



Learning Network for
**Chartered
Value Exchanges**

Quality Measurement 101

A Framework for CVEs

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Objectives

- How quality of care has been defined and conceptualized
- Framework for selecting quality measures
- Types of quality measures; strengths and limitations
- Roles of quality measure developers and the National Quality Forum
- Evaluating and prioritizing measures, considering potential unintended consequences



Framing the Problem in 1998:

President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry

- “Exhaustive research documents the fact that today, in America, there is no guarantee that any individual will receive high-quality care for any particular health problem.
- The health care industry is plagued with...
 - **Overutilization of services (that don't work)**
 - **Underutilization of services (that do work)**
 - **Errors in health care practice.”**



Challenging the Nation (2001):

IOM Committee on Quality of Health Care in America

- “The American health care delivery system is in need of fundamental change...
- Health care today harms too frequently and routinely fails to deliver its potential benefits...
- Quality problems are everywhere, affecting many patients.
- Between the health care we have and the care we could have lies not a gap, but a chasm.”

Definitions of Quality

- **Roemer & Montoya-Aguilar, WHO (1988):**
“The proper performance (according to standards) of interventions that are known to be safe, that are affordable..., and have the ability to produce an impact on mortality, disability, malnutrition...”
- **Institute of Medicine (1990):**
“the degree to which health services... increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”
- **Brook and McGlynn (1991):**
“High quality care...produces positive changes, or slows the decline, in health...”
- **Pauly (2004):**
“...anything and everything about some good or service relevant to consumers’ (actual and perceived) well-being that is not measured by quantity” (or price).

National Quality Strategy 2011

- **Better Care:** Improve overall quality by making health care more patient-centered, reliable, accessible, and safe.
- **Healthy People/Healthy Communities:** Improve the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health...
- **Affordable Care:** Reduce the cost of quality health care for individuals, families, employers, and government.



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IOM Domains of Quality

Effectiveness

- Providing services based on scientific knowledge (avoiding overuse of inappropriate care, underuse of appropriate care)

Patient Centeredness

- Care that is respectful of and responsive to patient preferences, needs, and values

Timeliness

- Reducing wait times and sometimes harmful delays

Safety

- Avoiding injuries to patients from care that is intended to help

Efficiency

- Avoiding waste of equipment, supplies, ideas, and energy

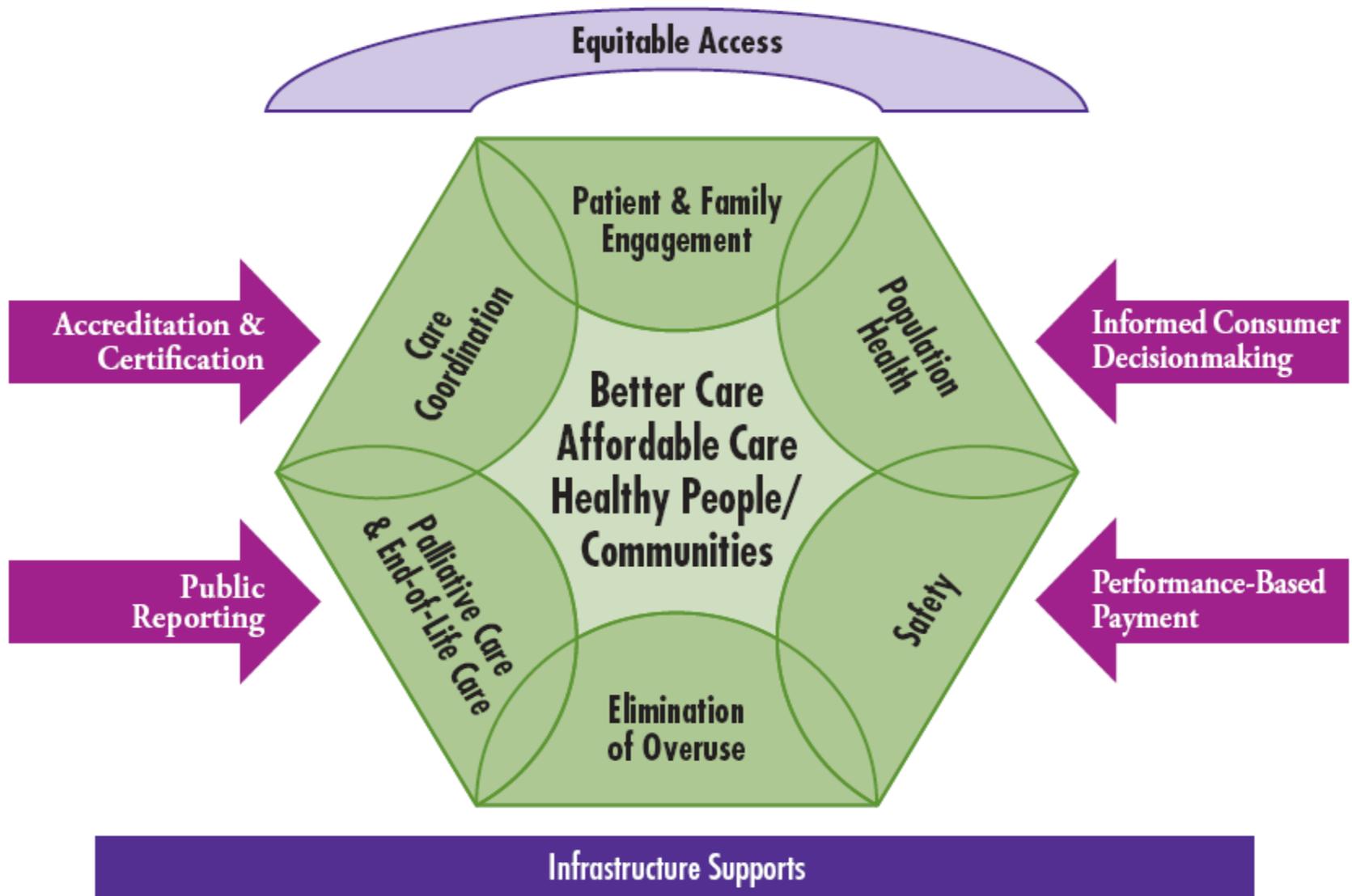
Equity

- Care does not vary in quality because of personal characteristics

In search of a balanced set of quality measures: Institute of Medicine, 2010

Crosscutting Dimensions		Components of Quality Care	Type of Care		
			Preventive Care	Acute Treatment	Chronic condition management
E Q U I T Y	V A L U E	Effectiveness			
		Safety			
		Timeliness			
		Patient/family-centeredness			
		Access			
		Efficiency			
	Care Coordination				
	Health Systems Infrastructure Capabilities				

National Priorities Partnership's Recommended Priorities



Types of Quality Measures

Donabedian 2003

- **Structure:** Conditions under which care is provided
 - Material resources (facilities, equipment)
 - Human resources (ratios, qualifications, experience)
 - Organizational characteristics (size, volume, IT systems)
- **Process:** Activities that constitute health care
 - Screening, diagnosis, treatment, rehabilitation, education, prevention (adherence to guidelines)
- **Outcome:** Changes attributable to health care
 - Mortality, morbidity (complications, readmissions)
 - Functional status, quality of life
 - Knowledge, attitudes, and behaviors
 - Experiences/satisfaction with care



