



September 12, 2019

To: Prevention and Population Health Standing Committee
From: NQF staff
Re: September 18 strategic web meeting

Background

The Prevention and Population Health (PPH) Standing Committee had a robust discussion on the issue of defining value and population health measurement during its strategic webinar on June 27. At the conclusion of the call, NQF staff agreed that the strategic webinar on September 18 would continue the dialogue, which would include definitional issues and, if possible, next steps to develop guiding principles or even criteria to identify those measures that are critical to population health. A copy of the call summary is attached for your reference.

The Committee's call on September 18 will focus on two issues:

1. Definitions for core terms identified by the Committee on the previous call: value, benefit, population health, public health, community health, and quality of life; and
2. Criteria/domains/guiding principles on how performance measures can be categorized in the context of population health measurement and value.

Discussion of Definitions

During the first call, Committee members suggested defining (or using others' definitions) for value, benefit, population health, public health, community health, and quality of life. Presented below are definitions for the Committee to consider. For instances where the literature did not present a prominent definition, NQF has provided a common set of themes/concepts that are related.

The Committee discussed the following two definitions in the greatest detail during the strategic webinar on June 27:

- **Value** is defined as a comparison between benefit versus cost plus harm, regardless of whether the focus is on population versus individual health.
- **Benefit** was identified as a key component to further define. Per the Committee discussion, one approach to defining benefit is that it must contribute to length of life or have impact on the quality of life. Further, the quality of life contribution could be related to specific morbidity or to broader definitions of well-being. There also were different perspectives on and/or quantification that benefit depends on "value to whom?"

We recommend that the Committee adopt its original proposed definition for value. For benefit, we recommend: Benefit in the context of value means the extension of length of life or an impact that improves quality of life (to be discussed further below).

The next set of definitions/attributes were identified from the literature. In many instances, there was more than one prominent definition, yet they shared similar concepts. For each term, the Committee should discuss and reach consensus on a definition (i.e., to adopt or modify an existing definition/list of attributes from the literature.)

Population Health

- Defined by NQF as the health of a population, including the distribution of health outcomes and disparities in the population (*Improving Population Health by Working with Communities: Action Guide 3.0*. 2016)
- Kindig and Stoddart defined population health as the health outcomes of a group of individuals, including the distribution of such outcomes within the group. The field of population health includes health outcomes, patterns of health determinants, and policies and interventions that link these two.¹
- CDC defines population health as an interdisciplinary, customizable approach that allows health departments to connect practice to policy for change to happen locally.²

Community Health

- Defined on one article as a multisector and multidisciplinary collaborative enterprise that uses public health science, evidence-based strategies, and other approaches to engage and work with communities, in a culturally appropriate manner, to optimize the health and quality of life of all persons who live, work, or are otherwise active in a defined community or communities.³
- Other industry-wide uses and definitions of community health⁴:
 - CDC Division of Community Health mission statement – community-level health efforts that help communities prevent disease and promote healthy living through an emphasis on reaching people who experience the greatest burden of death, disability, and suffering from chronic disease.
 - Kaiser Permanente Community Health Initiative – a collaboration with community-based organizations and residents to focus on prevention by supporting policies and environmental changes that promote healthy eating and active living in neighborhoods, schools, and workplaces.
 - Focus areas that collectively help define community health: (1) encompasses a group of individuals (i.e., the community); (2) health as a function of the community's experience and expectations; (3) interventions that create safe and healthful environments and (4) the methods that are used to conceptualize, design, implement, evaluate, and disseminate interventions.

Public Health

- Institute of Medicine (now National Academy of Medicine) report (1988) *The Future of Public Health* defines public health as what society does collectively to assure the conditions for people to be healthy.

Quality of Life (QOL)⁵

- Root definition from World Health Organization (WHO) in 1947 – a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity.
- Common health dimensions often included in defining QOL – physical health, mental health, social health, and functional health.
- Other definitions in literature
 - A state of well-being which is a composite of two components (1) the ability to perform everyday activities which reflects physical psychological and social well-being and (2) patient satisfaction with levels of functioning and the control of disease and/or treatment related symptoms.
 - The satisfaction of an individual's values, goals and needs through the actualization of their abilities or lifestyle.

