



Developing Key Performance Indicators for Consumer-Directed Health Care and Pay-For-Performance

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McKesson Provider Technologies
Ft. Lauderdale, Florida

Session 2.06
Wednesday, September 26, 2007
5:15 pm – 6:15 pm Eastern Time

Agenda

- **Key Performance Indicators**
 - Definition
 - Purpose
 - Benefits
- **Consumer-Directed Health Care**
 - Why Don't Employees Care?
 - Why Do Employers Care?
 - The President's Plan
 - Backlash
 - Financial Ramifications
 - Keys to Success Under CDHC

Agenda (cont'd)

- **Pay-For-Performance**
 - Costs of Errors and Variation
 - How Can They Pay Us for “Quality?”
 - Challenges Ahead
 - Backlash
 - Keys to Success Under P4P

- **KPIs for CDHC and P4P**
 - Scheduling
 - Pre-Registration / Pre-Authorization
 - Insurance Verification
 - Patient Access / Registration

Agenda (cont'd)

- **KPIs for CDHC and P4P (cont'd)**
 - Financial Counseling
 - Health Information Management
 - Billing / Claim Submission
 - Clinical / Decision Support / Finance
- **Appendices**
 1. 34 CMS / Premier Hospital Quality Measures
 2. Organizations Interested in Healthcare Quality
 3. Provider Scorecard Information
 4. 50 Clinically-Relevant, yet Difficult, Questions

What's Going On in This Picture?



Tiger Woods

**2005
Masters
Tournament**

Even the **VERY BEST** Keep Score!

“In business, words are words, explanations are explanations, promises are promises, but only performance is reality.”

Harold S. Geneen

Former President and CEO of ITT

Even the **VERY BEST** Keep Score!

Ten Top Issues for 2006

1. **Balancing clinical and financial issues**
2. **Getting ready for pay-for-performance**
3. **Implementing the EHR**
4. **Making pricing transparent**
5. **Boosting the revenue cycle**
6. Developing new capital-access strategies
7. Increasing financial-reporting transparency
8. Updating charity care policies and procedures
9. Improving leadership skills
10. Dealing with staffing shortages

Where's Your Focus?





Let's Define Terms

Key Performance Indicators

What is a Key Performance Indicator?

- Numerical factor
- Used to quantitatively measure performance
 - Activities, volumes, etc.
 - Business processes
 - Clinical processes
 - Financial assets
 - Functional groups
 - Service lines
 - The entire enterprise

SOURCE: BearingPoint, Key Performance Indicators

Purposes of KPIs

- View a snapshot of performance at an individual, group, department, hospital, or regional level
- Assess the current situation and determine root causes of identified problem areas
- Set goals, expectations, and financial incentives for any individual, group, or enterprise
- Trend the performance of the selected individual, group, or enterprise over time

SOURCE: BearingPoint, Key Performance Indicators

Benefits of Using KPIs

- Increases management awareness
 - Focuses attention on improvement opportunities
- | | | |
|------------------------------|-----------------------|---|
| – Increasing Cash Flow | – Benchmarking | – Developing Consistent Processes and Outcomes |
| – Improving Clinical Quality | – Illustrating Trends | – Developing “Best Practices” |
| – Reducing Costs | – Scoring Performance | – Improving / Accelerating Management Reporting |
| – Identifying Problem Areas | – Reducing Denials | – Monitoring Staffing Levels |

SOURCE: BearingPoint, Key Performance Indicators



Consumer-Directed Health Care

A Whole New Ballgame!

Medical Consumerism Coming



“Managed care was designed to put control where there was none.

Today’s trend towards consumerism attempts to inject something that’s been missing from health benefits – a consumer who cares more about cost and quality.”

SOURCE: Take Care of Yourself – Employers Embrace Consumerism to Control Healthcare Costs, PricewaterhouseCoopers’ Health Research Institute, 2005

Why Don't Employees Care?

- Many have chosen unhealthy lifestyles, which drive up spending
- Can rarely shop for health plans, because 90% of plans lack a choice of benefits
- Few shop for providers
- Fewer still are aware of rating services for MDs, hospitals, or health plans

SOURCE: Take Care of Yourself, PwC, 2005

Why Don't Employees Care?

- Almost all are at least four steps away from cost of, and payment for, medical care
- Have little access to information
- Thus, most know little or nothing about quality or true cost of what they're buying

SOURCE: Take Care of Yourself, PwC, 2005

Why Do Employers Care?

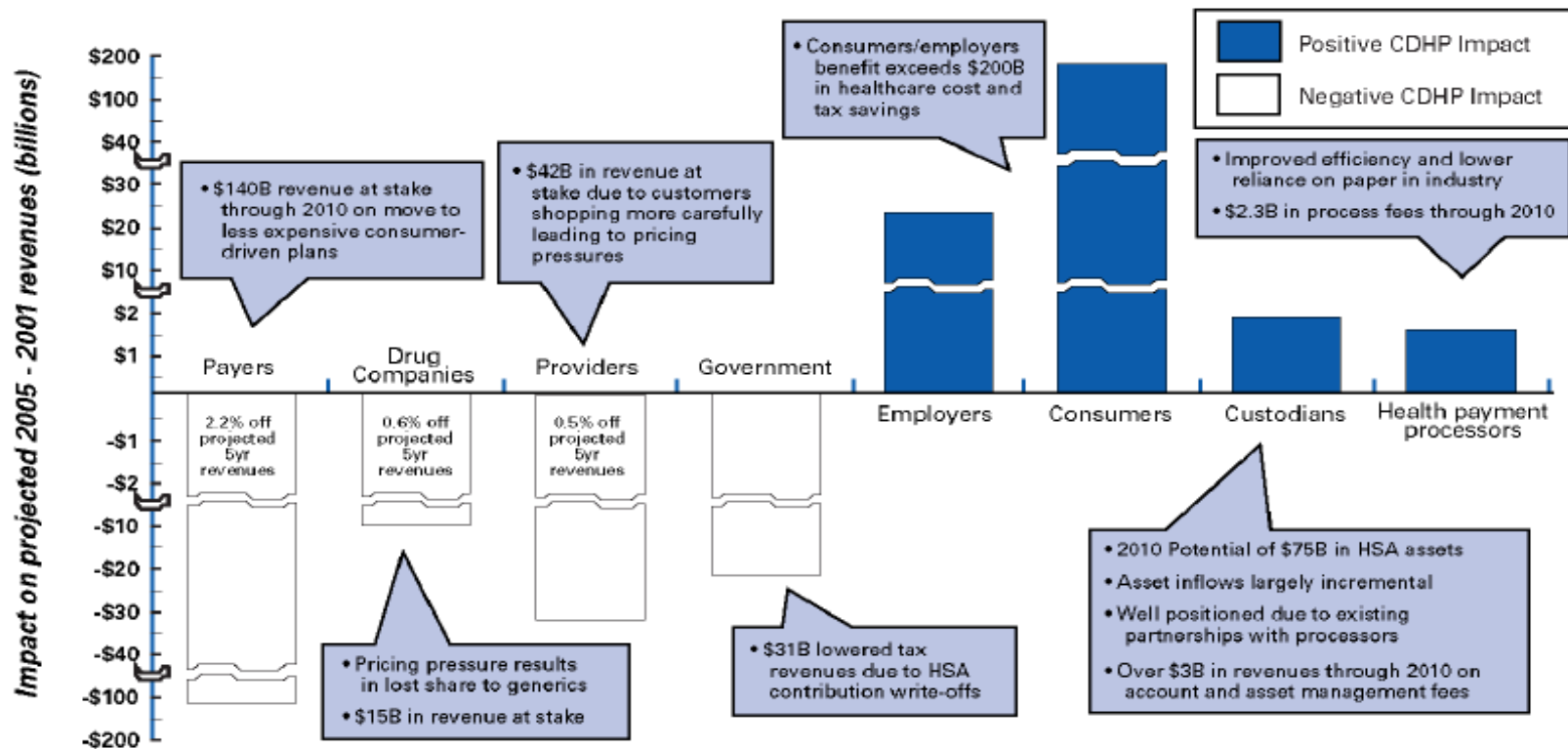
- More than 75% believe they can reduce benefit costs by making employees pay a greater share
- Nearly 67% fear that increasing deductibles could cause employees to defer needed care or risk long-term health problems
- This could reduce productivity and lead to higher catastrophic costs later
- 80% believe most-promising option is to provide financial incentives for employees to adopt healthier lifestyles (“carrot vs. stick”)

Why Do Employers Care?

- 72% state that CEOs are encouraging employees and dependents to adopt healthy lifestyles
 - Financial incentives
 - Education
 - Innovative healthcare programs
- Divided on whether to require employees with unhealthy lifestyles to pay a greater share of their healthcare costs (“self-inflicted wounds”)
- Think price + quality info could change behavior and reduce costs, but hard to obtain / distribute

Why Do Employers Care?

\$200B of Cumulative Revenue Will Be in Play Over The Next Five Years



This chart compares projected 5 year revenues for future state with and without CDHP

SOURCE: Kauffman, V. and L. Smith, Centering on the Consumer: The Health Insurer's Key to Unlocking the Healthcare Cost Crisis, DiamondCluster International, 2005

Why Do Employers Care?

What If They Didn't Offer Health Benefits?

- Per a recent Kaiser Family Foundation annual Employer Benefits Survey
 - Survey tracked five-year trend
 - Employers offering health coverage fell from 69% to 60%
 - 13% decline in five years
- Healthcare premium costs grew precipitously between 1999 and 2004
 - 5.5 times the rate of inflation
 - 2.3 times the rate of business income growth

SOURCE: Klepper, B. and P. Salber, The Business Case for Reform, Modern Healthcare, Oct 10, 2005

Why Do Employers Care?

