NATIONAL QUALITY FORUM

Defining Affordability

Overview

The National Quality Strategy (NQS) serves as a blueprint for achieving a high-value healthcare system. There are three interdependent aims that guide the NQS: better care, affordable care, and healthy communities; performance measurement supports driving and tracking progress towards these aims. While advances have been made in measuring progress on the aims of better care and healthier communities, progress in the affordable care aim has slow.

One challenge is the lack of a clear definition of affordability. Affordability is a broad concept that can be interpreted in many ways depending on the individual stakeholder's vantage point. For example, purchasers prioritize achieving the highest quality care at the lowest cost, while patients tend to be concerned more about out-of-pocket costs and often equate higher costs with better quality. Additionally, information on the various components of what may constitute affordable healthcare varies by stakeholder.[1] Compounding this clarity problem is the interrelationship between affordability and terms such as value, efficiency, cost, and resource use. To address this problem, the Measure Applications Partnership (MAP) will establish parameters for affordability and develop consensus-based definitions.

In addition to building on prior work that has defined efficiency, resource use, and cost, MAP is seeking input to understand what various stakeholders consider to be the major drivers for healthcare costs and the measurement priorities in this area. This document provides a background on how the NQS has defined affordable care, reviews existing definitions related to affordable care, and highlights some examples of how various stakeholders define affordability. After reviewing this document, we invite the public to submit comments on how your organization defines affordability. Public comments can be submitted here.

Background and Conceptual Framing

The need for improving the affordability of healthcare has been well established. The United States spends twice the per capita healthcare expenditures than other developed nations while having no associated improvement in outcomes.[2] To advance the aim of affordable care, each of the NQS priorities presents an opportunity to improve care, reduce costs, and increase affordability:

Reducing Medical Errors:

The NQS sets a priority of making care safer by reducing harm caused in the delivery of care. In its 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, the Institute of Medicine (IOM) highlighted the link between medical errors and increased costs, as medical errors result in the subsequent need for additional healthcare services to treat patients who have been harmed.[3] The NQS notes that healthcare-related errors harm millions of American patients each year and needlessly add billions of dollars to healthcare costs.[4]

Promoting Person-Centered Care:

Evidence supports that patients who are engaged in their care incur lower costs.[5] Healthcare delivery is currently designed around treating specific clinical conditions, rather than meeting the needs of the patient more holistically. The NQS priority of ensuring that care engages each person and family as partners aims to change this. Involving the patient in their care through shared decision making could result in reductions in unwarranted variation in care and costs while better aligning care with patients' values.[6] A 2008 estimate by the Lewin Group found that implementing shared decision making for just 11 procedures would yield more than $9 billion in savings nationally over 10 years.[7]

Improving Care Coordination:

The fragmentation in the current system leads to waste in numerous ways. The NQS priority of promoting effective communication and coordination of care aims to reduce waste by developing a more integrated healthcare system. Improved care coordination presents an opportunity to lower costs and improve quality by improving disease management, reducing duplicative services, and preventing unnecessary hospital readmissions.[8] However, current payment models do not foster care coordination, demonstrating a need for new models that encourage the effective integration of care.[9]

Reducing the Burden of Chronic Illness:

An aging population and increased life expectancy have increased the prevalence of chronic diseases, driving healthcare spending higher. In the *Healthcare Imperative, the* IOM notes that treatment of chronic conditions consumes 96 cents per dollar for Medicare and 83 cents per dollar for Medicaid while many chronic conditions may be preventable.[10] The NQS priority of promoting the most effective prevention and treatment practices for the leading causes of mortality seeks to reduce the burden of chronic diseases.

Addressing Modifiable Risk Factors:

The IOM highlighted missed prevention opportunities as a driver of excess healthcare costs.[11] However, these services currently represent a small portion of the approximately $2 trillion annually spent on healthcare. PriceWaterhouseCoopers estimates that the nation could save almost $500 billion per year by addressing obesity, smoking, and other modifiable risk factors.[12] The Trust for America's Health estimates that community-based interventions could save $5 for every $1 invested.[13] To address this problem, the NQS prioritizes, working with communities to promote wide use of best practices to enable healthy living.

