Maryland Health Services Cost Review Commission

Payment Work Group
Efficiency/Cost Measures

05/05/2014

Measuring Efficiency

- HSCRC Performance Measurement Workgroup March 17, 2014

  - Market Scan by HSCRC Contractor Tom Valuck, MD, JD, Discern
  - Definition of Efficiency
  - Measurement
  - HSCRC History and Perspective

Framework for Measuring Efficiency

- Definition
- Perspectives
- Levels of accountability
- Types of efficiency measurement
- Methodological issues
- Phasing

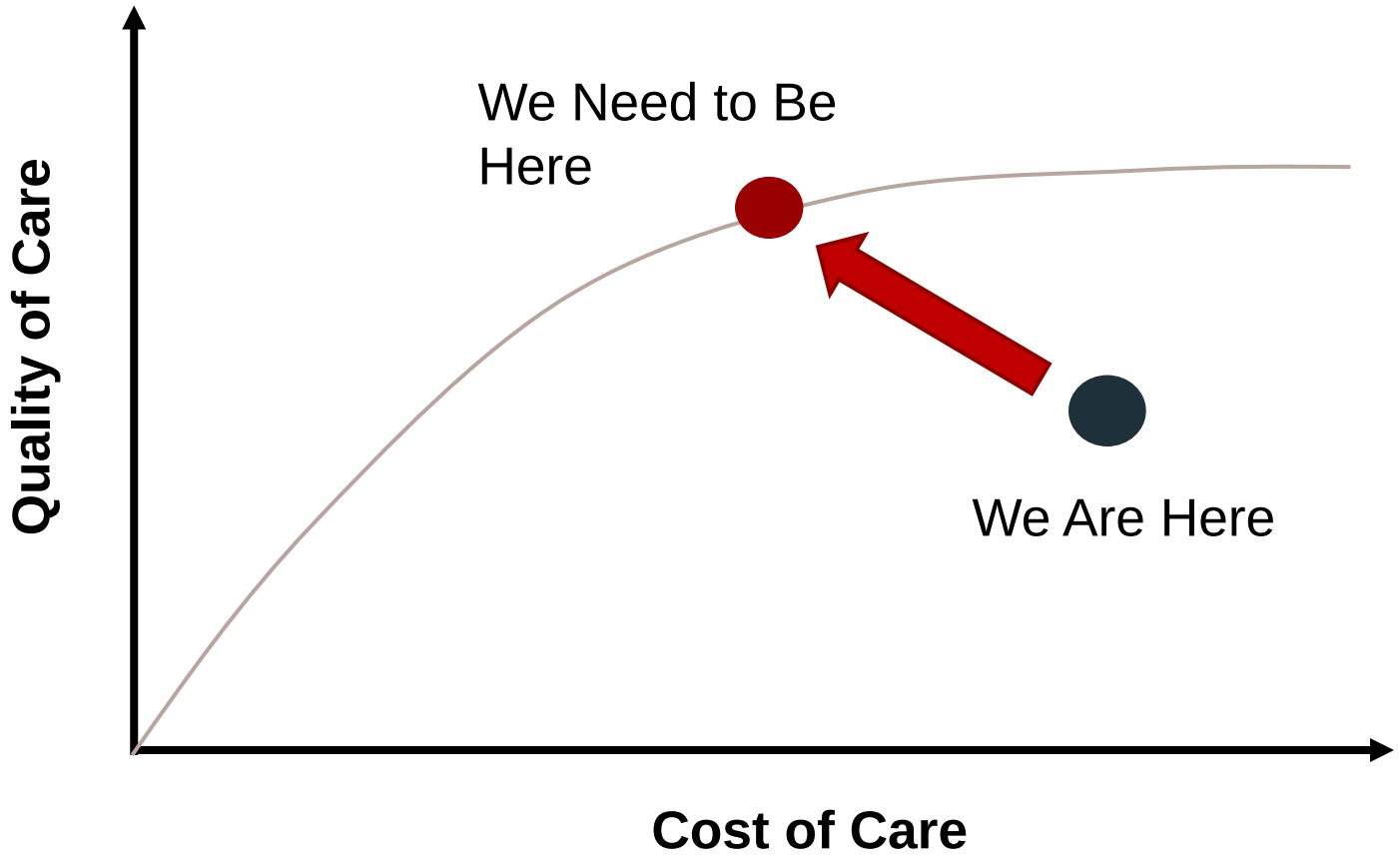
Source: Discern

What Is Efficiency?