Glossary of Consumer-Directed Products

Plans	Descriptions	Tax Benefits
<p>FSAs: Flexible Spending Accounts</p>	<ul style="list-style-type: none"> • Employer bookkeeping accts for medical expenses, funded by employee pre-tax dollars • Often offered as separate components of cafeteria plans 	<ul style="list-style-type: none"> • Unspent balances may not be rolled over from year to year or cashed out • “Use it or lose it”
<p>HDHPs: High-Deductible Health Plans</p>	<ul style="list-style-type: none"> • Health insurance plans with a deductible of at least \$1,000 • Must meet certain legislative and regulatory requirements for participants to contribute to HSAs and MSAs 	<ul style="list-style-type: none"> • Tax benefits same as other employer plans • Premiums are tax deductions for employers and are not considered taxable income for employees
<p>HRAs: Health Reimbursement Arrangements</p>	<ul style="list-style-type: none"> • Medical plans funded entirely by employers, that reimburse employees for qualified medical expenses • Cannot be offered through cafeteria plans 	<ul style="list-style-type: none"> • Unspent balances may be rolled over from year to year but there is only limited portability • Unused amounts cannot be cashed out

Why Do Employers Care?

Glossary of Consumer-Directed Products

Plans	Descriptions	Tax Benefits
<p>HSAs: Health Savings Accounts</p>	<ul style="list-style-type: none"> • Portable, personal accounts for payment of medical expenses • Individuals must be covered by HDHPs (\$1,000 indiv / \$2,000 family) to contribute to HSAs • Unavailable to Medicare-eligibles, tax dependents, or anyone covered by non-HDHP plans • Can be funded by employers, employees, or other individuals 	<ul style="list-style-type: none"> • Requires a trust or custodian account • Contributions are excludable or deductible and may be rolled over from year to year if unused for payment of qualified medical expenses • Accounts' earnings are not taxable
<p>MSAs: Medical Savings Accounts</p>	<ul style="list-style-type: none"> • Available to small-business employees covered by High Deductible Health Plans • No new accounts may be opened after 2005 	<ul style="list-style-type: none"> • Requires a trust or custodian account • Contributions are excludable or deductible and may be rolled over from year to year if unused for payment of qualified medical expenses



The President Has a Plan

The President's Plan

- Allow people who buy HSA-related high-deductible policies outside their workplace to deduct premiums from their taxes
- Offer tax credits to offset payroll taxes paid on these premiums
- Have owners of HSA accounts and their employers make contributions to offset out-of-pocket costs, as well as deductibles
- Make out-of-pocket expenses tax-deductible, but cap at \$5,250 indiv / \$10,500 family

SOURCE: Newkirk, W. and J. Graham, Chicago Tribune, Feb 16, 2006

The President's Plan

- “Refundable” tax credit to help uninsured Americans purchase high-deductible policies in connection with HSAs
- Maximum credit
 - \$1,000 for one adult
 - \$2,000 for two adults
 - \$3,000 for two adults with children
- Credit would phase out at
 - \$30,000+ income for individuals
 - \$60,000+ income for families

SOURCE: Newkirk, W. and J. Graham, Chicago Tribune, Feb 16, 2006

The President's Plan

- President Bush spoke during a panel discussion at DHHS on Thursday, February 16, 2005
 - Argued that U.S. patients should pay more-directly for their care
 - Postulated they will become comparison shoppers whose interest in a good deal will drive costs down
- Bush said current system makes individuals less engaged in the cost of the procedures they get

SOURCE: Reichman, D., Bush Urges More Direct Health Care Choices, Associated Press, Feb 16, 2006

The President's Plan

- Bush's statements at DHHS headquarters included
 - "When somebody else pays the bills, rarely do you ask price or ask the cost of something"
 - "The problem with that is that there's no kind of market force, there's no consumer advocacy for reasonable price when somebody else pays the bills"
 - "One of the reasons why we're having inflation in health care is because there is no sense of market"
- Bush also repeated his calls for tax-advantaged Health Savings Accounts

SOURCE: Reichman, Associated Press, Feb 16, 2006

The President's Plan

Comparison Shopping a Myth, or Dream?

- Government Accountability Office study released September 2005
- GAO found “no rhyme or reason” to
 - Prices charged by hospitals or physicians
 - Prices paid by health insurers for hospital or physician services

SOURCE: Evans, M., Modern Healthcare, Oct 3, 2005



Consumer-Driven Health Care Backlash

Consumer-Driven Health Care Backlash

“One of the greatest public-relations coups in the history of the health-care industry is the creation of the term ‘consumer-driven health care.’

Anyone that follows healthcare knows that consumers had nothing to do with this latest cost-saving invention from the minds of employers and health insurers.”

David Burda
Editor, Modern Healthcare
Oct 10, 2005

Consumer-Driven Health Care Backlash

Many employees “don’t like the HSA, to be quite frank. Had my position been an elected one, I would have been voted out of office this year.

It feels like they’re paying more up front. The perception is, ‘this is a very expensive type of plan.’ Even though there is money in employee accounts to cover these expenses, people end up feeling they’re paying more out of pocket.”

Larry Lutey
VP, Human Resources
Lutheran Social Services, Elgin, IL

Match the Headline to the Organization

Headline

“Majority of working adults prefer employer-selected health plans to employer-funded accounts.”

“Large U.S. employers are changing benefit plans to control costs and improve quality.”

“Survey shows high rate of satisfaction with HSAs.”

Organization

Blue Cross and Blue Shield Organization

PricewaterhouseCoopers

Commonwealth Fund

SOURCE: Burda, D., **Connect the Dots – Employers and Insurers are Behind the Wheel on ‘Consumer-Driven Healthcare,’** Modern Healthcare, Oct 10, 2005



What Does This Mean for You?

Possible CDHC Financial Ramifications

Desirable

- Potentially-better results
 - More net revenue
 - Higher profits
 - Improved cash flow
- Patients w/ HDHPs will have to use cash or credit for care, at least initially
- Patients w/ HDHPs may be paying full charges, not discounted rates charged to HMOs and PPOs

Questionable

- Potentially-worse results
 - More bad debt
 - Worsened aging
 - Higher cost-to-collect
- Growing pressure to publicly disclose prices and details of reimbursement
- Patients w/ HSAs may deplete funds by spending on health convenience items and/or non-traditional care

Possible CDHC Financial Ramifications

- Rising pressure to increase financial transparency
- Summer 2005 McKinsey & Company study of 2,500 insured people (1,000 in CDHC plans) showed
 - CDHC-plan members felt they lacked sufficient info to make meaningful healthcare-choice decisions
 - Wondered about how much MDs and hospitals get paid
- Yet, McKinsey study also showed CDHC plan members were
 - 50% more likely to ask about cost
 - 33% more likely to independently find alternative care
 - 300% more likely to have chosen a less extensive, less-expensive treatment

SOURCE: Snowbeck, C., Pittsburgh Post-Gazette, Sep 18, 2005



Keys to Success Under CDHC

CDHC Thoughts to Ponder...

- CDHC initiatives will continue to accelerate, and proliferate, over time
- Initiatives will require an increased focus on
 - Pre-registration
 - Ins verification
 - Financial counseling
- The need to collect, retrieve, and report data about CDHC-related patients will increase



CDHC Thoughts to Ponder...

- Self-pay exposure will increase as more employers offer, and more employees take, CDHC plans
- Provider / payor negotiations may be needed to sort out whether patients will be responsible for gross or net charges
- Individual patient encounters may be subject to one-off price negotiations, requiring considerable management time
- Up-front payment policies and enforcement may have to become stricter, to forestall bad debt



P4P: Pay for Performance

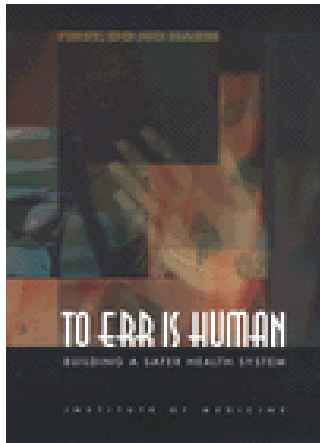
Another Whole New Ballgame!

Costs of Errors and Variation

High costs associated with medical errors and variations in treatment are drivers for P4P



What Factors Contributed to Economic Focus on Patient Safety?

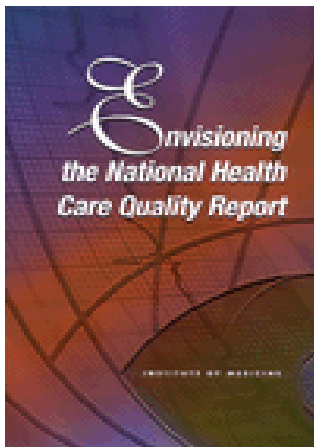
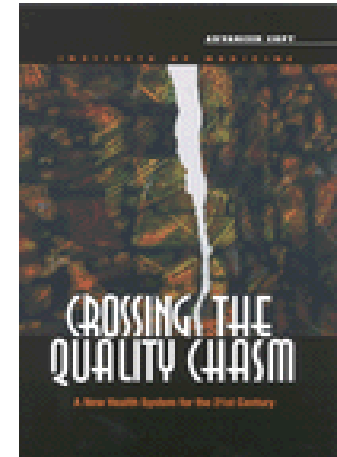


1999 Medical Errors



2001

Evidence-Based Medicine,
increased use of IT



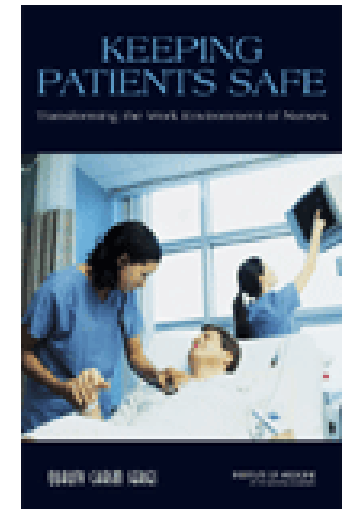
2001

Safety, effectiveness, patient-centeredness, timeliness



2004

Keeping Patients Safe:
Transforming the Work
Environment of Nurses



What Do We Know About Medical Errors?