Eliminating Waste and Inefficiencies:

The NQS states that healthcare costs can be reduced while quality is improved by delivering the right care to the right person at the right time.[14] The *Healthcare Imperative* notes the impact of unnecessary services, inefficiently delivered services, and excess administrative costs on delivering affordable care. To achieve this goal and reduce waste in the system, the NQS set a priority of making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models. Efforts such as the ABIM Foundation's Choosing Wisely campaign aim to combat this problem by encouraging physicians, patients, and other stakeholders to think and discuss medical tests and procedures that may be unnecessary, and could in some instances cause harm[15].

In addition to the NQS, MAP will build on prior work establishing the high-leverage opportunities to decrease healthcare costs. In the *Healthcare Imperative,* the IOM explored the sources and implications of waste and excess cost, identifying six major drivers of excess spending:

- Unnecessary services: Variations in practice because of scientific uncertainty, perverse economic and practice incentives, and lack of patient engagement in decisions can lead to higher spending through the provision of unnecessary services. Unnecessary services can include overuse of services, discretionary use beyond benchmarks, and the unnecessary choice of higher cost services,
- Inefficiently delivered services: Providing appropriate services in the most efficient way possible would decrease costs while improving quality. Preventing mistakes such as medical errors or preventable complications, reducing care fragmentation, decreasing the unnecessary use of higher cost providers, and improving operational inefficiencies at care delivery sites would improve the efficiency of care.
- Prices that are too high: While high prices may create incentives for innovation, current prices in healthcare may reflect market asymmetries in information and monopoly power. Current prices may cost billions of dollars in expenditures unnecessarily through product and services prices that are beyond competitive benchmarks.
- Excess administrative costs: The time, costs, and personnel necessary to process billing and insurance-related activities and lead to redundancy and inefficiency in healthcare administration. Bringing administrative costs in line with benchmarks from other industries, reducing administrative inefficiencies, and improving care documentation inefficiencies could significantly reduce costs.
- Missed prevention opportunities: Changing demographic trends and underinvestment in population health lead to missed prevention opportunities. Improving primary, secondary, and tertiary prevention could lower costs while adding value to patients.
- Medical fraud: The FBI has estimated that fraud and abuse cost three to ten percent of total healthcare spending. Reducing fraud from all sources could lead to significant cost savings.

Building on Existing Definitions

MAP will build on prior definitions related to affordability, including NQF's *Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care*, *National Voluntary Consensus Standards for Cost and Resource Use,* the Agency for Healthcare Research and Quality (AHRQ) and RAND's *Identifying, Categorizing, and Evaluating Health Care Efficiency Measures,* and the work of the Robert Wood Johnson Foundation (RWJF) to understand how consumers view and define affordability. MAP aims to understand what terms such as cost, value, and efficiency mean to various stakeholders and how they interrelate with the concept of affordability.

NQF's *Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care* identifies three components—population at risk, evaluation and initial management, and follow-up care—that must be measured and evaluated longitudinally over the course of an episode of care. Additionally, the framework notes that performance measurement should shift towards assessments of value by interpreting measures of quality, cost of care, and outcomes in light of concordance with patients' well-informed preferences.[16] The framework builds on the consensus-based definitions established by the AQA Alliance:

- Cost of care is a measure of total healthcare spending, including total resource use and unit price(s), by payor or consumer, for a healthcare service or group of healthcare services, associated with a specified patient population, time period, and unit(s) of clinical accountability.
- Efficiency of care is a measure of cost of care associated with a specified level of quality of care.
- Value of care is a measure of a specified stakeholder's (such as an individual patient's, consumer organization's, payor's, provider's, government's, or society's) preference-weighted assessment of a particular combination of quality and cost of care.

