



HEALTH

Measuring Performance in Healthcare (Quality, Costs and Utilization)

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The Challenge of Measuring Healthcare Performance

- **The growing complexity and differentiation of innovation and interventions requires policymakers and practitioners to design and implement performance measurement strategies**
- **The goal is to derive differentiated information on what works, in which context at what cost**
- **Generating such evidence on best practices requires:**
 - **Defining value and operationalizing it into measures**
 - **Attributing changes in the measures to the intervention**

Overview

- **The four golden rules of performance measurement in healthcare**
- **Where does the measurement science stand?**
- **Maintenance of a measurement system**

Rule #1



Form Follows Function

- **What is the purpose of measurement?**
 - Research
 - Quality improvement
 - Internal management
 - External oversight
 - Public reporting
 - Pay for performance
- **What is it that we are trying to measure?**
 - Logic model
 - Conceptual framework

Functions of Monitoring System

- **Program operations:**
 - **Monitoring of effect**
 - **CQI**
 - **Operations management**
- **Accountability:**
 - **Regulatory requirements**
 - **Informing health policy decisions**
 - **Potential public reporting and P4P schemes**
 - **Competitive advantage**
- **Data for research**

Potential Domains for Measurement System

- Patient knowledge
- Self-efficacy
- Health-related behavior
- Processes of clinical care
- Disease control
- Utilization of medical care
- Cost of care
- Health outcomes and health status
- Patient satisfaction
- Non-medical cost (productivity loss)

Which Domains to Include?

- Patient knowledge
- Self-efficacy

Program design

- Health-related behavior
- Processes of clinical care

Clinical program operations

- Disease control

- Utilization of medical care

Financial program operations

- Cost of care

- Health outcomes and health status

- Patient satisfaction

Health policy decisions

- Non-medical cost (productivity loss)

Economic policy decisions

Rule #2



Take Stock of What You Have

- **What measures are already being used?**
- **What data sources are currently available or easily accessible?**
- **Whom can we ask for help?**

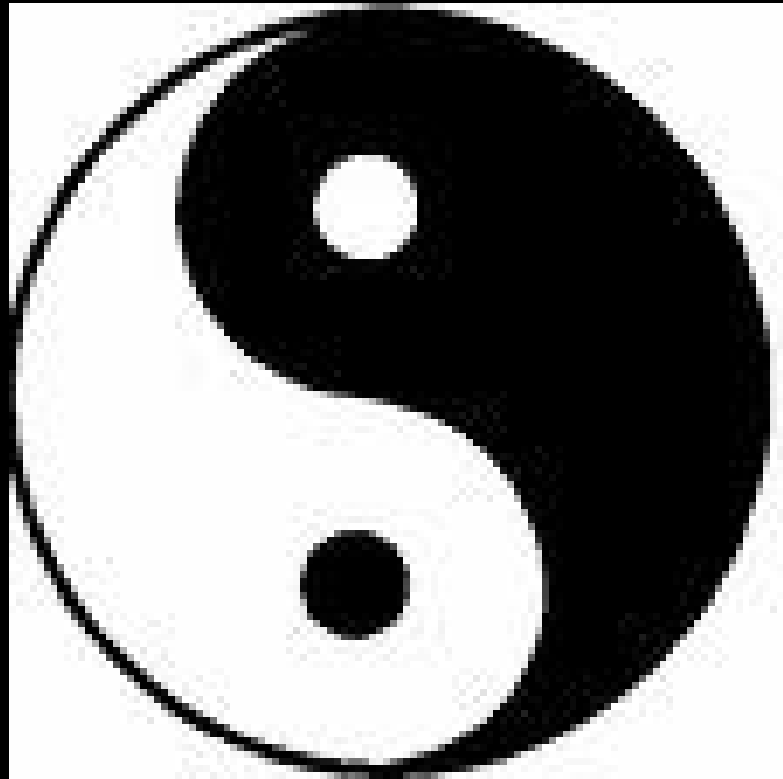
Rule #3



Aim High

- **Use solid and explicit criteria and processes for measures selection**
- **Don't be afraid of additional developmental work and data collection**

Rule #4



Find A Sound Balance

- **Measurement needs to be a compromise between desirable and feasible measures**
 - Primary data collection is costly
 - Providers view data collection as distraction
 - Privacy issues create obstacles
- **The measurement system requirements for evaluation and research should be aligned closely with operational needs**
- **Don't underestimate the challenge of implementation**
 - It will take more time than anticipated
 - It will be more difficult than anticipated
 - A pilot phase will allow to fix initial problems

The Four Golden Rules: Summary

- **Consider the intended use of the measures**
- **Develop a conceptual framework, which defines what should be measured**
- **Operationalize the framework, i.e. select the measures that cover the domains of the framework**
- **Implement the monitoring system, i.e. calculate the selected measures from actual data**

Criteria for Measures Evaluation

- **Importance/Relevance**
 - Is there a meaningful problem?
 - Can our intervention improve it?
- **Scientific Soundness**
 - Is the measure supported by evidence
 - Has the construct been implemented correctly?
 - Is the measure reliable and valid?
- **Feasibility**
 - Is the measure well specified?
 - Are required data accessible, reliable and timely?
- **Usability/Actionability**
 - Does the measure provide actionable decision support?

Some Thoughts on Data Sources

- **Administrative data should be used whenever possible**
 - + **Provide a wealth of information based on standardized coding systems**
 - + **Readily available, even for potential comparison groups**
 - **Require some creativity and the ability to imagine how clinical processes are reflected in admin data**
 - **Reflect the scope and data quality of its original purpose**
- **It might be necessary to augment admin data with data from medical records and patient surveys**
- **Use of EMRs will make clinical data more accessible**
 - **BUT by no means guarantee data availability**

Measuring Performance: Cost and Utilization

- **Conceptually straightforward**
- **Costs are hard to track in some systems**
- **Costs are influenced by many factors**
 - **Price negotiations**
 - **Price differentiation**
 - **Medical inflation**
- **This may make it difficult to use cost to identify the impact of reforms or programs**
- **Utilization tends to be easier to measure and more stable**

Measuring Performance: Quality of Care

- **Complex construct**
- **Usually measured in three categories**
 - **Processes of care**
 - **First and second generation measures**
 - **Disease control/intermediate outcomes**
 - **Outcomes**
- **All have different advantages and disadvantages**
 - **Choice of categories and measures depends on question to be asked, time line and sample size**

State of the Science in Quality Measurement

- **Substantial progress over the last decade**
- **Universally accepted measures in many areas**
 - **Most common chronic conditions (asthma, CAD, CHF, COPD, diabetes)**
 - **Preventive services**
 - **Prenatal care**
- **Gaps remain in other areas:**
 - **Other chronic conditions**
 - **Cancer**
 - **Surgical care**
 - **Clinical quality measures for complex patients**
 - **Patient-centric versus disease-focused or transaction-oriented measures**
 - **Composite measures and interdependency**

Measures Maintenance

- **Measures used for operational purposes require ongoing maintenance to ensure that they continue to meet their requirements in the long run**
 - **Roadside assistance: Ad hoc review to deal with comments and concerns (as needed)**
 - **Oil change: Measures maintenance to keep measures up to date (annual)**
 - **Tune-up: Full re-evaluation to assess whether expectations have materialized and initial rationale still holds (tri-annual)**

Summary

- **Performance measurement is of increasing interest and importance in healthcare**
- **It allows generating actionable information for evidence-based policy and management decisions**
- **Measurement science has evolved substantially**
- **But much developmental work is still ahead**



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