Most Common Errors per 1,000 Visits



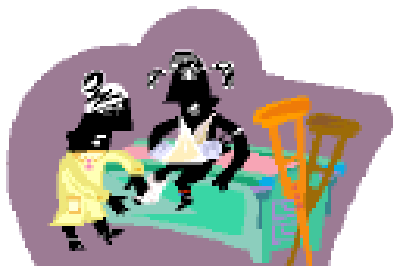
65 incidents due to adverse drug events



60 incidents due to hospital-acquired infections



51 incidents due to procedural complications



15 incidents due to falls

SOURCE: Advisory Board Company, Washington, DC

Problems with Paper-Based Manual Systems

Handwritten MDs' Orders

- 24% incomplete
- 20% illegible

SOURCE: National Committee on Vital and Health Statistics (NCVHS)



“A small piece of paper doesn't look like a deadly weapon.” SOURCE:

Turner, R., U.S. News & World Report, Aug 2, 2004

A photograph of a small, rectangular piece of white paper with a torn bottom edge. The paper has the word 'Plendil' and '20mg' written in blue ink in a cursive, handwritten style. The paper is set against a light background.









Prescription: Doctor intended 'Isordil'; pharmacist read 'Plendil.'

Dartmouth Study Spotlights Variances

More Care Is Not Better

- 90,616 Medicare patients treated for cancer, CHF, and COPD at 77 top U.S. hospitals
- Patients with large amounts of care did no better than those with less care
- Extra MD visits, longer LOS, and more tests / consults appear to hasten death

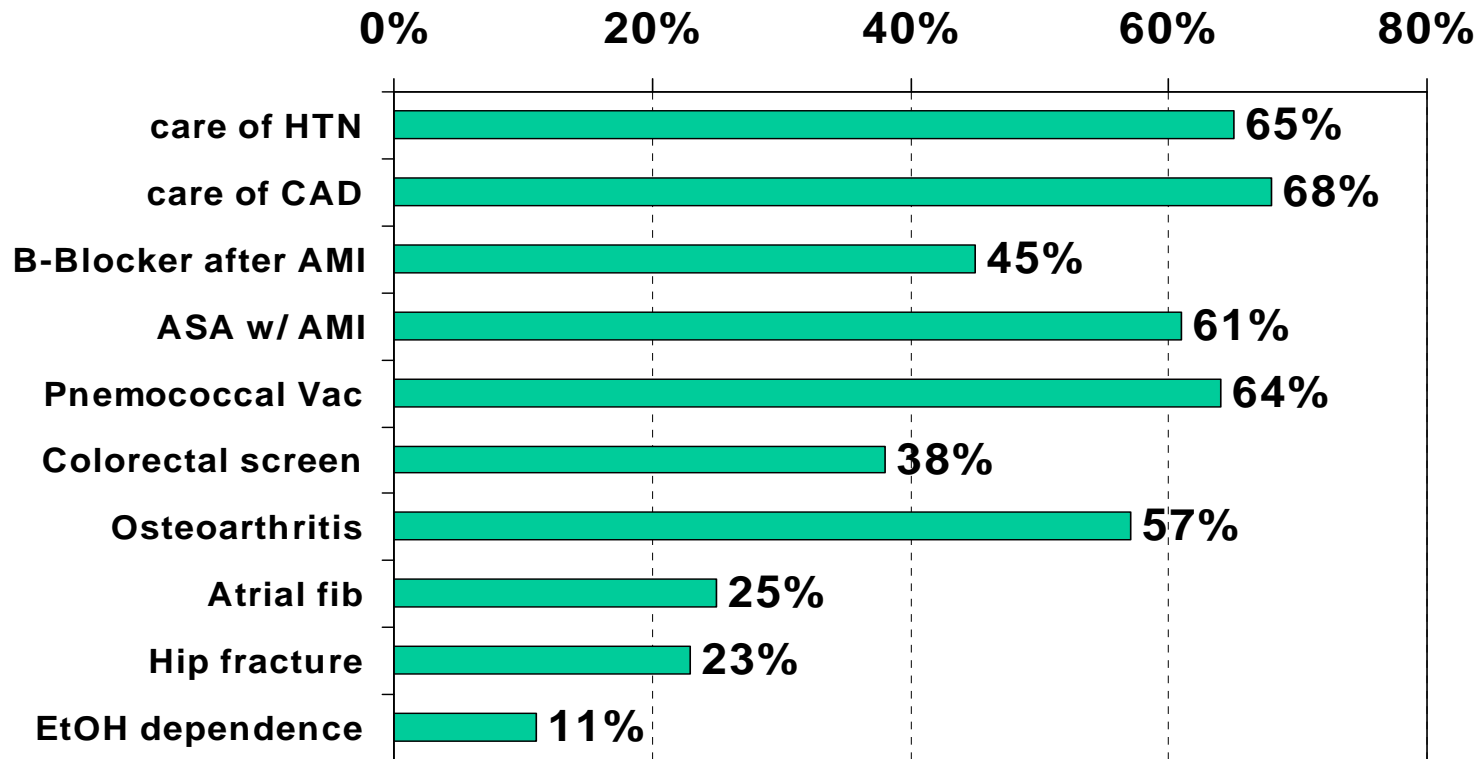
SOURCE: Wennberg, et al, The Dartmouth Study, Journal of Health Affairs, Oct, 2004

Hospital	Length of Stay 
Mayo - Rochester	11.6 
St. Louis Univ Hospital	12.9 
Duke Medical Center	13.5 
UCLA Medical Center	16.1 
John Hopkins	16.1 
Massachusetts General	16.5 
Mount Sinai Med Ctr, NYC	22.8 

Problem Is Not Simply Variances

Care Often Does Not Match Quality Standards

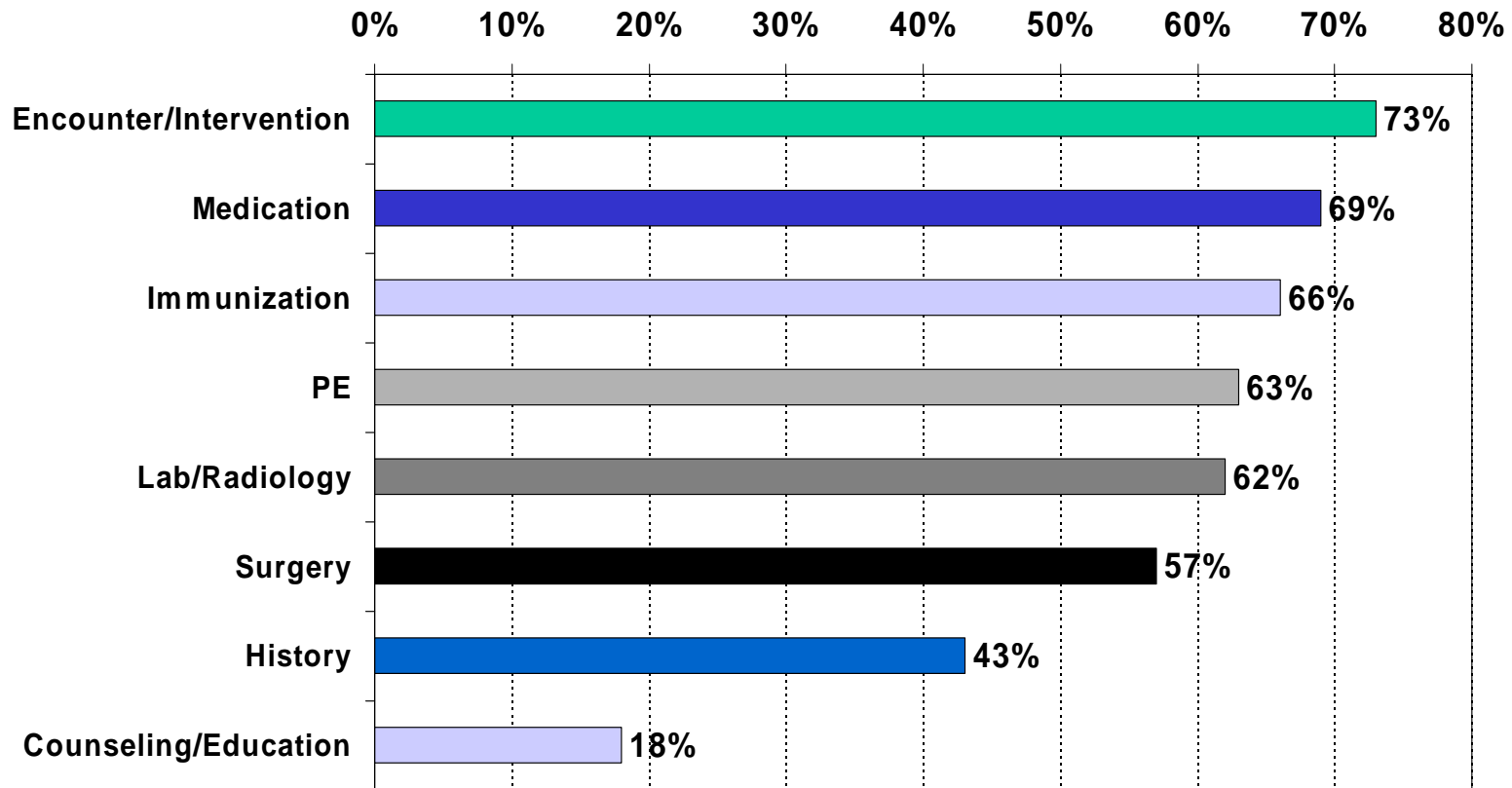
Adherence to quality indicators - by condition



SOURCE: Clinical Quality Guidelines, New England Journal of Medicine, 348:2635-45, Jun 26, 2003

When Does Care Match Quality Guidelines? Only 55% of the Time!