Framework for selecting measures

IOM Domains	Structure	Process	Outcome
Effective	Cardiac nurse staffing, nursing skill mix (RN/total)	Use of ACE inhibitor or ARB for patients with systolic HF	30-day readmissions (or mortality) for heart failure
Patient Centered	Use of survey data to track patient-centered care	How often did you get an appointment as soon as you thought you needed?	Overall rating of experience with care
Timely	Physician organization policy on scheduling urgent appointments	Received beta blocker at discharge and for 6 months after AMI	Potentially avoidable hospitalizations for angina (without proc)
Safe	Computerized physician order entry with medication error detection	Use of prophylaxis for venous thromboembolism in appropriate patients	Postoperative deep vein thrombosis or pulmonary embolism
Efficient	Availability of rapid antigen testing for sore throat	Inappropriate use of antibiotics for sore throat	Dollars per episode of sore throat
Equitable	Availability of adequate interpreting services	Use of interpreting services when appropriate	Disparity in any other outcome according to primary language



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Healthcare Information Division

Coronary Artery Bypass Graft (CABG) Surgery in California

CABG surgery is the most common surgical procedure for treating coronary artery disease. In this surgery, a vein or artery from another part of the body is used to create a new path for blood to flow to the heart, bypassing the blocked artery. Coronary artery disease is the leading cause of all adult non-maternal admissions representing nearly 9% of all admissions. It is a chronic condition in which cholesterol and fat solidify to form plaque along the linings of the coronary arteries. As the plaque continues to build up, blood vessels can be restricted or blocked leading to chest pain or a heart attack.

Go to CABG Outcomes Report for: [2007-2008](#) | [2007](#) | [2005-2006](#) | [2005](#) | [2003-2004](#) | [2003](#) | [2000-2002](#) | [1999](#) | [1997-1998](#)

Go to CABG Trends for: [2003-2008](#)

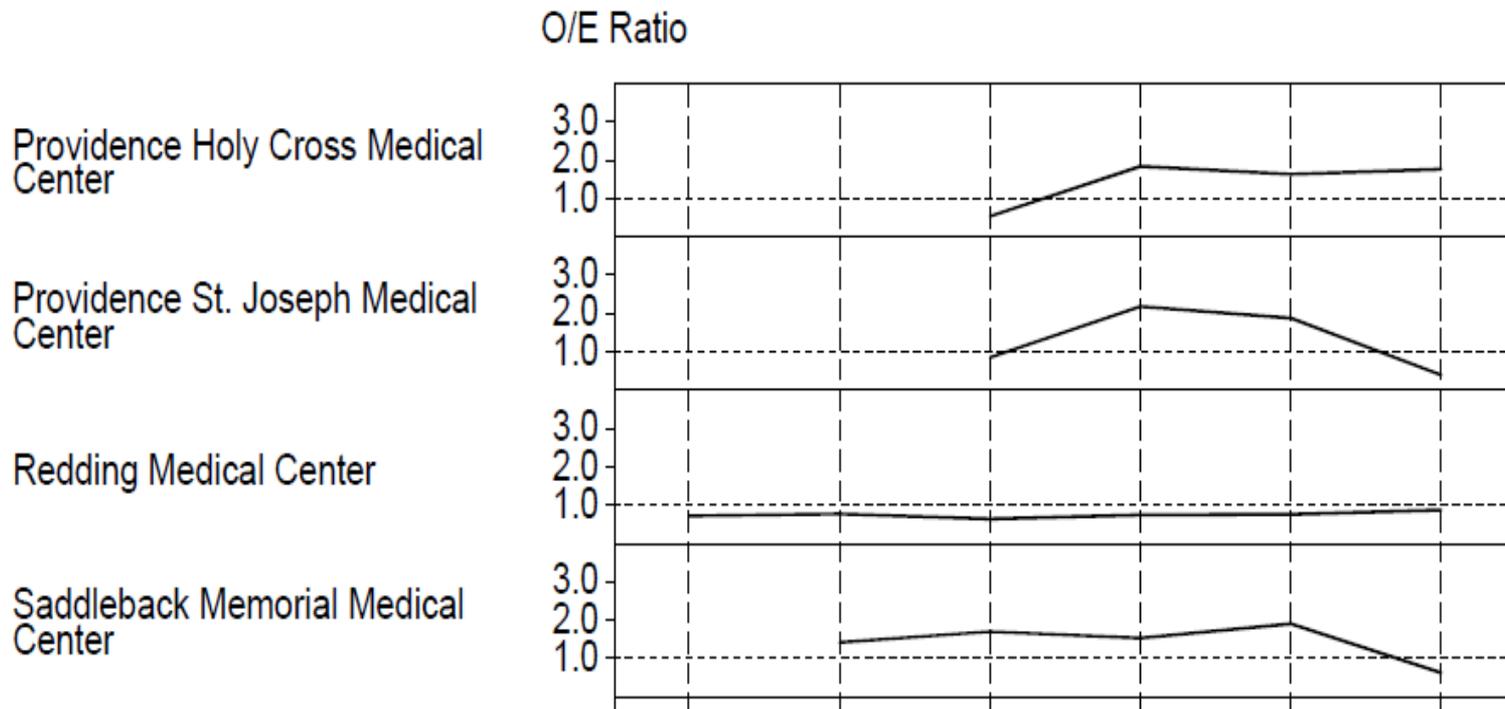
Go to Other CABG Reports: [Impact of Public Reporting](#) | [The State of Cardiac Revascularization Outcomes Reporting](#)



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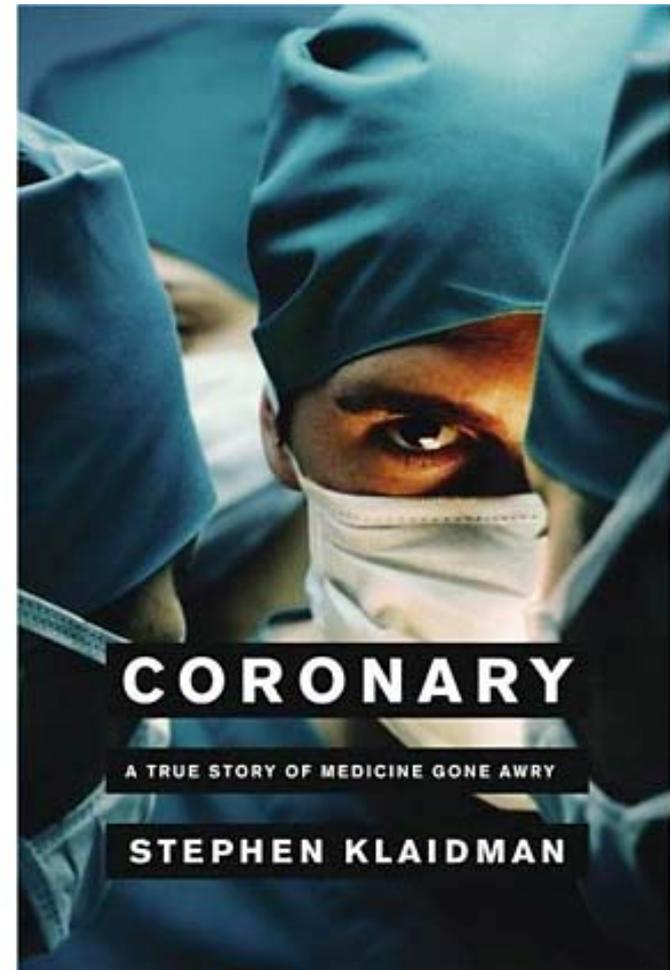
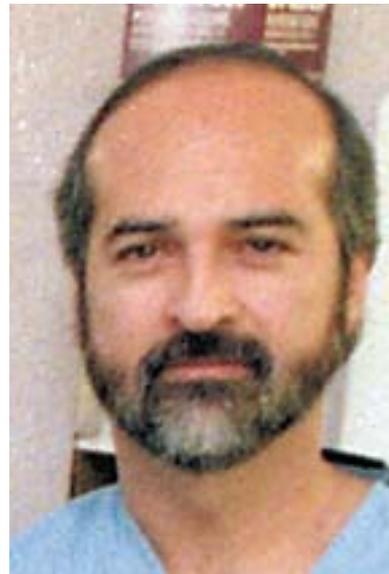
OSHPD's CABG Report