Mapping of IOM Core Measure Categories to Pop Health Measure Portfolio

Prior to the Committee's most recent webinar, NQF staff had reviewed the 2015 IOM report, *Vital Signs: Core Metrics for Health and Health Care Progress*, and noted the 15 "core metrics" (<https://www.nap.edu/visualizations/vital-signs/>) identified in the report. Similar to the domains in NQF's measurement framework reports, we intended to map the NQF portfolio against these 15 attributes for the Committee's September 18 webinar.

Given the Committee's interest during the June call in identifying guiding principles/criteria in the context of value and population health measurement, we decided against this large undertaking. Instead, we have mapped the IOM areas against the Prevention and Population Health measure portfolio as a first step for Committee discussion on criteria/guiding principles—specifically whether to adopt these areas, what to add or subtract, or whether to take a different approach altogether.

The IOM report identified areas that are important for capturing and assessing population health, but we felt they needed expansion/modification in the performance measure context. Accordingly, we have provided context as to why the measures were mapped as they were (Appendix A) by providing staff rationale for all the domain areas along with the actual IOM definition for these domains.

The table below summarizes the staff rationale on why a measure was assigned to a domain, as well as the IOM report's definitions for each domain. Of note, NQF staff reviewed measure specifications, so in some instances assignment of a relevant IOM domain may not be obvious

from the short title used in the Appendix; measures have been assigned to multiple domains based on this review.

¹ Kindig D, Stoddart G. "What is population health?" *Am J Public Health*. 2003;93(3):380-383.

² Centers for Disease Control and Prevention (CDC). "What is population health?" <https://www.cdc.gov/pophealthtraining/whatis.html>. Last assessed on August 2019.

³ Goodman RA, Bunnell R, Posner SF. What is "community health"? Examining the meaning of an evolving field in public health. *Prev Med*. 2014;67(Suppl 1):S58-S61.

⁴ Goodman RA, Bunnell R, Posner SF. What is "community health"? Examining the meaning of an evolving field in public health. *Prev Med*. 2014;67(Suppl 1):S58-S61.

⁵ Post M. Definitions of quality of life: what has happened and how to move on. *Top Spinal Cord Inj Rehabil*. 2014;20(3):167-180.

Appendix A: IOM Definition and Staff Rationale for Each Domain Area

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Life expectancy	<p>Measure captures elements that can directly affect life expectancy and positively impacts individual's life expectancy. (e.g., nutrition counseling, immunizations, etc.)</p> <p>83% of the measures were mapped to this domain (30 out of 36)</p>	<p>Life expectancy is a validated, readily available, and easily comprehensible measure for a critical health concept, length of life, based on the simple logic that healthier people tend to live longer. Because life expectancy depends on a full range of individual and community influences on health—from cancer to homicide—it provides an inclusive, high level measure for health, broadly defined.</p>
Well-Being	<p>Measure captures elements that can directly affect an individual's well-being and positively impacts individual's overall well-being. (e.g., nutrition counseling, screening and immunizations)</p> <p>100% of the measures were mapped to this domain (36 out of 36)</p>	<p>Life expectancy and death rates from various diseases and injuries provide clear, “bright line” measures of health in a population group, but health and well-being in the population comprise many other components, including illness from chronic or acute diseases, injury, functional capacity, mental health, sense of security, and social networks. As the World Health Organization notes, health is “not merely the absence of disease” (WHO, 1946). The health of an individual has both objective and subjective dimensions. In fact, people's perception of their own health is not just a reliable indication of well-being but often a predictor of utilization of and satisfaction with health care.</p>
Overweight and obesity	<p>Measure addresses conditions affected by weight issues such as obesity and overweight</p> <p>25% of the measures were mapped to this domain (9 out of 36)</p>	<p>Overweight and obesity represent a significant challenge to Americans' health. Their prevalence is a feature of American life with causes and consequences that extend beyond the scope of the health system, including socioeconomic, cultural, political, and lifestyle factors—in particular diet and physical activity, which together constitute leading causes of early death.</p>