Adherence to Quality Indicators, According to Mode



SOURCE: Clinical Quality Guidelines, NEJM, 348:2635-45, Jun 26, 2003



How Can They Pay Us for “Quality?”

How Have We Approached Healthcare Pmt?



1. Financial
2. Administrative
3. Clinical

Financial and Administrative Approaches More Trouble Than They're Worth?

- Financial - Payors controlling costs, via
 - DRGs
 - Managed care contracting
 - Etc.
- Administrative - Payors controlling access, via
 - Gatekeepers
 - Capitation
 - Etc.
- Clinical - Payors attempting to reward care that adheres to “quality standards”

Control Access and Institute Risk Sharing? Some MDs Don't Tell Patients About Options

33% of MDs declined to offer "useful" medical services to some patients because the services weren't covered under their patients' health insurance.



SOURCE: Health Affairs, Jul 2003

What Do We Know About Medical Errors? Some Payors No Longer Pay For Them!

- HealthPartners (Minnesota) recently became the *first* to penalize for errors
- In January 2005 HealthPartners stopped paying for errors that appear on a list of “nevers”
 - surgery performed on the wrong body part
 - surgery performed on the wrong patient
 - leaving a foreign object in a patient after surgery

SOURCE: Modern Healthcare, Oct 06, 2004



Payors Want Savings When Errors Reduced

- Medical errors are responsible for 30% of healthcare expenditures
- More than 50% of the \$17 - \$29 billion national cost of medical errors is preventable
- Medical errors cost 10 - 15% of hospitals' annual budgets

SOURCE: Task Force on Healthcare Cost Control, Mar 2002

- ADEs are responsible for \$2 billion per year nationwide in hospital costs alone

SOURCE: Bates D. W., et al, JAMA, 1997;277(4):307-11

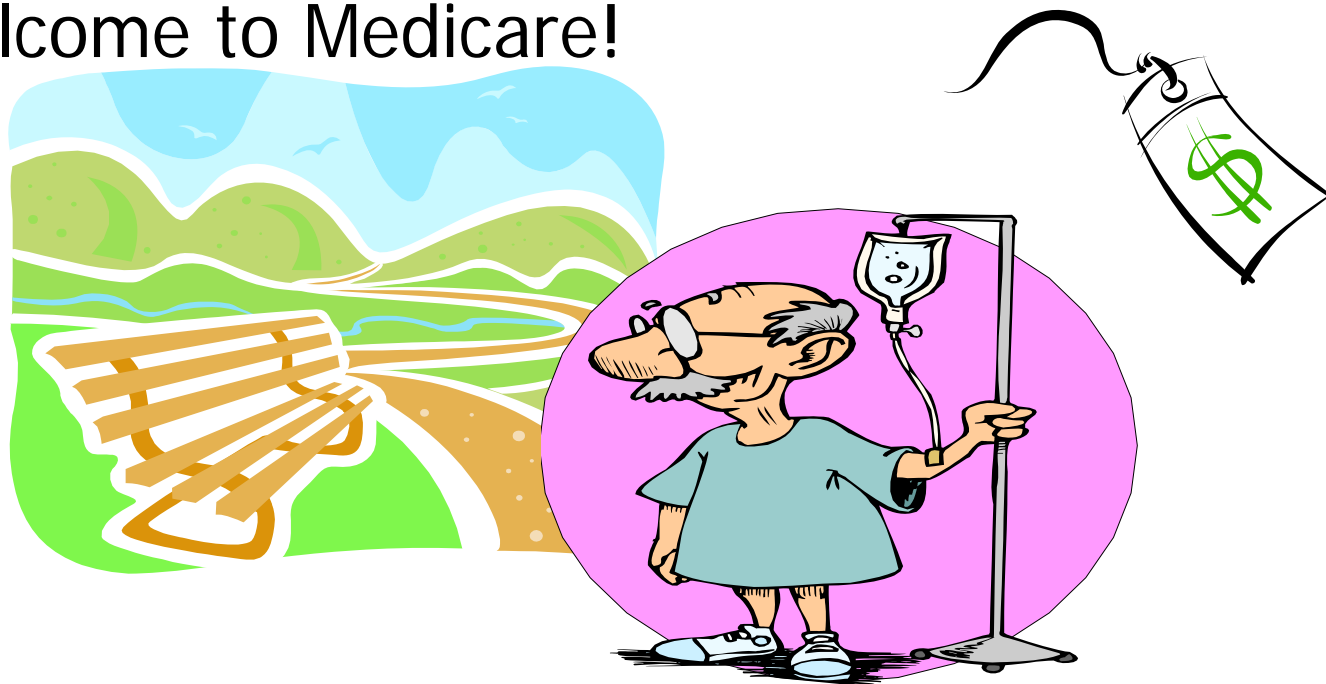
- One ADE adds more than \$2,000 on average to the cost of hospitalization

SOURCE: Classen D. C., et al, JAMA, 1997;277:301-306



If No Proper Care Now, Who Pays Later?

Welcome to Medicare!



In 1999, seniors (13% of the population) accounted for \$387 billion (\$11,089 per capita / 36%) of U.S. healthcare spending

SOURCE: CMS Office of the Actuary, Dec 6, 2004

By 2014, CMS says government will pay 50% of healthcare costs

SOURCE: Heffler, et al, Health Affairs, Feb 23, 2005

Medicare Using Its Leverage

CMS / Premier Demonstration Project

- Three-year program linking payment with quality
- 278 participating hospitals
- Up to 2% of Medicare dollars at risk across five clinical areas
- Minimum payout of \$25 million across top 20% of participants

SOURCE: Toward the Data-Driven Clinical Enterprise, Advisory Board Company, 2005

Medicare Using Its Leverage



“In five to ten years I would like to see 20% – 30% of Medicare payments tied to performance.”

Mark McClellan
CMS Administrator
2004

SOURCE: Advisory Board Company, 2005

More Scrutiny on Practice Variation

Tell MDs This is “Improving Quality of Care”

Highmark Blue Cross and Blue Shield (PA) - a 1,100-physician network

- Launched a program in 2000 to provide physician-specific data
- Pinpoints practice variation from accepted clinical guidelines
- In July 2005 Highmark began to offer financial support for EMR development

SOURCE: Healthcare Informatics, Mar 2005

Hospitals Now Have Company... Doctors

CMS Launches Pilot P4P Program for MDs

- Pays bonuses to MDs at 10 participating clinics who achieve standards for more-efficient and better-quality care
- Focuses on 32 quality measures for preventive care and chronic disease management, for example
 - Vaccination for patients at high risk for influenza
 - Blood pressure control for diabetics
 - Use of cholesterol-lowering medication by patients with heart disease
- Provides payments based on services delivered
- MDs eligible for annual bonus payments of up to 5%

SOURCE: CMS Press, Jan 31, 2005



Challenges Ahead

On That, We All Likely Agree...

“C-Suite” Executives View P4P Differently

Stakeholder	Current Perception
CEOs/ COOs	Concerned about public perception See P4P as marketing tool
CFOs / CROs	Worried about ROI Believe P4P requires labor-intensive data gathering Think payors will use P4P to drive down reimbursement
CMOs / CNOs	Dislike CMS Feel measures do not accurately represent quality Believe P4P requires labor-intensive data gathering
CIOs / DSS Directors	See P4P as a nuisance Do not see as a top priority compared to clinicals Resistant to “one more” request for data
QA Directors	Think P4P is important Believe P4P requires labor-intensive data gathering

Data Collection and Measurement Challenges Ahead

Over 400 publicly-defined indicators based on clinical evidence and industry-recognized metrics

- **Process measures (~90%)**
 - Right treatment / drug, at the right time
 - Appropriate patient assessment, education, and instruction
- **Outcomes measures**
 - Mortality
 - Post-operative complications
 - Readmissions

Data Collection and Measurement Challenges Ahead

JCAHO Measurement Sets

- ORYX initiative (1997) is required for accreditation, and Medicare participation requires accreditation
- JCAHO partnered with CMS so ORYX would encompass CMS's "Pay For Performance" measures
- Core measures (ORYX + CMS)
 - Acute myocardial infarction (AMI)
 - Heart failure (HF)
 - Community acquired pneumonia (CAP)
 - Pregnancy and related conditions (PR)
 - Surgical infection prevention (SIP)

Data Collection and Measurement Challenges Ahead

JCAHO Measurement Sets

- Hospitals must report on a varying combination of core and non-core measure sets, depending on their ability to collect the data
 - Two core and three non-core measure sets
OR
 - One core and six non-core measure sets
OR
 - Nine non-core measure sets
- Data are publicly reported at www.qualitycheck.org

Data Collection and Measurement

Current CMS / Premier Reporting

Acute Myocardial Infarction (AMI)

- | | |
|---|--|
| ASA on admission | • Med record abstract |
| ASA on D/C | • Discharge Instructions |
| ACEI for LVSD | • Charge code + Dx code + imaging result |
| Adult smoking-cessation instructions | • Nursing activity |
| Beta Blocker ordered at D/C | • Discharge instructions |
| Beta Blocker within 14 hours of admission | • Drug administration time |
| Time to Thrombolysis (30 min.) | • Drug administration time |
| Time to PTCA (120 min.) | • Procedure start times |
| Inpatient mortality | • Discharge status |