Figure 3: O/E Ratios Over Time for 67 CCMRP Participating Hospitals that Have at Least Two Years of Continuous O/E Ratios Available Between 2000 and 2002 (Continued)



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Redding Medical Center, Tenet, and “medicine gone awry”



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Structural Measures: Background and Concerns

- Enabling factors of high-quality care
- Explain little process and outcome variability
- May be hard to modify
- Causal relationships are often unclear (e.g., current volume as proxy for cumulative experience)
- Should be viewed as markers or facilitators of quality, not true measures
- Used when process or outcome measures are unavailable or have inadequate power
- Focus on modifiable measures that are closely related to outcomes (e.g., nursing skill mix)

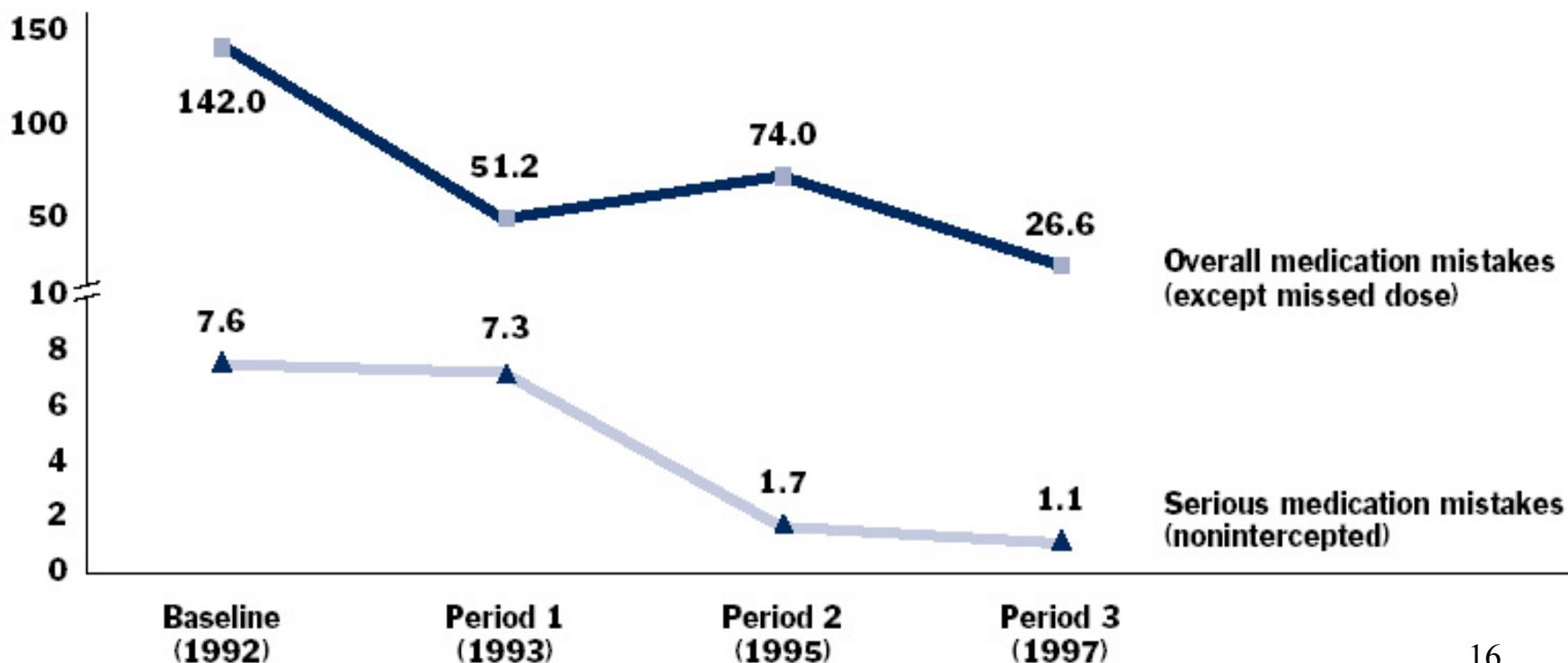


Chart 6-8

Preventing Medication Mistakes

Over 80 percent of medication mistakes (other than missed doses) were prevented by a computerized physician order entry system once it was fully developed at a teaching hospital. Medication mistakes that caused patient injury or had the potential to cause injury (and were not intercepted before reaching the patient) were reduced by 86 percent.

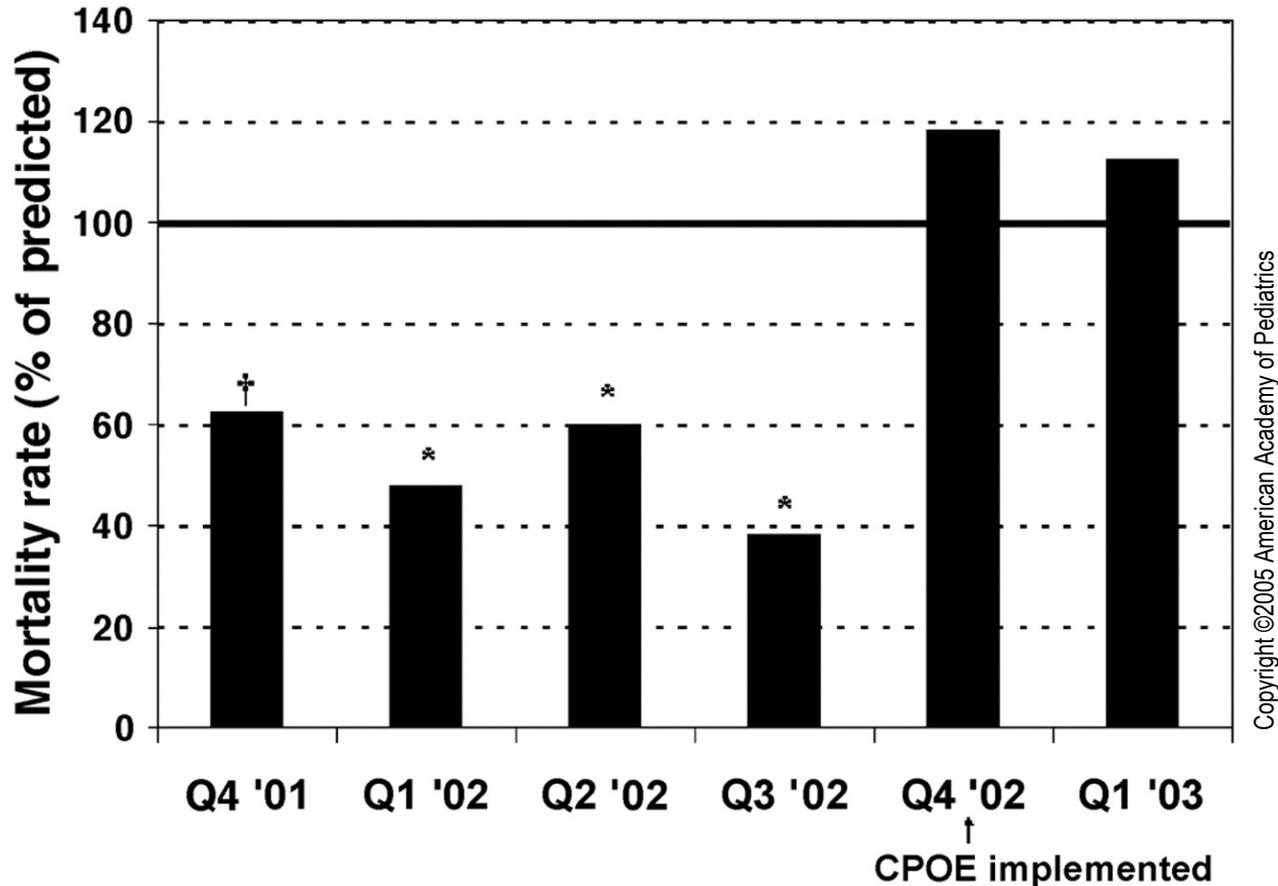
Rate per 1,000 patient-days



How CPOE Systems Facilitate Prescribing Errors

- Entering order for wrong patient due to interruption or display problems
- Delays in orders when patients not yet entered into system, CPOE crashes
- Incorrect default dosing or protocol
- Overloading users with alerts and reminders
- Medications discontinued without clinicians being aware (after surgery, antibiotics)

