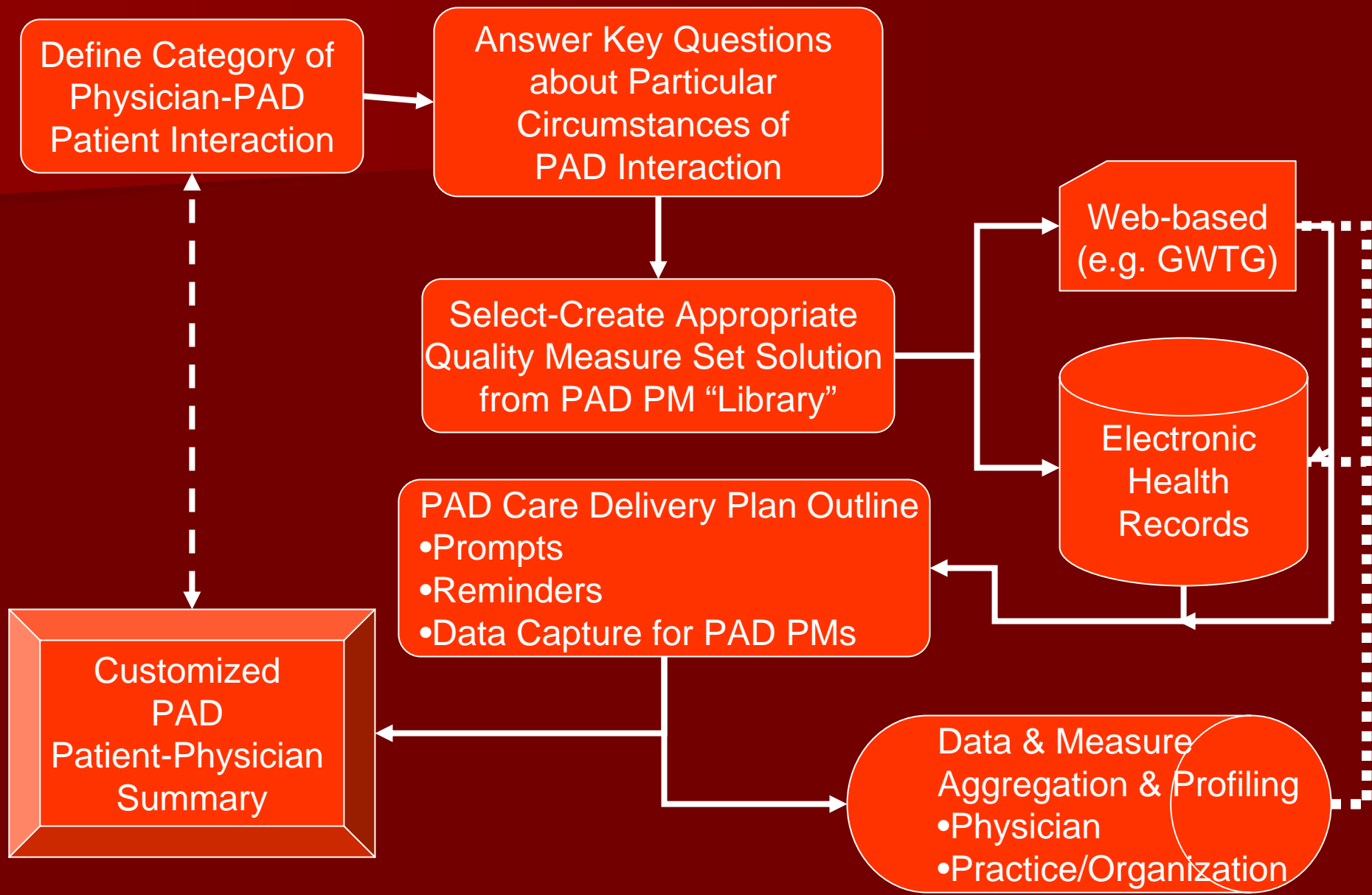


Don Casey--for discussion purposes
only

What Physicians want to
know:

How do you make the
right thing to do the
easy thing to do??

Proposed Flow Diagram for Selection of PAD Performance Measures



Real-Life Story: Lorain, OH

- Northern Ohio Heart Center (“NOHC”)
- 30 + physicians (mostly cardiologists)/5 hospitals
- Direct competition with The Cleveland Clinic
- 3rd Generation EHR (Allscripts Touchworks)
- Completely paperless; minimal Medical Records FTE support; Voice Recognition; Documentation Assistants
- Patient Records available 24/7 through secure internet access to all members of the group from anywhere
- Vioxx Story
- Taking on e-prescribing
- Participating in the AMA Cardio-HIT
- Developing “Pay for Performance” initiatives directly with payors and employers

Thank you!



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