BLUE	Currently-captured revenue cycle data
GREEN	Not currently captured. Requires manual record review
RED	Time-stamped clinical activity. Requires manual review of non-traditional data sources

Data Collection and Measurement Challenges Ahead

Reporting

- Virtually all study populations apply extensive inclusion / exclusion criteria
- These require complex data combinations
 - Clinical
 - Demographic
 - Diagnosis
 - Procedure

BLUE	Currently-captured revenue cycle data
GREEN	Not currently captured. Requires manual record review
RED	Time-stamped clinical activity. Requires manual review of non-traditional data sources

Numerator Statement: AMI patients whose time from hospital arrival to thrombolysis is ≤ 30 minutes

- Arrival date
- Arrival time
- Thrombolytic administration date
- Thrombolytic administration time

Denominator Statement

- Included populations - discharges with:
 - An ICD-9-CM principal diagnosis code for AMI as defined in Appendix A, Table 1.1 AND
 - ST segment elevation or LBBB on the ECG performed closest to hospital arrival AND
 - Thrombolytic therapy within 6 hours after hospital arrival
- Excluded Populations:
 - Patients less than 18 years of age
 - Patients received in transfer from another hospital including another emergency department
- Data Elements:
 - Admission date
 - Admission source
 - Birthdate
 - ICD-9-CM principal diagnosis code
 - Initial ECG interpretation
 - Thrombolytic administration
 - Transfer from another ED

• Risk adjustment: No

Data Collection and Reporting Financial Burden

Data Collection

- Over 90% of the measures require data not readily available in current hospital data sets
- Thus, data collection will require manual chart review

Cost to Report Performance Measures

COST FACTORS	\$100M OE	\$200M OE
Chart Review Time Req'd	1,000 Hours/Yr	1,250 Hours/Yr
3 RNs / 4 RNs	\$240,000	\$320,000
Data Analyst	\$50,000	\$50,000
Annual Total	\$295,000	\$380,000

Revenue Impact of CMS P4P (.4%)

ASSUMPTION	\$100M OE	\$200M OE
CMS Revenue Totals 50%	\$200,000	\$400,000

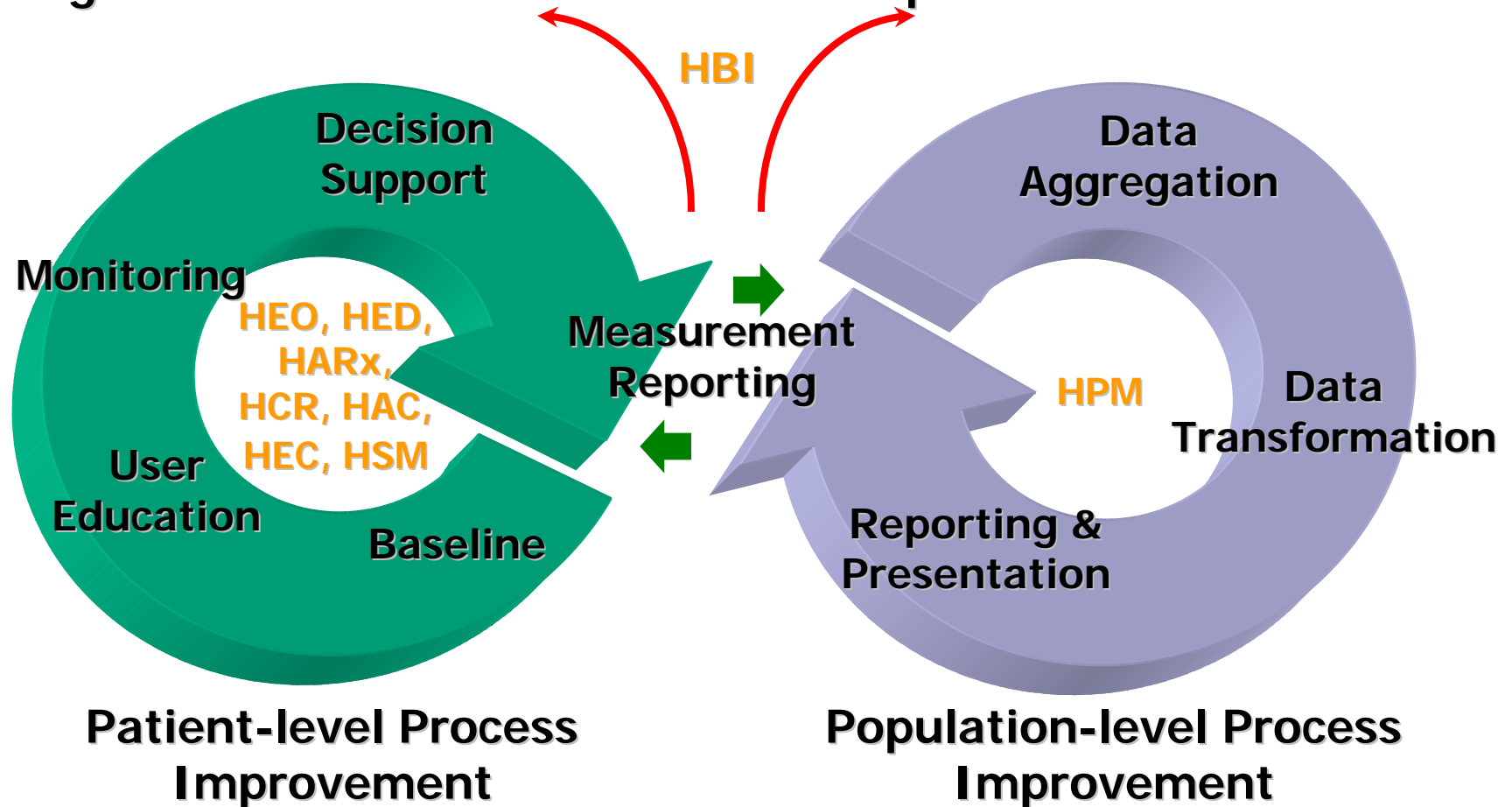
Net Financial Impact of CMS P4P

GAIN / (LOSS)	\$100M OE	\$200M OE
After costs of reporting	(\$95,000)	\$20,000

Data Collection and Reporting

Need Two Views: Patient + Aggregate

Integrated View of Clinical Process Compliance & Perf Measures





Pay for Performance Backlash

Pay For Performance Backlash

“Too often managers and non-clinical personnel make profound decisions about how we practice medicine.

I hope this conference allows us to shape future payment policies in ways that those of us who actually see patients believe will work best.”

Sidna M. Scheitel, MD, MPH
Mayo Clinic

SOURCE: Outcomes-Based Compensation – Pay-for-Performance Design Principles, 4th Annual Disease Management Outcomes Summit, Nov 11-14, 2005

Data / Methods for MDs' Scores Questioned

- “Performance measurement is still in its very rudimentary stages. There are a number of challenges to measuring quality and efficiency. It remains difficult to generate accurate provider report cards.”
- MD group threatens to terminate its contract with United by August 2005 unless United suspends or alters its Performance Designation Program
 - Program gives stars next to MDs' names on United's website
 - Stars purportedly indicate high quality and lower-cost care
 - Claims data from 2002 - 2003 used

SOURCE: Armstrong, J. (AMA), Modern Healthcare, Apr 4, 2005

Data / Methods for MDs' Scores Questioned

- MD group's concerns:
 - Only 4 of 1,144 (0.3%) of full-time faculty received stars
 - MDs bill in groups, but United unable to break down claims individually
 - 40% of MDs ineligible due to of insufficient sample size (not enough claims submitted to analyze)
 - MDs evaluated on cost, because evidence-based standards for their specialties had not been established

SOURCE: Armstrong, J. (AMA), Modern Healthcare, Apr 4, 2005

Outcomes of P4P Programs Questioned

- Compared California and Pacific Northwest MD groups on three clinical quality process measures, based on 2001 to 2004 data
 - Cervical cancer screening
 - Mammography
 - Hemoglobin A_{1c} testing
- For all three measures, MDs with baseline performance at or above threshold improved least but got biggest share of P4P bonuses

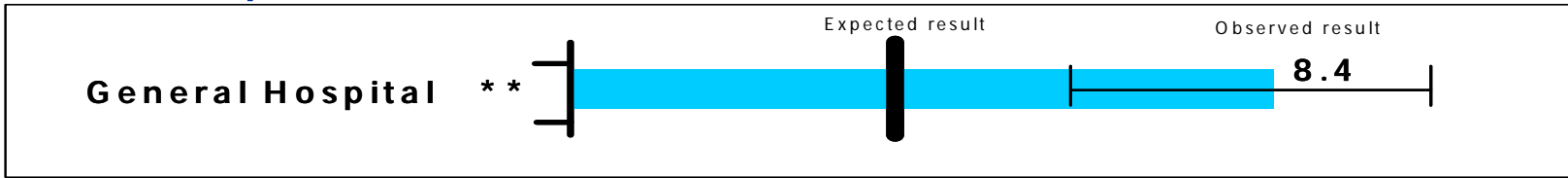
SOURCE: Rosenthal, M. et al, (Harvard School of Public Health), JAMA, Oct 12, 2005

Interpretation Challenges

Variable definitions: Not all agencies and initiatives agree on measurement definitions. This creates varying results, and confusion

Same facility, same condition... different results. As a consumer, do I use this facility for my bypass surgery?