Mortality Among Patients Transferred From Other Hospitals



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Han, Y. Y. et al. *Pediatrics* 2005;116:1506-1512

What Went Wrong?

- “Order entry was not allowed until patient had physically arrived to the hospital and been fully registered...”
- “Entering stabilization orders often required an average of 10 ‘clicks’ on the computer mouse...”
- “Communication bandwidth was often exceeded...”
- “Second physician often needed solely to enter orders during the first 15 mins to 1 hour...”
- “Pharmacy could not process medication orders until they had been activated, [so] ICU nurses spent significant amounts of time... away from the bedside...”
- “Opportunities for face-to-face physician–nurse communication were diminished.”



Process Measures: Strengths

- Directly actionable by health care providers (“opportunities for intervention”)
- Highly responsive to change
- Often validated in randomized controlled trials (“do what works”)
- Illustrate pathways by which interventions may lead to better patient outcomes



Process Measures: Concerns

- Often costly or difficult to collect
 - Pharmacy/lab utilization (incomplete capture; e.g., CPT-II codes)
 - Provider or patient surveys (biased recall)
 - Chart review (inadequate documentation, cost)
 - Participant observation (Hawthorne effect, cost)
 - Simulated patients (cost)
- Validity may be questionable
 - Are they really evidence-based (vs. “expert opinion”)?
 - Some processes that seem important probably are not...
 - Many important processes have not yet been recognized...
 - Measures may not generalize across settings of care because the “standard of care” may vary

Story of a Hospital Core Measure: Time to First Antibiotic Dose (TFAD) for Pneumonia

- Two seminal studies of Medicare patients showed that TFAD is associated with risk of death:
 - Meehan et al. (1997): In 14,069 community-acquired pneumonia (CAP) patients aged ≥ 65 , 15% lower 30-day mortality if TFAD ≤ 8 hrs
 - Houck et al. (2004): In 18,209 CAP patients aged ≥ 65 , 15% lower 30-day mortality if TFAD ≤ 8 hrs (no \downarrow with prior antibiotic treatment, 16% \downarrow if TFAD ≤ 6 hrs)
- Smaller studies found no association with mortality, but significant associations with adjusted LOS

Concerns About TFAD

- 22% of patients may have “appropriate” delays due to atypical presentations and diagnostic uncertainty
- Adherence may be related to factors beyond hospital control (e.g., number of ED registrants)
- In one 608-bed teaching hospital from 2003 to 2005:
 - Patients receiving antibiotics within 4 hours of triage increased from 54% to 66% BUT
 - “CAP” with normal CXR increased from 21% to 29%
 - CAP with “clear infiltrate” dropped from 55% to 41%
 - Final dx of CAP among patients with admit dx of CAP decreased from 76% to 59%



Outcome Measures: Strengths

- Outcomes are what really matter to patients, families, and communities
- Intrinsically meaningful and easy to understand
- Outcomes reflect not just what was done but how well it was done (which is very difficult to measure directly)
- Often ascertainable at low cost using administrative data



Outcome Measures: Concerns

- Inconsistent reporting of morbidity measures (poor MD documentation and/or coding)
- Mortality measures may be confounded by variation in use of observation units, inter-hospital transfers, LOS
- Severity of illness varies widely across providers; most existing data systems capture little of this variation
- Many adverse outcomes are rare or delayed (e.g., little short-term responsiveness, lots of random noise)
- Are outcomes sufficiently under providers' control?

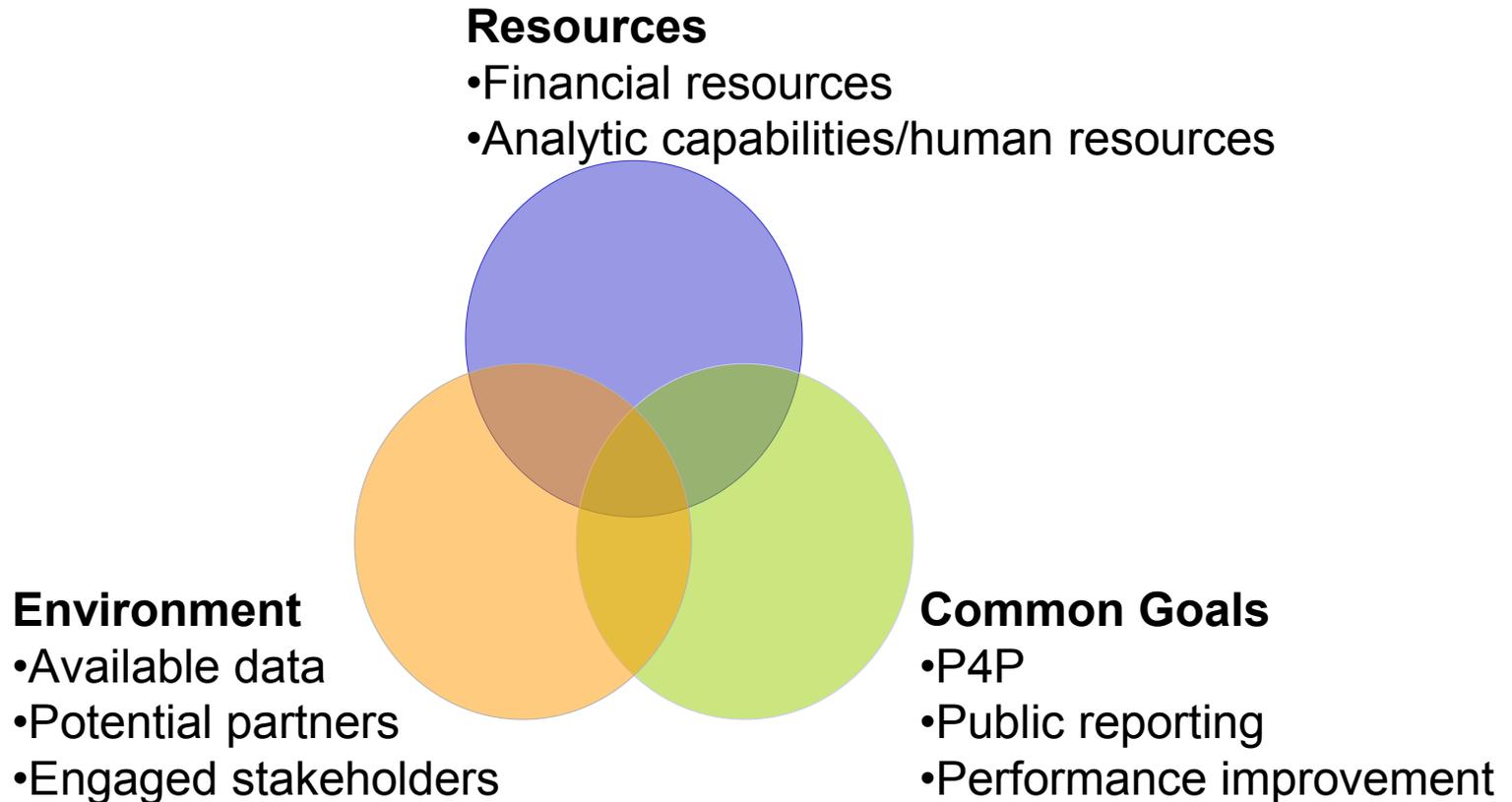


Questions? Complaints?