NQF's built on the concepts in the *Patient-Focused Episode of* Care when developing *National Voluntary Consensus Standards for Cost and Resource Use*. This work noted that measures of cost and quality must be aligned in order to truly understand efficiency and value. To facilitate endorsing measures given the diverse perspectives on cost and resource use measurement in healthcare, the report sought to provide further clarity on the definition of resource use measures[17]:

- Resource use measures are the amount of resources used per population, episode, or procedure. Resource use measures are defined as broadly applicable and comparable measures of health services counts (in terms of units or dollars) that are applied to a population or event (broadly defined to include diagnoses, procedures, or encounters). A resource use measure counts the frequency of defined health system resources; some may further apply a dollar amount (e.g., allowable charges, paid amounts, or standardized prices) to each unit of resource use.

As a starting place in understanding efficiency and value, NQF supports using and reporting of resource use measures in the context of quality performance, preferably outcome measures. Using resource use measures independent of quality measures does not provide an accurate assessment of efficiency or value and may lead to adverse unintended consequences in the healthcare system.[18]

In *Identifying, Categorizing, and Evaluating Health Care Efficiency Measures*, RAND and AHRQ developed a typology of efficiency measures as a first step in developing a systematic and rigorous process to improve measurement in this area[19]. AHRQ and RAND defined efficiency as an attribute of performance that is measured by examining the relationship between a specific product of the healthcare system (an output) and the resources used to create that product (inputs). A healthcare provider would be efficient if it was able to maximize output for a given set of inputs or minimize inputs used to produce a given output. Building on this definition AHRQ and RAND developed a typology of efficiency measures whose purpose is to make explicit the content and use of a measure of efficiency. The typology has three levels:

- Perspective: who is evaluating the efficiency of what entity and what is their objective?
- Outputs: what type of product is being evaluated?
- Inputs: what resources are used to produce the output?

The first level, perspective, requires identification who is evaluation efficiency, what they are evaluating, and the objective or rationale for the assessment. AHQR and RAND identify four types of entities, each with different consideration for efficiency, for the purpose of perspective:

- Healthcare providers (e.g., physicians, hospitals, nursing homes) that deliver healthcare services
- Intermediaries (e.g., health plans, employers) who act on behalf of collections of either providers or individuals (and, potentially, their own behalf) but do not directly deliver healthcare services

- Consumers/patients who use healthcare services
- Society, which encompasses the first three.

The second level identifies the outputs of interest and how they will be measured. The report distinguishes between two types of outputs, health services such as visits, drugs, and admissions, and health outputs such as preventable deaths, functional status, and clinical outcomes.

The third level identifies the inputs that are used to produce the output of interest. Inputs can be measured as counts by type (e.g. nursing hours, bed days, days supply of drugs) or they can be monetized (real of standardized dollars assigned to each unit). Efficiency measures that count the amounts of different inputs used to produce an outcome help to answer questions about whether the output could be achieved faster, with few people, with less time, or fewer supplies.

The aim of this typology is to provide a framework within which stakeholders can have discussions about the intended use of measures, the choice and measurement of outputs and the choice and measurement of inputs. Using a standard format, such as this typology, allows stakeholders to examine what is being measured and whether the measure is appropriate for the purpose.

MAP will also build on the work of the Robert Wood Johnson Foundation to understand affordability, particularly from the consumer perspective. RWJF developed a glossary of terms to define the problem of cost and price transparency and to reduce confusion around terms related to healthcare spending[20]. RWJF developed definitions for:

- Cost: The amount of money actually paid to a healthcare provider. As a performance measure, cost is a measure of the total healthcare spending, including total resource use and unit price(s), by payer or consumer, for a healthcare service or group of healthcare services associated with a specified patient population, time period, and unit(s) of clinical accountability.
- Efficiency: The relationship between a specific product (output) of the healthcare system and the resources (inputs) used to create the product. Similar to value.
- Episode of care: A grouping of a series of care which quantifies the services (resources used) across multiple settings and providers involved in the diagnosis, management and treatment of specific clinical conditions. Episode-of-care measures can be developed for the full range of acute and chronic conditions, including diabetes, congestive heart failure, acute myocardial infarction, asthma, low back pain and many others. Because episodes of care can be defined more tightly and specifically around aspects of a given clinical condition, it may be easier to determine accountability based on per-episode than on per-capita measurement efforts.
- Input: The factor used to produce a healthcare good or service, and the spending associated with that factor (e.g., nursing wages, prescription drug prices).
- Price: The amount paid for a service or product, typically determined via market mechanisms that take into account the supply of and demand for the service or product.
- Resource Use: A measure or set of measures intended to broadly capture indicators of the cost and efficiency of healthcare provisions. Healthcare resource use measures reflect the amount or cost of resources used to create a specific product of the healthcare system. The specific product could be a visit or procedure, all services related to a health condition, all services during a period of time, or a health outcome.