THCIC Report* – CABG mortality is significantly higher than expected



** indicates difference in observed and expected results are statistically significant
 * Texas Healthcare Information Council

HealthGrades.com Report – CABG mortality is at the expected level

Name	City State	Inhospital Mortality	Inhospital +1 Month Mortality	Inhospital +6 Months Mortality
General Hospital		***	***	***

Five stars indicates significantly better than expected
 Three stars indicates average
 One star indicates significantly worse than expected

SOURCE: Texas Healthcare Information Council

P4P a Nightmare or Will Reason Prevail?

- Jack Bovender Jr. (HCA's CEO) calls for Congress to create a special board to develop a standard set of quality measures for P4P programs
- Without an organized approach, healthcare providers face high administrative costs as they try to comply with different P4P requirements
- “We have all these silos going - Leapfrog, individual consulting companies, government agencies, employer groups - all starting down different paths.”

Karen Ignagi, CEO

America's Health Insurance Plans



Keys to Success Under P4P

P4P Thoughts to Ponder...

- P4P initiatives will continue to accelerate, and proliferate, over time
- Initiatives will require, at both patient and aggregate levels
 - Data collection
 - Data retrieval
 - Data reporting
- Clinical information systems will become an economic necessity as the ability to collect, retrieve, and report process / outcomes data increases



P4P Thoughts to Ponder...



- Revenue cycle + clinical informatics professionals will play key roles in evolving information systems towards **efficacious** care
- Financial and clinical data will become more-closely integrated
- The HIPAA claims attachment rule (coming in 2006, hopefully) will require clinical documentation
- Do not limit yourself to a reactive approach to outside influences – establish your own quality and outcomes goals and measures

Keys to Success Under P4P

People, Process, and Technology

1. Automate and Support Patient-Facing Workflow

How do we do the work electronically?

- ✓ Clinical Data Repository
- ✓ Results Viewing + Notification
- ✓ Clinician Decision Support
- ✓ Clinical Order Entry + Documentation
- ✓ Nurse MAR
- ✓ Pharmacy-to-Lab Integration
- ✓ Intelligent Medical Devices Integration
- ✓ Integrated Structured Documentation
- ✓ Charge Capture + Billing and Coding

3. Improve Outcomes

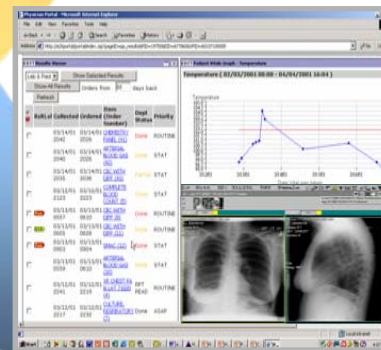
How can we do it better?

- ✓ Workflow Rules
- ✓ On-Line References
- ✓ Clinical Protocols
- ✓ Mandatory/Optional Support

2. Measure Aggregate Outcomes

How well did we do it?

- ✓ Health Status
- ✓ Patient Satisfaction
- ✓ Cost & Utilization Analysis
- ✓ Clinical Results Analysis
- ✓ Level of resource commitment



Components Required to Fully Address P4P

Definitions

Day-to-day MD / RN clinical processes surrounding patient care

Data acquisition, either automated (via clinical process) or manual, to support needed metrics

Transformation of discrete data points into a comprehensive set of measures that goes beyond P4P and core measures

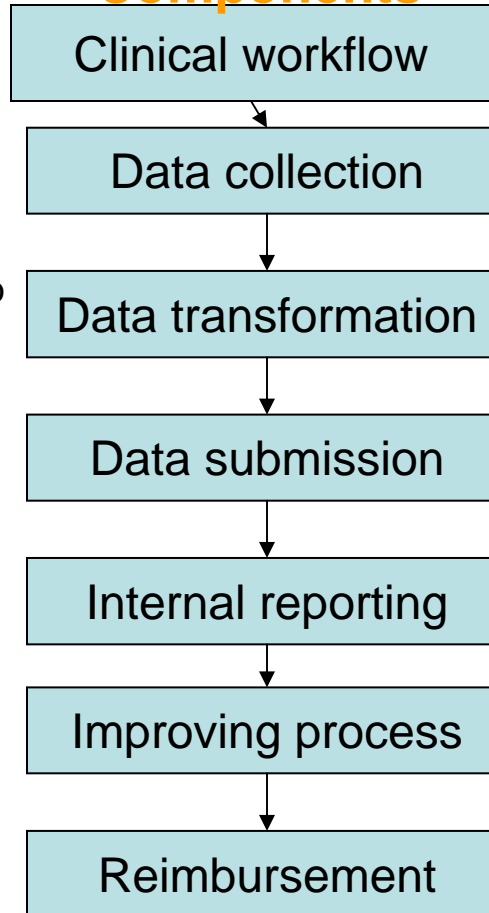
Submission of data to key stakeholders (CMS, JCAHO, etc.) typically by a CMV

Presentation of metrics and scorecards to internal audiences

Improvement of business & clinical process to enhance patient safety, financial health, and market perception

In the context of P4P, payment based on measured quality of care

Components



Issues

Full adoption of clinical systems is not yet widespread

Supplemental data collection is mostly manual; hard to automate

Heavy automation required to minimize cost

Often requested to present a fair and accurate picture of quality

Industry leaders will leverage core measures/ P4P to implement TQM

An increasing % of reimbursement will be performance-based



So, How Do You Measure Success?

Use Proven KPIs in a New Context,
and Consider Some New Ones

KPIs for CDHC and P4P

Scheduling

KPI Description	Standard
1. Overall scheduling rate of potentially-eligible patients:	100%
➤ Scheduling rate for elective and urgent inpatients	100%
➤ Scheduling rate for ambulatory surgery patients	100%
➤ Scheduling rate for hi-\$ outpatient diagnostic patients	100%
2. Scheduled patients' pre-registration rate	95%

KPIs for CDHC and P4P

Scheduling

KPI Description	Process
1. Use on-line scheduling software house-wide?	Yes
2. Have central scheduling unit?	Yes
3. Central scheduling answers to Chief Revenue Officer?	Yes
4. Surgery uses same scheduling software as other depts?	Yes
5. Scheduling system interfaced with registration system?	Yes
6. Use on-line OP medical necessity system prior to service?	Yes
7. Pre-certification requirements shared with MDs' offices?	Yes

KPIs for CDHC and P4P

Scheduling

KPI Description	Process
8. MDs' offices able to make on-line appointment requests?	Yes
9. Non-emergency services scheduled 12+ hours in advance?	Yes
10. Process and IT integrated between scheduling and pre-reg?	Yes
11. Services postponed if not pre-authorized in advance?	Yes
12. Financial counseling part of scheduling process?	Yes
➤ Patient balances and payment obligations discussed?	Yes
➤ Hospital policy explained for point-of-service payment?	Yes
➤ Reminder given to bring required payment & insurance cards?	Yes

KPIs for CDHC and P4P

Pre-Registration / Pre-Authorization

KPI Description	Standard
1. Overall pre-registration rate of scheduled patients	≥ 95%
2. Overall insurance verification rate of pre-registered patients	≥ 95%
3. Deposit request rate for co-pays and deductibles	≥ 95%
4. Deposit request rate for elective admissions / procedures	≥ 100%
5. Deposit request rate for prior unpaid balances	≥ 95%
6. Data quality compared to pre-established dept standards	≥ 98%

KPIs for CDHC and P4P

Pre-Registration / Pre-Authorization

KPI Description	Process
1. Have dedicated pre-registration / pre-authorization unit?	Yes
2. Process and IT integrated between scheduling and pre-reg?	Yes
3. Services postponed if not pre-authorized in advance?	Yes
4. Financial counseling part of pre-reg / pre-auth process?	Yes
<ul style="list-style-type: none"> ➤ Patient balances and payment obligations discussed? 	Yes
<ul style="list-style-type: none"> ➤ Hospital policy explained for point-of-service payment? 	Yes
<ul style="list-style-type: none"> ➤ Reminder given to bring required payment & insurance cards? 	Yes

KPIs for CDHC and P4P

Insurance Verification

KPI Description	Standard
1. Overall insurance verification rate of scheduled patients	≥ 95%
2. Overall ins verification rate of pre-registered patients	≥ 95%
3. Ins verf rate of unscheduled IPs w/ in one business day	≥ 95%
4. Ins verf rate of unscheduled hi-\$ OPs w/ in one business day	≥ 95%
5. Data quality compared to pre-established dept standards	≥ 98%

KPIs for CDHC and P4P

Insurance Verification

KPI Description	Process
1. Have dedicated insurance verification unit?	Yes
2. Process and IT integrated between ins verf / patient access?	Yes
3. Use on-line insurance verification system?	Yes
4. Financial counseling part of insurance verification process?	Yes
<ul style="list-style-type: none"> ➤ Alternate arrangements for non-covered patients explored? 	Yes
<ul style="list-style-type: none"> ➤ Hospital policy explained for point-of-service payment? 	Yes
<ul style="list-style-type: none"> ➤ Reminder given to bring required payment & insurance cards? 	Yes

KPIs for CDHC and P4P

Patient Access / Registration

KPI Description	Standard
1. Average registration interview duration	≤ 10 min
2. Average patient wait time	≤ 10 min
3. Average IP registrations per registrar / per shift	35
4. Average OP registrations per registrar / per shift	40
5. Average ER registrations per registrar / per shift	40
6. Data quality compared to pre-established dept standards	≥ 98%
7. ABNs / MSPQs obtained when required	100%
8. MPI duplicates created daily as a % of total registrations	≤ 1%