- Patient-centered definition
  - Relationship between inputs and outputs
  - Efficiency = quality / costs
  - Can increase efficiency by increasing quality, decreasing costs, or both; but cheaper is not necessarily more efficient
  - To measure efficiency, need both the quality and cost components

Source: Discern

Efficiency: The Relationship Between Cost and Quality



Source: Discern

What Is Efficiency?

- **Value** and **affordability** are **subjective** assessments of efficiency
  - Depends on perspective – cost to **whom** and the quality **they** receive
    - Consumer – sensitive to out-of-pocket costs; otherwise, want the best quality outcome
    - Policymaker, serving as purchaser and payer – want to maximize outcome per unit cost
    - Hospital – operational efficiency, but need to consider appropriateness
  - Example: assessing the value and affordability of a CT scan after head trauma


Value
Efficiency
Stakeholder preference
Quality
Time
Resource use
Costs/resources used to provide care

Measuring Efficiency

More population-based

- Levels of accountability – cost and quality
  - Service
    - unit of service
    - for a single patient
    - provided by one entity
  - Episode
    - bundle of services
    - for a single or multiple patients
    - provided by one or more entities
  - Population
    - wide range of services
    - for multiple individuals
    - provided by one or more entities

Source: Discern

Possible uses of Efficiency measures

- Provide comparative information for decision making
  - by businesses about health plan purchasing
  - by consumers about health plan/provider choice
  - by health plans about provider contracting
  - by managers about resource allocation
- Monitoring and planning
- Pay-for-performance
- Public reporting

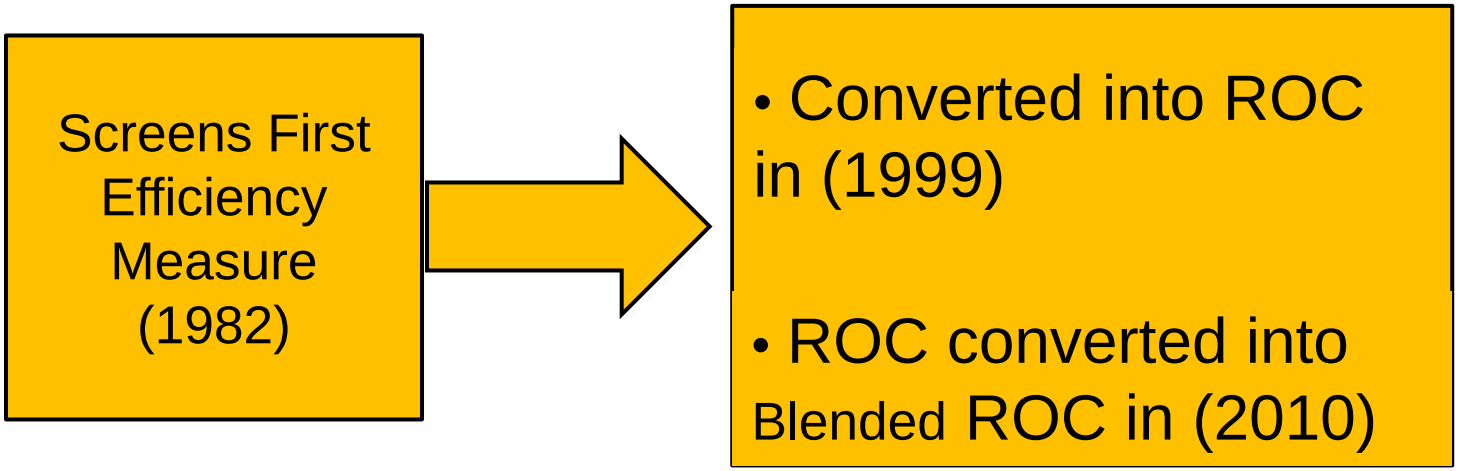
Cost Measures

- Per Case: Reasonableness of Charges (ROC)
- Episode: Medicare Spending per Beneficiary (MSPB)
- Population: Total Cost of Care PMPM measures