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Design of public reporting programs starts with a candid self-assessment



Sources of Pre-Packaged Hospital Quality Performance Measures

- Centers for Medicare and Medicaid Services (CMS) (www.hospitalcompare.hhs.gov)
 - 30-day readmission and mortality rates (heart attack, pneumonia, heart failure)
 - Clinical process measures
 - Heart failure, pneumonia, heart attack, pregnancy, children's asthma care, surgical infection prevention, venous thromboembolism
 - Patient experience
 - Hospital-associated conditions (for payment penalty)
 - Selected AHRQ QIs and composites
 - Central line associated bloodstream infection (NHSN)
- The Joint Commission (www.qualitycheck.org)
 - Accreditation and program certification
 - National Patient Safety Goals
 - Core measures (mimics CMS reported measures)



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Sources of Pre-Packaged Hospital Quality Performance Measures

- States
 - Example: New York State (<http://hospitals.nyhealth.gov/>)
 - Reports on risk-adjusted mortality for isolated CABGs, valve, percutaneous coronary intervention (PCI), and pediatric congenital heart surgery
 - Citations and deficiencies
 - Structural elements: volume of procedures
 - Reports for various procedures (e.g., CA, PA, MA, NJ) and types of complications (e.g., HAIs in PA, SREs in several states)
- Collaboratives
 - Example: California CHART project (www.calhospitalcompare.org)
 - Uses data from array of sources (CMS, state, AHRQ Quality Indicators applied to statewide hospital discharge data, “homegrown” measures of ICU mortality and obstetric care, Potentially Preventable Readmissions)



Sources of Pre-Packaged Hospital Quality Performance Measures

- Leapfrog patient safety (www.leapfroggroup.org/cp)
 - Voluntary reporting by larger, mostly non-rural hospitals
 - Report on adherence to 4 quality and patient safety practices
 - CPOE – hospital requires its staff to use computers to order medications, tests and procedures
 - ICU Staffing – Intensive care unit (ICU) is staffed by doctors and other caregivers who have special training in critical care (i.e., ‘intensivists’)
 - High Risk Treatments – hospital has lots of experience and the best results for specific procedures, surgeries or conditions (i.e., Evidence Based Hospital Referral)
 - Leapfrog Safe Practices Score – hospital uses 17 key procedures/policies to reduce preventable medical mistakes (see NQF Safe Practices)



Sources of Pre-Packaged Hospital Quality Performance Measures

- Private vendors
 - Example: HealthGrades® (www.healthgrades.com)
 - Applies proprietary analytic models to Medicare claims or all-payer hospital discharge data to generate risk adjusted measures of mortality and complications (~29 procedures)
 - Computes a composite of selected AHRQ Patient Safety Indicators
 - Others include:
 - US News and World Reports (<http://health.usnews.com/sections/health/best-hospitals/index.html>)
 - Thomson Reuters (www.100tophospitals.com)



Report 100621-022(Untitled) [\[Rename\]](#)

This report has not been saved. [Save Now](#).
Click any measure below for more details.

 Show selected measures only

	AVERAGE OF TOP 10%	NATIONAL AVERAGE	MERCY GENERAL HOSPITAL	SUTTER GENERAL HOSPITAL	UNIV OF CALIFORNIA DAVIS MED CENTER
<input checked="" type="checkbox"/> Overall Recommended Care	98.40%	90.00%	96.79%	97.67%	92.42%
<input checked="" type="checkbox"/> Overall Heart Attack Care	99.87%	92.72%	98.78%	99.26%	96.69%
<input checked="" type="checkbox"/> Overall Pneumonia Care	98.44%	89.48%	95.22%	97.84%	82.35%
<input checked="" type="checkbox"/> Overall Heart Failure Care	99.45%	85.94%	96.11%	99.86%	83.75%
<input checked="" type="checkbox"/> Overall Surgical Care	98.78%	92.04%	95.89%	96.53%	95.72%
<input checked="" type="checkbox"/> Patient Experience (HCAHPS) - Rating 9 or 10					
<input checked="" type="checkbox"/> Percent of Patients Highly Satisfied	82.79%	65.12%	69.00%	64.00%	63.00%
<input checked="" type="checkbox"/> Patient Experience (HCAHPS) - Rating 7 or 8					
<input checked="" type="checkbox"/> Overall Rating of 7 or 8	N/A	25.04%	24.00%	28.00%	30.00%
<input checked="" type="checkbox"/> Patient Experience (HCAHPS) - Rating 6 or lower					
<input checked="" type="checkbox"/> Overall Rating of 6 or lower	N/A	9.82%	7.00%	8.00%	7.00%
<input type="checkbox"/> Readmission					
<input type="checkbox"/> Mortality					
<input type="checkbox"/> Reimbursement					

Sources of Pre-Packaged Physician or Group Quality Performance Measures

- States and/or Community collaboratives
 - Example: California Office of the Patient Advocate (<http://www.opa.ca.gov/>)
 - Reports on group-level CGCAHPS patient experience and HEDIS performance measures (Integrated Healthcare Association)
- State medical boards
 - Information on licensure and disciplinary actions, including basic information submitted as part of the licensure process (e.g., medical school and year of graduation, residency training and board certification).
 - Data used to populate
 - American Medical Association's DoctorFinder site (<http://webapps.ama-assn.org/doctorfinder>)
 - Administrators in Medicine (Association of State Medical Board Executive Directors) Doc Finder site (<http://www.docboard.org/docfinder.html>)

Sources of Pre-Packaged Physician or Group Quality Performance Measures

- National Committee for Quality Assurance's Recognition Programs (www.ncqa.org)
 - Voluntary participation (provider self-selection)
 - Patient Centered Medical Home, Back Pain, Diabetes, Heart/stroke
 - Metrics include structural, process, patient experience and outcome measures
- Centers for Medicare & Medicaid Services (<http://www.medicare.gov/find-a-doctor/provider-search.aspx>)
- Private sources—Examples include...
 - Consumers' Checkbook (www.checkbook.org/doctors/pageone.cfm)
 - Asks “roughly 260,000 physicians to identify which specialists they would want to care for a loved one”
 - Vitals.com (<http://www.vitals.com>)
 - Present a 360 view of physicians (background), consumer reviews, peer reviews and awards, and office information

Example: Oregon CVE Uses Medicare Hospital Compare Data (www.PartnerForQualityCare.org)



Tips
for You

Quality
Scores

About
this Work

You are here: [Home](#) > [Select Region](#) > [Quality of Care Ratings for North Coast Hospitals](#)

Quality of Care Ratings for North Coast Hospitals

Using the reports

Getting quality care in the hospital

About the scores

[Overall Care Score](#)

[Surgical Care](#)

[Heart Attack Care](#)

[Heart Failure Care](#)

[Pneumonia Care](#)

[Patient Experience](#)

How is the quality of pneumonia care measured?