KPIs for CDHC and P4P

Patient Access / Registration

KPI Description	Process
1. Patient access reports to Chief Revenue Officer?	Yes
2. All registrars report to patient access or within rev cycle?	Yes
3. Use on-line document imaging system?	Yes
4. Financial counseling part of patient access process?	Yes
<ul style="list-style-type: none"> ➤ Patient balances and other payment obligations collected? 	Yes
<ul style="list-style-type: none"> ➤ Policy explained for payment alternatives (credit cards, etc.)? 	Yes
<ul style="list-style-type: none"> ➤ Copies obtained of required payment & insurance cards? 	Yes

KPIs for CDHC and P4P

Patient Access / Registration

KPI Description	Process
5. Registrars' incentive compensation tied to quality indicators?	Yes
6. Registration system integrated / interfaced to PFS system?	Yes
7. Use on-line / web-enabled patient self-registration system?	Yes
8. Use on-line OP medical necessity system prior to service?	Yes
9. Use on-line registration data quality tracking system?	Yes
10. Have CDHC-specific insurance plans?	Yes

KPIs for CDHC and P4P

Financial Counseling

KPI Description	Standard
1. Collection of elective services deposits prior to service	100%
2. Collection of IP patient-pay balances prior to discharge	≥ 65%
3. Collection of OP patient-pay balances prior to service	≥ 75%
4. Collection of ER patient-pay balances prior to departure	≥ 50%
5. Screening of uninsured IPs and hi-bal OPs for fin assist	≥ 95%
6. Pmt arrangements for non-charity eligible IPs / hi-bal OPs	≥ 95%
7. Prompt-payment discount percentage(s)	05 - 20%

KPIs for CDHC and P4P

Financial Counseling

KPI Description	Process
1. Financial counseling reports to Chief Revenue Officer?	Yes
2. Uninsured IPs and high-balance OPs screened for fin assist?	Yes
<ul style="list-style-type: none"> ➤ Medicaid eligibility? 	Yes
<ul style="list-style-type: none"> ➤ State, local, and hospital charity programs? 	Yes
<ul style="list-style-type: none"> ➤ Grants / studies, etc.? 	Yes
3. Financial counselors interview patients in their rooms?	Yes
4. Prompt payment discounts offered?	Yes

KPIs for CDHC and P4P

Financial Counseling

KPI Description	Process
5. Fin counselors' incentive compensation tied to collections?	Yes
6. Discuss pmt alternatives w/ non-charity eligible patients?	Yes
<ul style="list-style-type: none"> ➤ Credit cards? 	Yes
<ul style="list-style-type: none"> ➤ Bank-loan financing? 	Yes
<ul style="list-style-type: none"> ➤ Interest-bearing hospital-funded payment arrangements? 	Yes
7. All IPs cleared thru financial counselors before discharge?	Yes
8. Proof of income / assets obtained from charity applicants?	Yes
9. Place "holds" on \$ in CDHC patients' medical savings accts?	Yes

KPIs for CDHC and P4P

Health Information Management

KPI Description	Standard
1. IP charts coded (or reviewed for P4P) per coder / per day	23 - 26
2. OBSV charts coded per coder / per day	36 - 40
3. AMB SURG charts coded (or reviewed for P4P) per coder / per day	36 - 40
4. OP charts coded per coder / per day	150 - 230
5. ER charts coded (or reviewed for P4P) per coder / per day	150 - 230
6. Chart delinquency greater than 30 days (JCAHO definition)	≤ 5%
7. Total chart delinquency	≤ 10%

KPIs for CDHC and P4P

Health Information Management

KPI Description	Standard
8. HIM “DRG development” hold greater than late charge hold	≤ 2 A/R days
9. Copies of medical records pursuant to payors’ requests	≤ 2 work days
10. Transcription rate per line	08 - 12¢
11. Transcription backlog	≤ 1 work day
12. Chart retrieval pursuant to MDs’ requests	≤ 90 minutes
13. MPI duplicates as a % of total MPI entries	≤ .5%

KPIs for CDHC and P4P

Health Information Management

KPI Description	Process
1. Health Info Management reports to Chief Revenue Officer?	Yes
2. Use on-line DRG and APC groupers?	Yes
3. Use on-line, bar-code enabled chart location system?	Yes
4. Use on-line, scanning-enabled HIM records imaging system?	Yes
5. Use on-line and/or voice-recognition transcription system?	Yes
6. Use on-line clinical abstracting system ?	Yes
7. MDs able to view and/or e-sign records outside the hospital?	Yes

KPIs for CDHC and P4P

Health Information Management

KPI Description	Process
8. Use on-line, up-to-date coding compliance system?	Yes
9. Storage / retrieval / release of records HIPAA-compliant?	Yes
10. All P4P coders / technicians receive payor-specific training?	Yes
11. All coding done by employees reporting to HIM Director?	Yes
12. All coding done by certified coders who are retrained often?	Yes
13. All coding done in descending balance order, not FIFO ?	Yes
14. All coding done when info is sufficient, not 100% complete?	Yes

KPIs for CDHC and P4P

Health Information Management

KPI Description	Process
15. Receive and discuss P4P info provided by Finance or others?	Yes
16. Provide and discuss P4P info with MDs?	Yes
17. P4P discussed / monitored in multi-disciplinary meetings?	Yes
18. Have effective tracking system to locate missing records?	Yes
19. Have appropriate staffing to prevent process backlogs?	Yes
20. Consistently monitor / control D-N-F-B A/R due to HIM?	Yes
21. Perform internal quality-control audits at least quarterly?	Yes
22. Have external quality-control audits done at least annually?	Yes

KPIs for CDHC and P4P

Billing / Claim Submission

KPI Description	Standard
1. HIPAA-compliant electronic claim submission rate	100%
2. Final-billed / claim not submitted backlog	≤ 1 A/R day
3. Medicare supplement ins billing following adjudication	≤ 2 bus days
4. Non-Medicare COB-2 ins billing following COB-1 payment	≤ 2 bus days
5. Medicare RTP (Return To Provider) denials rate	≤ 3%
6. Outsourced guar stmt cost to produce / mail (w/out stamp)	20 - 25¢

KPIs for CDHC and P4P

Billing / Claim Submission

KPI Description	Process
1. Use <i>Patient Friendly Billing</i> ® concepts for guarantor billing?	Yes
2. Use proration to bill ins and guarantor simultaneously?	Yes
3. Guarantor stmts include credit / debit / MSA card option?	Yes
4. Guarantor stmts clearly communicate payment policies?	Yes
5. Guarantor stmts provide customer service phone number?	Yes
6. Guarantor stmts provide customer service web address?	Yes
7. Guarantor billing cycle designed to optimize collections?	Yes

KPIs for CDHC and P4P

Clinical / Decision Support / Finance

KPI Description	Standard
1. P4P Demonstration Project percentile ranking	≥ 80%
2. P4P Demonstration Project bonus achievement	≥ 1%
3. Length of stay, by DRG	≤ DRG avg
4. Readmission rate, by DRG	≤ DRG avg
5. Adherence to quality indicators, by condition	≥ 80%
6. Adherence to quality indicators, by mode	≥ 80%
7. Overall P4P program ROI	≥ 0%

KPIs for CDHC and P4P

Clinical / Decision Support / Finance

KPI Description	Process
1. Use advanced clinical systems to support patient care?	Yes
2. Use electronic medical record system to support patient care?	Yes
3. Use advanced decision support / performance mgt system?	Yes
4. Use executive information (scorecard) system?	Yes
5. Use “data warehouse” system to support DSS / EIS capabilities?	Yes
6. Participate in CMS Demonstration Project, if eligible?	Yes
7. Have clinical improvement teams in data-enabled depts?	Yes
8. Target greatest cost / quality improvement areas first?	Yes
9. Use “root cause analysis” to focus improvement efforts?	Yes

Where's Your Focus?





Appendices

Appendix 1

34 CMS / Premier Hospital Quality Measures

Five Diagnosis Focus Areas

- Acute myocardial infarction
- Coronary artery bypass graft
- Heart failure
- Community-acquired pneumonia
- Hip and knee replacement

Appendix 1

34 CMS / Premier Hospital Quality Measures

Condition	Measure
Acute Myocardial Infarction	1. ASA on arrival
	2. ASA at discharge
	3. ACEI for LVSD
	4. Smoking cessation advice / counseling
	5. Beta blocker on arrival
	6. Beta blocker at discharge
	7. Thrombolytic w/ in 30 minutes of arrival
	8. Percutaneous Coronary Intervention w/ in 30 minutes of arrival
	9. Inpatient mortality rate

Appendix 1

34 CMS / Premier Hospital Quality Measures

Condition	Measure
Coronary Artery Bypass Graft	10. ASA at discharge
	11. CABG using internal mammary artery
	12. Prophylactic antibiotic 1 hour before surgery
	13. Prophylactic antibiotic for surgical pts
	14. Prophylactic antibiotic dc'd w/ in 24 hours post-op
	15. Inpatient mortality rate
	16. Post operative hemorrhage or hematoma
	17. Post operative physiologic and metabolic derangement

Appendix 1

34 CMS / Premier Hospital Quality Measures

Condition	Measures
Heart Failure	18. Left ventricular function (LVF) assessment
	19. Detailed discharge instructions
	20. ACEI for LVSD
	21. Smoking cessation advice

Appendix 1

34 CMS / Premier Hospital Quality Measures

Condition	Measures
Community Acquired Pneumonia	22. Oxygenation assessment
	23. Initial antibiotic
	24. Blood culture prior to antibiotic
	25. Influenza screening / vaccination
	26. Pneumococcal screening / vaccination
	27. Initial antibiotic timing
	28. Smoking cessation advice