Reasonableness of Charges (ROC)

HSCRC per case measure

HSCRC History of Efficiency Measures



- **The Commission has a long proven history of including some form of efficiency measure in its arsenal of tools used to set Maryland hospital rates. Once introduced these efficiency measures undergo many changes adapting to the industry environment.**

ROC General Information

- Published each fall by HSCRC
- Hospitals are Stratified into Peer Groups. Current Peer Groups:

Non- Urban Teaching	**Suburban/Rural Non Teaching**
Urban	**AMC Virtual**

- Threshold for “Reasonableness” of charges
  - Hospitals over 3.0% above their peer group average are identified by HSCRC as failing the ROC
- Hospital options after failing
  - Reduce CPC to Peer Group Average over 2 years
  - File full Rate Review Application (ICC)

ROC Adjustment Factors

- To compare hospitals with their peer group standards, approved CPCs or CCTs adjusted for the following:
  - Mark-up – Commission approved markups over costs that reflect uncompensated care built into each hospital's rate structure.
  - Direct Strips – (Direct Medical Education, Nurse Education, and Trauma) remove partial costs of resident salaries, nurse education costs and incremental costs of trauma services of hospitals with trauma centers
  - **Labor Market** – Adjustment for differing labor costs in various markets
  - **Case Mix** – Adjustment accounts for differences in average patient acuity across hospitals
  - **Indirect Medical Education**- Adjustment for inefficiencies and unmeasured patient acuity associated with teaching programs.
  - **Disproportionate Share** – Adjustment for differences in hospital costs for treating relatively high number of poor and elderly patients
  - **Capital** – Costs for a hospital are partially recognized

Medicare Spending per Beneficiary (MSPB)

What is MSPB?

- MPSB is a ratio and calculated based upon a hospital's average spending compared to the national median
  - 1 = Spending is approximately the same as the national median
  - >1 = Spending is MORE than the national median
  - <1 = Spending is LESS than the national median

- MPSB Episode includes all Part A and B claims between 3 days prior to index hospital admission to 30 days post hospital discharge
  - Episode based on "from date" or admission dates for inpatient claim

Coverage of Episode

Time Dimension

3 Days Prior

Index Admission

30 Days After Hospital Discharge

Cost Dimension

Home Health
Hospice
Outpatient
Inpatient
Skilled Nursing Facility
Durable Medical Carrier

Risk-Adjustment Variables

- Age
- Hierarchical Condition Categories (HCCs)
- Disability and End-Stage-Renal Disease (ESRD) Enrollment Status
- Long-Term Care
- Interactions between HCCs and/or enrollment status variables
- MS-DRG of Index Admission
- Reset (Winsorize) expected cost for extremely low-cost episodes

Total Cost of Care
Per Member per Month

What is Total Cost of Care?

- The total cost of care is a measure of the total cost of treating a population in a given time period expressed as a risk adjusted per member per month (PMPM).

- PMPM with appropriate and comprehensive risk adjustment methods allows for fair comparisons between providers, insurers, and regions over time.
  - 1 = Cost is approximately the same as the peer group or benchmark Standard
  - >1 = Cost is MORE than the peer group or benchmark Standard
  - <1 = Cost is LESS than the peer group or benchmark Standard

Coverage of Care

Time Dimension

Annual
Quarterly
Others

Cost Dimension

Inpatient, Outpatient, Professional, Pharmacy, Ancillary Services, Home Health, Hospice, Skilled Nursing Facility, Durable Medical Carrier

Considerations

- Measurement of Total Cost of Care
  - Private Claims from Maryland Health Care Commission
  - Medicaid Claims
  - Medicare Claims
- Risk Adjustment
  - Historical data on diagnosis
  - Risk Adjustment Methodology
- Attribution
  - Regional, county level calculations
  - Hospital level