Pneumonia is a serious lung infection that causes breathing trouble, fever, cough and tiredness. It is a leading cause of death among the elderly and people who have ongoing illnesses. Medical experts have looked at the research about pneumonia and agreed on seven things that should be happening for all patients with pneumonia.

The single score below summarizes the six things that should happen for all patients with pneumonia. To view quality scores for each of these six things, click on 'show details' which will expand the measures in greater detail. [Read more...](#)

What do these numbers mean?

Show details

Hospital

Pneumonia Care

Providence Seaside Hospital
Seaside 97138

95%

Tillamook County General Hospital
Tillamook 97141

95%

Samaritan Pacific Community Hospital
Newport 97365

88%

Example: Maine CVE Uses Medicare Compare, Leapfrog, NCQA, etc. (www.mhmc.info)



Maine Health Management Coalition

Maine Doctor Ratings Maine Hospital Ratings Major Surgery Ratings How Do I Get Quality Care?

Maine Doctor Ratings

Find out which Maine doctors do the best.



[View Results](#)

[Improving the way we rate Maine doctors >](#)
[Doctor Ratings Explained](#)

Maine Hospital Ratings

Information you can use to choose a hospital.



[View Results](#)

New, April 2010

[Hospital Ratings Explained](#)

Major Surgery Ratings

Facing a high-risk procedure? Which New England hospital is best?



[View Results](#)

[Surgery Ratings Explained](#)

Watch the Consumer Videos



About MHMC

[I have read and understand the disclaimer, please show me the results.](#) [View Results](#)

Disclaimer: Measures of HealthCare Quality

This disclaimer has important information you should know about the Pathways to Excellence results.

Information DISCLAIMER:

The information on hospitals, major surgeries, and physician practices is obtained from multiple sources:

Hospitals and Major Surgery Ratings:

- ✓ Patient Experience and Select Clinical Quality data is abstracted from the US Department of Health and Human Services website at www.hospitalcompare.hhs.gov.
- ✓ A Medication Safety Survey that is mailed to all hospitals in Maine. Each hospital is asked to complete a survey which was developed by a committee of pharmacists and nurses based on their knowledge and experience; learnings from previous years' surveys and on discussions of the relevant and current literature.
- ✓ A summary of hospital results from the National Leapfrog Survey found at www.leapfroggroup.org.

Hospital CEOs affirm the accuracy of the self-reported Leapfrog National and Medication Safety Surveys when they submit their data. If you have any questions about their data, you should contact the hospital directly.

Example: Maine CVE—Provider Ratings used NCQA Provider Recognition and Bridges to Excellence


 Maine Health Management Coalition

[Maine Doctor Ratings](#)
[Maine Hospital Ratings](#)
[Major Surgery Ratings](#)
[How Do I Get Quality Care?](#)

Optional: Search of [View Results](#)

Maine Doctor Ratings

Primary Care Physicians Sort by: [Highest Rated](#) [Name](#) [City](#) [« Doctor Ratings Explained](#)
page last updated May 2009

 [view Pediatric Practices »](#)

 **Good**  **Better**

	Uses Clinical Office Systems ratings explained	Measures Results of Diabetes Care ratings explained	Measures Results of Heart Disease Care ratings explained
Bridgton Internal Medicine 25 Hospital Drive, Suite #2, Bridgton Hospital Physician Group, Bridgton 04009 · view map			
Central Maine Family Practice 12 High Street, Suite 302, Lewiston 04240 · view map			
Eastern Maine Medical Center - Husson Family Practice 302 Husson Ave, Suite 2, Bangor 04401 · view map			
Eastern Maine Medical Center Husson Internal Medicine 302 Husson Ave, Suite One, Bangor 04401 · view map			
Evergreen Woods Primary Care 700 Mt Hope Avenue, Suite 650, Bangor 04401 · view map			

Critical Access Hospitals: Implications for CVEs

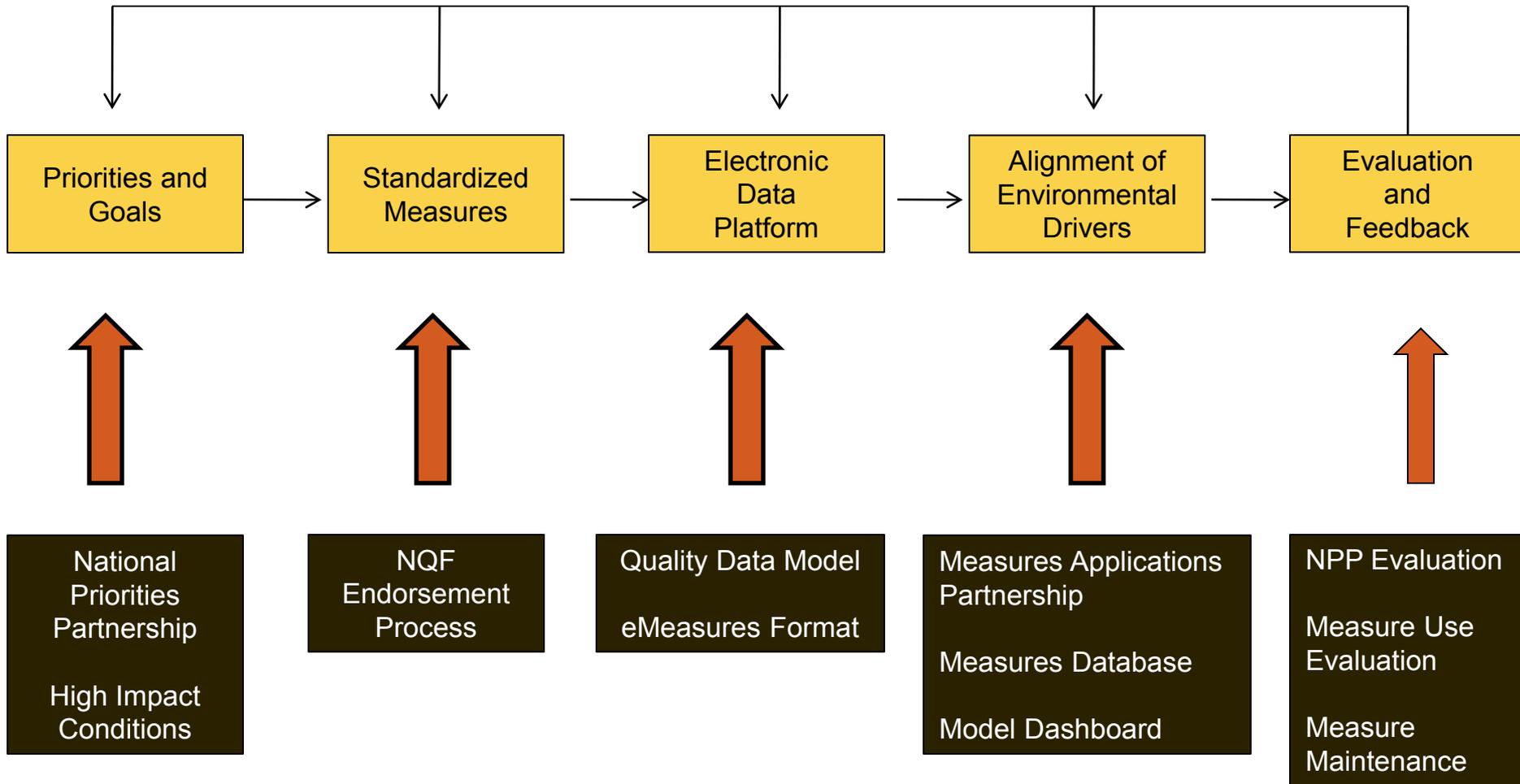
- Low volume leads to inadequate statistical power (i.e., poor precision)
- Some indicators do not apply due to lack of subspecialists (especially in cardiology, surgery)
- Small size and financial vulnerability limit resources for participation in quality initiatives
- No incentive to code all ICD-9-CM diagnoses
- Participation in HospitalCompare is optional