Appendix 1

34 CMS / Premier Hospital Quality Measures

Condition	Measures
Hip and Knee Replacement	29. Prophylactic antibiotic one hour prior to surgery
	30. Prophylactic antibiotic selection for surgical patients
	31. Prophylactic antibiotic dc'd w/ in 24 hours after surgery
	32. Post-operative hemorrhage or hematoma
	33. Post-operative physiologic and metabolic derangement
	34. Readmissions 30 days post-discharge

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
ACHP: Alliance of Community Health Plans	Performance measurement initiatives
AHRQ: Agency for Healthcare Research and Quality	Performance measurement initiatives
AMIA: American Medical Informatics Association	Data collection and standardization
CHI: Consolidated Health Informatics Initiative	Data collection and standardization
CHT: Center for Health Transformation	Healthcare quality initiatives
CMS: Centers for Medicare and Medicaid Services	Public reporting initiatives
eHI: e-Health Initiative	Data collection and standardization

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
FACCT: Foundation for Accountability	Healthcare quality initiatives
FDA: Food and Drug Administration	<ol style="list-style-type: none"> 1. Nov 02: Look-alike / sound-alike drugs to be stored on different shelves + comprehensive review of sound-alike drug names 2. Mar 03: Bar code with NDC number required + reporting of blood reactions and potential medication errors
FHCQ: Foundation for Health Care Quality	Healthcare quality initiatives
HIMSS: Healthcare Information and Management Systems Society	Data collection and standardization

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
IHA: Integrated Healthcare Association. Composed of seven CA health plans (Aetna, BC of California, Blue Shield of CA, CIGNA CA, Health Net, PacifiCare, Western Healthcare Advantage)	Began to pay physicians for documented performance in 2003
IHI: Institute for Healthcare Improvement	Healthcare quality initiatives
ISMP: Institute for Safe Medical Practice	Healthcare quality initiatives
IsQua: International Society of Quality Assurance	Healthcare quality initiatives

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
JCAHO: Joint Commission for Accreditation of Healthcare Organizations	Hospital core measures (average survey cost is \$29,191 for 2005)
LFG: Leap Frog Group	Patient safety initiatives
NCC MERP: National Coordinating Council for Medication Errors Reporting and Prevention	Medication safety initiatives
NCQA: National Committee for Quality Assurance	2005 Health Plan Employer Data and Information Set (HEDIS) tracked Medicare beneficiaries for <ul style="list-style-type: none"> • Glaucoma • Beta-blocker long term usage for 6 months following MI and physical activity advice

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
NHIN: National Health Information Network (supported by National Committee on Vital and Health Statistics – NCVHS)	Data collection and standardization
NICHQ: National Initiative of Children’s Healthcare Quality	Children’s health initiatives
NPSF: National Patient Safety Foundation	Patient safety initiatives
NVHRI: National Voluntary Hospital Reporting Initiative (Now replaced by Hospital Quality Initiative)	Uses CMS’s 7th Scope of Work

Appendix 2

Organizations Interested in Healthcare Quality

Organization	Focus Area
PSI: Patient Safety Initiative	Patient safety initiatives
QIO: Quality Improvement Organization (American Health Quality Association)	Medicare’s state review organization, f/k/a PRO: Peer Review Organization
UCLA CPSQ: UCLA Center for Patient Safety and Quality	Patient safety initiatives

Appendix 3

Provider Scorecard Information

Agency for Healthcare Research and Quality www.ahrq.gov/consumer/qnt	Guide to choosing quality care. Includes guide on judging MD quality, including checklists
The National Committee on Quality Assurance www.ncqa.org	Joint ventures with disease societies. Includes guide on finding best MDs for heart / stroke, by state
Qualitycheck www.jcaho.org/quality+check	Provides quality reports on hospitals, ambulatory care centers, and office-based surgery centers
Heathgrades www.healthgrades.com	Rates more than 5,000 hospitals by procedure. Also sells detailed reports on hospitals and MDs
American Medical Association MD Select dbapps.ama-assn.org/aps/amahg.htm	Info on 690,000 physicians
Center for Medicare and Medicaid Services www.medicare.gov	Quality reports about Medicare managed-care plans and providers
Federation of State Medical Boards www.docinfo.org	Reports on disciplinary action against MDs
Administrators in Medicine www.docboard.org	Free info on licensing, background, and disciplinary action
American Board of Medical Specialties www.abms.org	Board certification info

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Resource Planning

1. When do most patients come in with the flu?
2. When are physicians taking vacation?
3. Which Medicare patients are about to exceed their DRG-allowable LOS?
4. What % of Mrs. Green's previous ED visits resulted in admission?
5. What is our relative margin on CAP cases w/ and w/out vent assist?
6. What are the "true costs" of kyphoplasty?
7. How many complex cases are accurately reimbursed?
8. What are the marginal cost and LOS reductions, and improved outcomes, for patients treated on our CAP protocol vs. those not on the protocol?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Chronic Disease Management

9. Which female diabetics, ages 60-65, had eye exams in the last year?
10. What % of Dr. Smith's patients maintain HbA1c below 7?
11. How many patients with high cholesterol received angiograms last month?
12. What intervention seems to help prostate CA patients most?
13. What % of Dr. Jones's CHF patients were prescribed ACE inhibitors?
14. How many HIV+ patients did not have viral-load checks last year?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Inpatient Management

15. How many bariatric surgery patients have co-morbid diabetes, hypertension, and/or depression?
16. Which MDs have treated this patient on this, or any previous, visit?
17. How many current IPs have two glucose values >200 but no diabetes Dx?
18. What is the distribution of vancomycin orders by patient condition?
19. What is the post-op cardiac rehab treatment variation between community hospitals across our health system?
20. How many ED patients are hospitalized due to inappropriate treatment of alcohol withdrawal?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Quality Control

21. How many CHF patients returned to the ED w/in 72 hours of discharge?
22. How were the most-recent 100 patients diagnosed with COPD treated?
23. How did this COPD treatment vary by MD?
24. What MD-nurse combinations cause higher ED mortality / complications?
25. How many pneumonia patients were readmitted for pneumonia w/in six months?
26. How many of those patients were vaccinated?
27. How many patients were misdiagnosed, leading to extended LOS, w/in the most-recent six months?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Preventing Adverse Events

- 28. What types of catheters were used in all central-line infection cases w/in the most-recent six months?
- 29. What is the most common error caused by CPOE?
- 30. How many patients on heparin have experienced a platelet count drop of $\geq 15\%$ in the last 24 hours?
- 31. How often do pharmacists intervene when renal failure patients are prescribed potentially-toxic doses of renally-excreted drugs?
- 32. How many coronary angioplasty patients received appropriate prophylaxis against contrast-mediated renal toxicity?
- 33. What % of total-joint replacement patients receive DVT prophylaxis?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Preventing Adverse Events (cont'd)

34. What is the most common combination of caregiver and patient condition, for patients who fall?

35. Which nurses have the most contact w/ patients w/ positive MRSA tests?

36. How often does each resident internist ignore drug interaction alerts?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Surveillance

- 37. What is the distribution of patients presenting with stomach pains, by zip code?
- 38. What is the distribution of positive blood cultures, by nursing unit?
- 39. Where do most inpatients die?
- 40. Have we experienced a spike in the number of ED patients complaining of shortness of breath, in the last week?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Physician Credentialing

- 41. What is the most common reason for failing to give beta blockers to AMI patients?
- 42. What is the average length of stay, by MD?
- 43. Which MDs have the highest readmission rates, on a severity-adjusted basis?
- 44. What is the compliance rate for standing orders, by MD?
- 45. Which MD group is referring the sickest patients?

Appendix 4

50 Clinically-Relevant, Yet Difficult, Questions

Physician Credentialing

46. What is the distribution of admitted patients, by primary care MD?
47. Are Dr. Black's patients actually sicker?
48. What is the distribution of cesarean deliveries, by day of week, and by MD?
49. How frequently do MDs treat patients for conditions outside of their credentialed fields?
50. Which MDs keep patients on IV antibiotics for more than three days, post-procedure?

APPENDIX 4 SOURCE: Toward the Data-Driven Clinical Enterprise, Advisory Board Company, 2005

Questions? Comments?

Presenter's Resume

David Hammer, Vice President, McKesson

Mr. Hammer is a Vice President in McKesson's Business Performance Solutions group. He focuses on receivables and health information management for hospitals, health systems, and related entities. In his more than 21 years of health care industry experience, Mr. Hammer has held a variety of positions with leading not-for-profit and proprietary health systems, Big Four accounting firms, information systems vendors, and health care A/R management companies.



Background and Affiliations

Mr. Hammer received an MBA in Management and an MHS in Health Care Administration from the University of Florida in 1987. He also received a BBA in Accounting with a minor in Information Systems (Magna cum Laude) from the University of North Florida in 1985. Mr. Hammer is certified by HFMA as a Fellow (FHFMA) and as a Certified Healthcare Finance Professional (CHFP). He has been named an HFMA Distinguished Speaker for four consecutive years, and has received HFMA's Gold, Silver and Bronze service awards.

Recent Publications

Mr. Hammer authored the July 2007 cover story in HFMA's healthcare financial management journal, entitled "The Next Generation of Revenue Cycle Management," as well as the July 2005 hfm cover story, entitled "Performance is Reality: Is Your Revenue Cycle Holding Up?" His most-recent article, "UPMC's Metric-Driven Revenue Cycle," appeared in the September 2007 issue of hfm, and "Data and Dollars: How CDHC is Driving the Convergence of Banking and Health Care" was published in hfm's February 2007 issue. His article "Black Space Versus White Space - The New Revenue Cycle Battleground" appeared in the January 2007 issue, and "Customer Service Adapts to CDHC" appeared in the September 2006 issue. He also publishes regularly in McKesson Provider Technologies' Answers magazine.

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