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Healthy communities	<p>Measure addresses factors that promote a healthy community through preventive services and education such as screenings and immunization. This domain was also viewed as a common thread for all measures.</p> <p>100% of the measures were mapped to this domain (36 out of 36)</p>	<p>Individual health is a function of a wide range of socioeconomic and community factors, ranging from environmental quality to infrastructure to education and social connections. Thus, the health of all individuals is closely tied to the health of the community in which they live, such that individual actions to improve health can benefit the community, and community actions to improve health can benefit each individual member. Community health includes critical elements of health that fall outside of the care system but have a major impact on care and health outcomes, such as housing, employment, and environment.</p>
Preventive services	<p>Measure directly addresses prevention and preventive services such as immunization, screening, counseling. This domain was viewed as a common thread for majority of the measures.</p> <p>86% of the measures were mapped to this domain (31 out of 36)</p>	<p>Preventive services—immunization, screening, counseling, and chemo prophylaxis—present a valuable opportunity for both improving health and adding value. Based on rigorous evidence standards, the U.S. Preventive Services Task Force recommends a range of services for different groups, from screening for hearing loss for infants to tobacco cessation counseling for current smokers (USPSTF, 2010).</p>
Care access	<p>Measure directly addresses and/or promotes access to care and captures various aspects of care access. This domain was viewed as a common thread for all measures.</p> <p>100% of the measures were mapped to this domain (36 out of 36)</p>	<p>The ability to receive care when needed is a critical precondition for a high-quality health system. Unmet need for health care may occur for a variety of reasons, including lack of or insufficient health insurance, clinician shortages, lack of transportation, cultural and linguistic barriers, and physical limitations. Regardless of the cause for unmet need, the avoidance or lack of needed care has a negative impact on health, which may result in the deferral of treatment until a condition becomes more serious and ultimately in higher costs for both the individual and the health system.</p>

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Patient safety	<p>Measure addresses/promotes various aspects of patient safety by preventing harm to patient. (e.g., emergency department visits, well-child visits, immunizations)</p> <p>52% of the measures were mapped to this domain (19 out of 36)</p>	<p>Avoiding harm is the primary obligation of the health care system, yet despite the steady decline in hospital mortality in the United States, one in every three hospitalized patients may be harmed during their stay, and one in five Medicare patients are rehospitalized within 30 days of admission (IOM, 2012a). These harms often are associated with certain risk factors, such as the use of indwelling medical devices, surgical procedures, injections, contaminations of the care setting, and misuse of antibiotics. Infections acquired in care settings are estimated to have an economic cost in the billions and to contribute to tens of thousands of lives lost each year (HHS, 2014b). Ensuring that patients are safe in all of their interactions with the health care system requires a systematic, coordinated approach to the provision of care services, as well as a culture of care in which safety is a priority.</p>
Evidence-based care	<p>Measure is based on evidence and guidelines with a high level of graded evidence. This domain was viewed as a common thread across all measures, particularly since NQF measures must be evidence-based</p> <p>100% of the measures were mapped to this domain (36 out of 36)</p>	<p>One of the central challenges for the American health system is ensuring that care delivered is based on the best available scientific evidence of appropriateness and effectiveness.</p>

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Care match with patient goals	<p>Measure addresses patient-centered factors such as patient preference and captures patient goals and needs with regards to care delivery. (e.g., preventive care and screening)</p> <p>52% of the measures were mapped to this domain (19 out of 36)</p>	<p>Measuring person-centered care accurately and consistently can enable better understanding and new approaches for ensuring that the health care system responds to the needs and values of patients. Systematically determining patient aims and perspectives ensures that the health care system is focusing on those aspects of care that matter most for patients. In many ways, a focus on patient goals and experience represents a cultural shift in the nation's understanding of health and health care, one necessary to the delivery of truly effective care.</p>
Personal spending burden	<p>Noncompliance with what is being measured affects personal spending burden. For example, not getting immunized for the influenza season increases personal spending burden when a person gets the flu. Therefore, assessment of measure's relevance based on how noncompliance affects patient's personal healthcare spending.</p> <p>36% of the measures were mapped to this domain (13 out of 36)</p>	<p>As noted earlier, the United States spends more on health care than any other country, even after adjusting for the cost of living, yet the health outcomes of a majority of its citizens are far from the best in the world. This mismatch between cost and quality has adverse impacts not only on the American economy but also on the health and economic security of individuals. Care that is too expensive can limit people's access to care, lead people to self-ration or altogether avoid care, or limit people's ability to purchase other goods and services of value to them. Individual spending burden provides an indication of the financial burden imposed by health care on households and, by extension, the limits that health care may place on other areas of consumer spending</p>