Critical Access Hospitals: Implications for CVEs

- Structural measures (accreditation, Leapfrog)
- HCAHPS (patient experience)
- Composite measures (AHRQ, TJC, multi-year, multi-hospital within system/county)
- Customized measures for CAHs (ED transfer, ED timeliness, cross-cutting)
- May choose collaborative approach, focusing on QI, CE, guidelines and protocols, and networking rather than transparency and accountability



Quality Measurement Enterprise: NQF Contributions

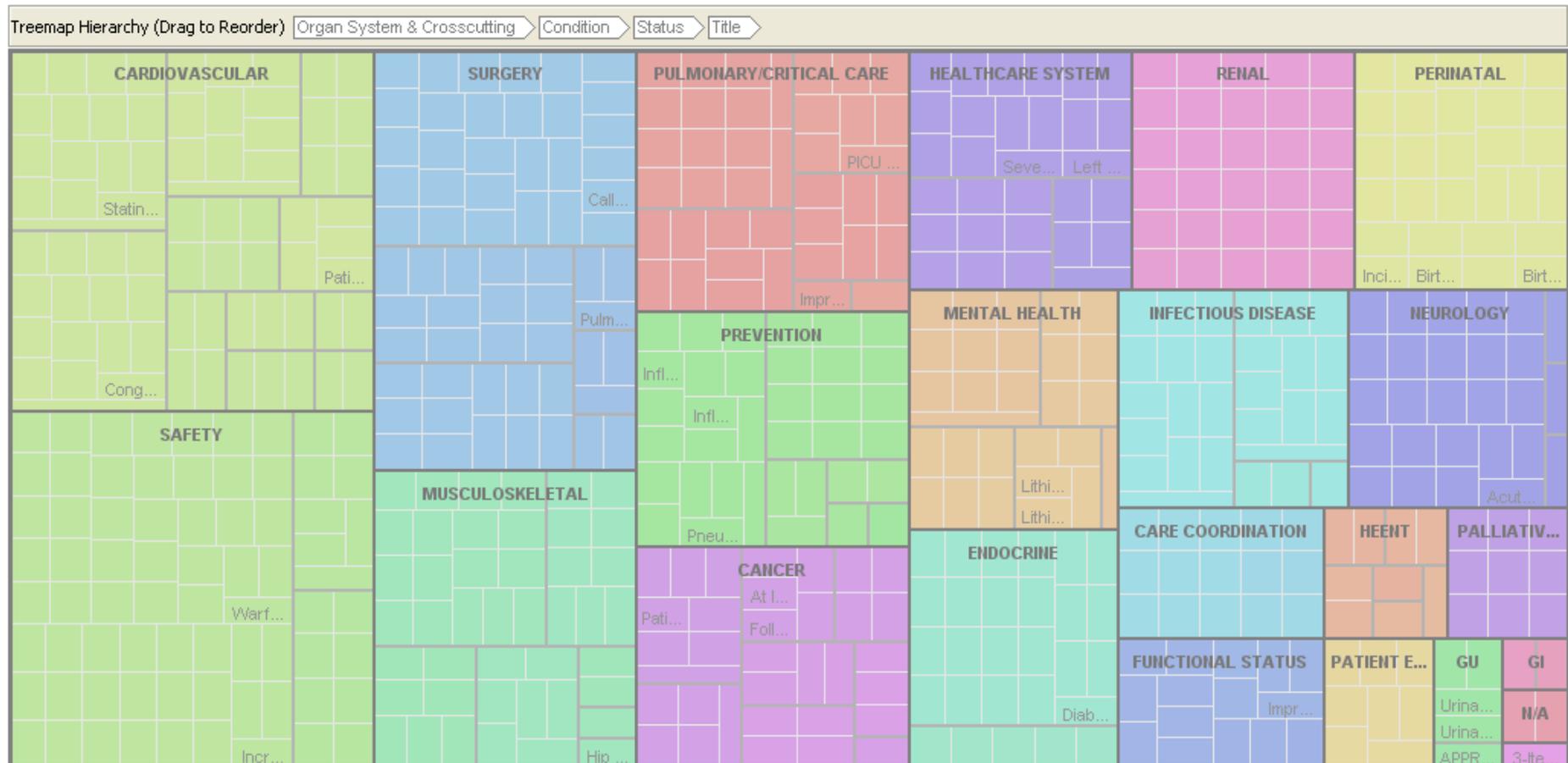


- **Importance to measure and report**
 - What is the level of evidence for the measures?
 - Is there an opportunity for improvement?
 - Relation to a priority area or high impact area of care?
- **Scientific acceptability of the measurement properties**
 - What is the reliability and validity of the measure?
- **Usability**
 - Can the intended audiences understand and use the results for decision-making?
- **Feasibility**
 - Can the measure be implemented without undue burden, capture with electronic data/EHRs?
- BUT relative importance of these criteria may depend on local circumstances and priorities...

NQF Portfolio

- 670 cross-cutting and condition-specific measures
- 30% outcome measures

Your visualization will look like this:



Consider Potential Unintended Effects

- Manipulation of data (e.g., exception reporting)
- Teaching to the test
- Risk of overtreatment (especially with all-or-none scoring) or undertreatment (with efficiency measures)
- Increased disparities