- Value: The health outcome per dollar of cost expended. Value incorporates product and service quality into the assessment of output, and also reflects the societal or personal value of the good or service consumed.

In *Counting Change*, the RWJF outlines the affordability information that consumers need and the major barriers to good price measurement and reporting for consumers, noting a lack of usable price comparisons, and a distortion of the meaning and importance of price information to insured consumers.[21] Additionally, RWJF notes that consumers may have challenges properly understanding and making decisions based on price data and may distrust efforts to make healthcare more efficient. RWJF also explores possible solutions such as the development of global payment measures to explore costs across an episode of care and as well as the development of spending measures that focus on the whole patient.

Preliminary Stakeholder Perspectives on Affordability

Affordability is a subjective term and influenced by a stakeholder's perspective. A few examples of how stakeholders may define affordability are provided below. The examples are not definitive or exhaustive as MAP seeks to better understand how various stakeholders approach the topic of affordability.

Consumers/patients are concerned about access to care as well as prices and out-of-pocket costs. Price transparency and consistent cost measures are critical aspects of affordability to consumers. Affordability may therefore be based on the appropriate share of income a person or family should be expected to contribute towards premiums and/or cost sharing (co-payments, co-insurance, and deductibles).[22] A challenge to measuring affordability is that higher cost is often associated with higher quality from the consumer/patient perspective,[23] underscoring the need to show cost data in the context of outcomes.

Communities are interested in improving healthcare affordability in their markets. Communities are interested in lowering costs while eliminating health disparities and addressing equity, chronic disease management, health promotion and disease prevention, and patient safety.

Providers want to improve care processes and outcomes and to show the value of the services provided. Affordability may be best approached by addressing unnecessary services, inefficiently delivered services, excess administrative costs, prices that are too high, missed healthcare prevention opportunities, and fraud.[24]

Clinicians are interested in promoting affordability by decreasing administrative burden and delivering the best care in the most efficient manner. Inefficiency and fragmentation make it challenging for clinicians to work together while conflicting clinical information can lead to uncertainty in decision-making. Incentives are often misaligned and reward volume over quality and outcomes.[25]

Payers/purchasers/policymakers need information to purchase healthcare services based on value, ensuring the populations they are responsible for receive high-quality care that is not wasteful or harmful**.** Affordability may therefore be based on how effectively cost and quality of care were managed to achieve health outcomes. If the purchaser is a self-insured employer, affordability may also include their contribution towards healthcare premiums as well as returning a sick worker to a healthy baseline, while limiting lost work time and permanent disability.

Supplier/industry are an integral part of ensuring overall healthcare quality and affordability as organizations that support the healthcare field with device and diagnostic products, medications, tools,

and other information and resources. Suppliers are interested in reducing costs through improved manufacturing and logistics processes[26] while maintaining incentives for innovation[27] and research and development, which can be slow, expensive, and difficult to generalize to broad patient populations.[28] Suppliers are also interested in decreasing costs by increasing safety, such as preventing adverse drug events.

Public Comments: How Does Your Organization Define Affordability?

To create an affordability lexicon, MAP seeks input from various stakeholders on how affordability should be defined and what is most important to measure. Specifically, NQF would like to know:

- How does your organization define affordability? Please provide a brief description.
- Please provide a brief definition for each term in your definition of affordability.
- Based on your definition of affordability above, what information or data is needed to assess affordability?
- Does your organization currently collect information on affordability? If yes, what types of data do you collect and how?
- Please provide any additional feedback here you wish to offer that MAP should consider in defining affordability through multiple stakeholder perspectives.