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Population spending burden	<p>Noncompliance with what is being measured affects population level spending burden. For example, not getting immunized for the influenza season increases population level spending burden through days missed from work and lost productivity. Therefore, assessment of measure's relevance is based on how noncompliance affects health care spending at the population level.</p> <p>88% of the measures were mapped to this domain (32 out of 36)</p>	<p>In addition to the burden placed on individuals, health care spending consumes a large portion of the nation's gross domestic product, dwarfing the relative investments of other countries in health care. While health care costs have grown more slowly than projected over the past few years, the magnitude of spending on care remains a significant challenge for the U.S. economy and has led to a growing number of initiatives aimed at curbing costs through performance-based pay, accountable care, and other models that challenge the standard approach of payment based on volume of services. The population spending measure recommended by the Committee will generate insights for decision makers not just at the national level but also at the state, local, and institutional levels.</p>
Individual engagement	<p>Measure addresses patient involvement in patient care and promotes patient-centered care by empowering patients to access preventive and screening services.</p> <p>86% of the measures were mapped to this domain (31 out of 36)</p>	<p>People play an active role in their own health, as choices about diet, exercise, lifestyle, and other behaviors have well-known implications for the development of chronic disease and other health consequences. Therefore, it is critical for people to be aware of their options and responsibilities in caring for their own health and that of their families and communities. Individual engagement means that people, patients, and families play an active role not only in their care but also in the range of factors that contribute to their health and the health of others, including environment, community, economy, social well-being, and generally health-oriented community culture. Individuals who are engaged are ready to manage their own health and health care, having the knowledge, skills, and tools needed to maximize their individual and family well-being.</p>

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Community engagement	<p>Measure addresses community involvement in patient care and promoting patient-centered care by making it easier for patients to access preventive and screening services as well as providing them with health education.</p> <p>86% of the measures were mapped to this domain (31 out of 36)</p>	<p>In addition to engagement in health by individuals, a health-oriented community culture, as reflected in community priorities, investments, and initiatives, is important to improving individual and community health and health care. Across the United States, communities have different levels of resources available and utilized to support people's efforts to maintain and improve their individual and family health. For example, some communities may have better access and availability for certain health facilities and services, such as addiction treatment programs or emergency medical facilities. Similarly, social engagement, such as involvement in elections or volunteering, varies both among and within communities.</p>
Addictive behavior^a	<p>Measure addresses addiction and addictive behavior such as screening for BMI or uncontrolled diabetes.</p> <p>11% of the measures were mapped to this domain (4 out of 36)</p>	<p>Addiction and addictive behavior represent a significant and complex challenge for the health system, as well as for communities and families. Approximately 18 percent of American adults smoke, 17 percent of adults binge drink, and an estimated 9 percent of people aged 12 years and older were found to have used an illicit drug within the past month (Agaku et al., 2014; CDC, 2012c; NCHS, 2014). The estimated economic cost of substance abuse and addiction in the United States is \$559 billion per year (NIDA, 2008).</p>

^a Several other addiction-related measures (tobacco, alcohol, pharmaceuticals) reside in the Behavioral Health and Substance Use portfolio (e.g., 2597 Substance Abuse Screening & Intervention Composite)

IOM Domains	Staff Rationale for determining Domain relevance to each measure	IOM Definition of the Domains (verbatim from Vital Signs report)
Unintended pregnancy^b	NQF's population health portfolio does not include measures related to topic area.	Unintended pregnancy presents a significant challenge for both individual and community health. According to a report from the Centers for Disease Control and Prevention's (CDC's) Division of Vital Statistics, it is the most direct available measure of women's ability to choose the number and timing of their pregnancies. As such, it is a measure that aggregates a variety of social, behavioral, cultural, and health factors, particularly the availability and use of both knowledge and tools for family planning.

^b Three contraceptive care measures reside in the Perinatal and Women's Health Committee portfolio: 2902 Contraceptive Care – Postpartum, 2903 Contraceptive Care - Most & Moderately Effective Methods, and 2904 Contraceptive Care - Access to LARC (Long-Acting Reversible Contraception). An additional contraceptive counseling PRO has been submitted for fall 2019 consideration by this Committee.