Overall Ranking of National Health Care Systems

	1.00–2.33
	2.34–4.66
	4.67–7.00



AUS



CAN



GER



NETH



NZ



UK



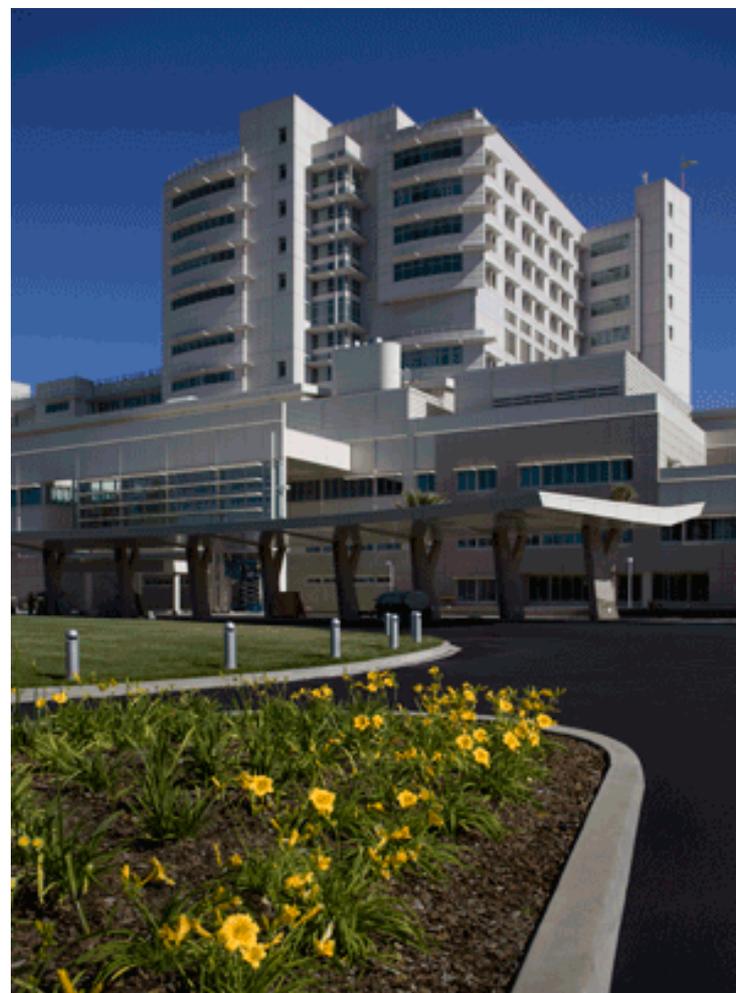
US

OVERALL RANKING (2010)	AUS	CAN	GER	NETH	NZ	UK	US
Quality Care	4	7	5	2	1	3	6
Effective Care	2	7	6	3	5	1	4
Safe Care	6	5	3	1	4	2	7
Coordinated Care	4	5	7	2	1	3	6
Patient-Centered Care	2	5	3	6	1	7	4
Access	6.5	5	3	1	4	2	6.5
Cost-Related Problem	6	3.5	3.5	2	5	1	7
Timeliness of Care	6	7	2	1	3	4	5
Efficiency	2	6	5	3	4	1	7
Equity	4	5	3	1	6	2	7
Long, Healthy, Productive Lives	1	2	3	4	5	6	7

Note: * Estimate. Expenditures shown in \$US PPP (purchasing power parity).

Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organization for Economic Cooperation and Development, *OECD Health Data, 2009* (Paris: OECD, Nov. 2009).

Production of health care is a public health issue



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Lessons from agriculture about comprehensive measurement Iowa's inspection of Wright County Egg

Iowa Department of Inspections & Appeals Egg Handler Inspection

QUALITY EGG LLC #1 AMS - USDA ED00-0001264

2731 265TH ST GALT 50101 Wright County

Owner: J GLESSNER (515)832-3300

Routine Inspection on 4/15/2010, from 2:45 PM to 3:00 PM by DUDEN, D.
SCOTT

Person In Charge: TONY WASMUND (CFPM:
No)

Inspection Summary (IN=IN Compliance, OUT=Out of Compliance, NO=Not Observed, NA= Not Applicable C=critical, S=Critical & non-Critical)

Buildings, Storage & Processing Areas

- 1) Building: good repair, clean, adequately vented *N/O*
- 2) Free from presence of birds, insects, rodents *N/O*
- 3) Adequate system/removal of refuse *N/O*
- 4) Floors of cleanable materials, floor drains provided *N/O*
- 5) Floors, walls and ceilings clean *N/O*
- 6) Plumbing and sewage disposal system adequate *N/O*
- 7) Hand Sink: convenient, hot/cold water, sanitary towels provided *N/O*
- 8) Storage and use of toxic items *N/O*
- 9) Storage of cartons and cases: clean and dry *N/O*

Shell Egg Washing, Grading and Packing Operations

- 10) Adequate supply of potable water *N/O*
- 11) Current water test on file for private system, date tested *N/O*
- 12) Shell washer clean and sanitary condition *N/O*
- 13) Wash temperature 90 degrees F or above, rinse water 10 degrees warmer than wash water *N/O*

- 14) Sanitizer spray rinse at 50ppm to 200ppm of chlorine *N/O*
- 15) Egg drying equipment: clean and maintained *N/O*

Equipment

- 16) Candling device, adequate *N/O*
- 17) Scales adequate to determine net weight *N/O*
- 18) Refrigeration units: 45 degrees F or below, clean, free of objectionable odors, good repair *N/O*
- 19) Thermometers: provided and accurate *N/O*
- 20) Transportation vehicles: refrigerated, clean and good repair *N/O*

Labeling and Packaging

- 21) Loose-packed egg cases properly labeled: firm name/USDA Plant license or number *N/O*
- 22) New egg cartons for sales to retail food stores *N/O*
- 23) Labeling of egg cartons: grade/size/pack date/name/address/plant or license number *N/O*
- 24) Adequate records maintained *N/O*
- 25) Restricted/Inedible eggs properly handled *N/O*

Personnel

- 26) Personnel in contact with shell eggs: good hygienic practices, clean clothes *N/O*
- 27) Demonstration of knowledge: candling, grading, weighing, washing and sanitation *N/O*

Lessons from agriculture about comprehensive measurement USDA "grader" inspection of shell egg plant

III. Cooler and Storage Areas								
A. Unprocessed egg coolers clean and free from odors and mold.	X							
B. Processed egg coolers clean and free from odors and mold.	X		U	U	U	S	S	S
C. Packing and packaging storage areas clean and dry.		X	S	S	S	S		
D. Chemical compound storage areas clean.		X				S		
IV. Buildings, Premises, and Refuse Handling Areas								
A. Buildings in good repair.		X	S	S	S	S	S	S
B. Outside premises, shipping, and receiving areas clean, well maintained, and properly drained.		X					S	
C. Outside premises free of trash, rubbish, weeds, and surplus equipment.		X					S	
D. Refuse removed and stored in designated area that is maintained in a clean and sanitary manner.		X					S	
E. Restrooms and lunchrooms clean and sanitary.		X					S	
F. USDA grader's office and candling booth clean and sanitary.		X					S	
G. Inspection of premises indicates rodent and pest control program is effective.		X					S	
PLANT MANAGEMENT INITIALS			HA	HA	HA	HA	HA	HA

Lessons from agriculture about comprehensive measurement
What did USDA and Iowa miss??



Tools from AHRQ

- CVE Learning Network
<http://www.cvelearningnetwork.org/default.asp>
- AHRQ Talking Quality
<https://www.talkingquality.ahrq.gov/default.aspx>
- AHRQ Health Care Report Card Compendium
<https://www.talkingquality.ahrq.gov/content/reportcard/search.aspx>
- AHRQ's National Quality Measures Clearinghouse
<http://www.qualitymeasures.ahrq.gov/>
- My Own Network, powered by AHRQ
<http://www.monahrq.ahrq.gov/>
- RWJF's Aligning Forces for Quality
<http://www.forces4quality.org/welcome>



Learning Network for
Chartered
Value Exchanges

Available from AHRQ

Final Contract Report

Selecting Quality and Resource Use Measures: A Decision Guide for Community Quality Collaboratives



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Dominique Ritley, MPH

With the help of many CVE representatives and others

Access on-line at:

<http://www.ahrq.gov/qual/perfmeasguide>

or to order hard copies free of charge:

send an email to

AHRQPubs@ahrq.hhs.gov

specify number of copies

include AHRQ Pub. No. 09(10)-0073

Composite measures?

- Defined by AHRQ as “condensing multiple quality measures into a single piece of information.”
- Systems oriented: Create incentives to examine processes that cut across individual measures.
- Allocation oriented: Provide information about how to allocate effort and resources among alternatives.
- Old concept: GPA, Dow Jones, S&P, CPI, clinical trials
- Reduce cognitive burden for users, providing clearer “signal” and reducing the danger of “cognitive shortcuts”
- Enhance precision and thus ability to discriminate between higher-quality and lower-quality providers (with better targeting of the population of interest)



Composite measures

- BUT composites can be difficult to construct and score, do not fix validity problems (e.g., due to differences among patients), and may obscure important information.
- Choose your conceptual model: psychometric or reflective perspective *versus* clinometric or formative.
- Select individual measures and a weighting/scoring approach consistent with your conceptual model and goals. “All-or-none” weighting is conceptually attractive, and may “raise the bar,” but has major limitations.
- What information is most important and most free of distortion (i.e., provides the “right signal”)?
- Provide different information for different audiences – providers and some consumers want drill-down details.