NQF is soliciting public comments through November 5, 2013. The MAP Affordability Task Force will review this input and draft affordability definitions during its November 14, 2013 web meeting. For additional assistance or questions, please contact Erin O'Rourke (eorourke@qualityforum.org).

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[1] Robert Wood Johnson Foundation (RWJF). *Counting Change.* Princeton, NJ: RWJF;2012. Available at http://www.rwjf.org/content/dam/web-assets/2012/03/counting-change. Last accessed October 2013.
[2] Institute of Medicine (IOM). *The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary.* Washington, DC: The National Academies Press;2010.
[3] IOM. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: The National Academies Press; 2001.
[4] National Quality Strategy (NQS). Rockville, MD:Agency for Healthcare Research and Quality (AHRQ);2011. Available at http://www.ahrq.gov/workingforquality/. Last accessed October 2013.
[5] Patient Engagement. *Health Policy Briefs*; February 14, 2013. Available at http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=86. Last accessed October 2013.
[6] Oshima Lee E, Emanuel EJ. Shared decision making to improve care and reduce costs. *New Eng J Med*. 2013;368(1):6-8. Available at http://www.nejm.org/doi/full/10.1056/NEJMp1209500. Last accessed October 2013.
[7] http://www.lewin.com/~/media/lewin/site_sections/publications/3888.pdf
[8] National Quality Strategy (NQS). Rockville, MD:Agency for Healthcare Research and Quality (AHRQ);2011. Available at http://www.ahrq.gov/workingforquality/. Last accessed October 2013.
[9] IOM. *The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary.*
[10] Id.
[11] Id.
[12] PriceWaterhouseCoopers (PWC), The Price of excess: Identifying waste in healthcare spending. New York:NY;2008.
[13] Levi et al., 2008
[14] National Quality Strategy (NQS). Rockville, MD:Agency for Healthcare Research and Quality (AHRQ);2011. Available at http://www.ahrq.gov/workingforquality/. Last accessed October 2013.
[15] ABIM Foundation. Choosing Wisely. Available at: http://www.choosingwisely.org/. Last accessed October 2013.
[16] National Quality Forum (NQF). *Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care.* Washington, DC:NQF;2010.
[17] NQF. *National Voluntary Consensus Standards for Cost and Resource Use*. Washington, DC;2012.
[18] Id.
[19] Identifying, Categorizing, and Evaluating Health Care Efficiency Measures. Rockville, MD Agency for Healthcare Research and Quality (AHRQ); 2008. Available at: http://www.ahrq.gov/research/findings/final-reports/efficiency/efficiency.pdf. Last accessed October 2013.
[20] Robert Wood Johnson Foundation. Glossary: Defining the Problem: Cost and Price Transparency. November 2011.

[21] Robert Wood Johnson Foundation (RWJF). Counting Change. Princeton, NJ: RWJF;2012. Available at http://www.rwjf.org/content/dam/web-assets/2012/03/counting-change. Last accessed October 2013.
[22] Blumberg LJ, Holahan J, Hadley J, et al. Setting a standard of affordability for health insurance coverage *Health Affairs. 2007:* 26(4): w463–w473.
[23] RWJF. *Counting Change*.
[24] IOM.*The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary.*
[25] Institute of Medicine (IOM). *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*. Washington, DC: National Academies Press;2012. Available at http://www.iom.edu/Reports/2012/Best-Care-at-Lower-Cost-The-Path-to-Continuously-Learning-Health-Care-in-America.aspx. Last accessed October 2013.
[26] Ebel T, Larsen E, Shah K, et al. *Building New Strengths in the Healthcare Supply Chain*. McKinsey and Company; 2013. Available at McKinsey white paper - building new strenghts in healthcare supply chain VF.pdf. Last accessed October 2013.
[27] Jayadev A, Stiglitz J. Two ideas to increase innovation and reduce pharmaceutical costs and prices.*Health Aff (Millwood)*. 2009;28(1):w165-168.
[28] IOM. *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*.