VIEWPOINT

Measuring *Vital Signs*
An IOM Report on Core Metrics for Health and Health Care Progress

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Two truisms apply to the current state of performance measurement in health care. The first is that if something (eg, a process, an outcome) cannot be measured, it cannot be improved. The second is that it is possible to have too much of a good thing.

The recent enactment of HR 2: Medicare Access and CHIP Reauthorization Act of 2015, the so-called Doc Fix legislation, confirms the broadening societal embrace of the first truism.[1] The new law makes plain that public policy makers are intent on measuring the value of health care services and rewarding clinicians and health care entities that improve that value. Private payers are also shifting rapidly to pay-for-performance models, as illustrated by the work of Catalyst for Payment Reform to develop scorecards, databases, and other value-driven tools on behalf of employers and other health care purchasers.

The budding enthusiasm for performance measurement, however, has begun to create serious problems for public health and for health care. Not only are many measures imperfect, but they are proliferating at an astonishing rate, increasing the burden and blurring the ability to focus on issues most important to better health and health care. Measures of the same phenomenon also vary in specification and application, leading to confusion and inefficiency that make health care more expensive and undermine the very purpose of measurement, namely, to facilitate improvement. Not uncommonly, a health care organization delivering primary care to a typical population is asked to report and collect hundreds of measures aimed at dozens of conditions.

In response to these issues, a new report from the Institute of Medicine (IOM), *Vital Signs: Core Metrics for Health and Health Care Progress*,[2] addresses the major opportunities and current problems in the health care measurement enterprise. The document identifies a set of standardized measures required at national, state, local, and institutional levels and recommends the steps necessary to implement and refine those measures.

Vital Signs was written by the IOM Committee on Core Metrics for Better Health at Lower Cost. The committee's charge was to conduct a study of the current status of measurement of health and health care; identify the measures most reliably reflective of overall health status, care quality, engagement and experience of people, and costs of care for individuals and populations; propose a basic, minimum set of core metrics; and make recommendations on how the core set could be implemented, maintained, and improved and related to more detailed measures tailored to different conditions and purposes.

The committee defined core metrics as a parsimonious set that provides "a quantitative indication of current status on the most important elements in a given field, and that can be used as a standardized and accurate tool for informing, comparing, focusing, monitoring, and reporting change." The committee sought a limited set of measures that are outcomes oriented, reflective of system performance, and meaningful and have utility at multiple levels of the health care system (while recognizing that any particular measure will vary in its utility at different levels).

Applying these criteria, the committee identified 15 measures as the core metrics for better health at lower cost—the US societal vital signs.

- Life expectancy—measure for a validated basic health concept that reflects overall system performance with respect to a wide range of factors influencing health.
- Well-being—measure of self-reported health status, as a general indicator of elements shaping quality of life.
- Overweight and obesity—measured by BMI and largely the product of diet and physical activity patterns, together representing leading sources of preventable early deaths.
- Addictive behavior—measure of dependence on tobacco, alcohol, or other drugs, which, together, impose high social and economic burdens on individuals and their families.
- Unintended pregnancy—measure with generational implications that reflects a combination of behavioral, social, and cultural dynamics.
- Healthy communities—index of a community's profile on health-related social and environmental dimensions, eg, education, housing, income, parks, and air and water quality.
- Preventive services—index of receipt of immunization, screening, counseling, and chemoprophylaxis services recommended by the US Preventive Services Task Force.
- Care access—measure of ability of individuals to receive the care they need in a timely fashion.
- Patient safety—index of system priority and performance in avoidance of harm to patients in the course of care.
- Evidence-based care—index of system priority and performance in the delivery of care best supported by scientific evidence as to appropriateness and effectiveness.
- Care match with patient goals—measure of the extent to which patient and family goals have been ascertained, discussed, and embedded in the care process.
- Personal spending burden—measure of personal expenditures for health care relative to income.

- Population spending burden—measure of aggregate health care expenditures for a population relative to that population's income.
- Individual engagement—index of personal involvement in health-related behaviors, self-care, caregiving, and social activities that reflect a personal health orientation.
- Community engagement—index of community priority and relative social and economic initiatives, investments, and opportunities that reflect a health-oriented culture.

In developing these measures, the committee reached a number of important conclusions. The first is that measurement is not an end but rather is a means to accomplishing health goals. Therefore, the committee's first task was to specify those goals, and it embraced the ends laid out in its charge: to improve the overall health status of people in the United States, to improve their care, to constrain costs, and to promote engagement of individuals and communities in their care. All the recommended measures aim to capture the attainment of one or more of these goals.

Second, because goal-setting in health care is a collective, societal endeavor, the process of defining core metrics that reflect those goals must be broad and inclusive. The committee finds the measures in *Vital Signs* compelling and believes they provide excellent guidance to future measurement development efforts. But the committee also recognizes that stakeholders must collaborate at multiple levels of the health care system to consider and embrace, or redefine, goals and corresponding measures. This process of consensus building will be critical—as important as the technical specifications—and must be guided with a strong, benevolent coordinating hand. Otherwise, it will merely replicate the chaotic outpouring of measures that currently is occurring. The committee decided that the federal secretary of Health and Human Services is best positioned to fulfill this coordinating role. The secretary could start this process by aligning the goals of the National Quality Strategy[3] and Healthy People 2020[4] with the goals laid out in this report and by embracing a parsimonious set of core metrics that capture the attainment of these ends. In some senses, therefore, this report should be seen as the beginning, not the end, of the journey toward a widely accepted set of core metrics for better health at lower cost.

Third, the committee discovered that, despite the recent proliferation of measures, important gaps remain in the ability to track the attainment of critical goals. Valid and widely supported measures of individual and community engagement are not yet available. As another example, the committee concluded that in a number of measurement areas, such as patient safety, evidence-based care, and healthy communities, the measurement enterprise would benefit from validated composite measures that capture multiple dimensions of the attribute of interest. Such composite measures would simplify the reporting and tracking of performance. In many cases, such composite indicators remain to be developed.

Fourth, the report does not establish a final, finely specified, parsimonious set of core metrics that will immediately solve all the nation's measurement problems. The committee did not have the time, resources, or expertise to specify metrics or develop composite measures for which consensus did not already exist on those indicators. Also, even though the committee consulted widely with stakeholders, both publicly and privately, it did not represent all of the stakeholders whose views should influence, and who should embrace, a final set of core metrics. Furthermore, the committee increasingly came to believe that the core metrics set may need to vary slightly (although with forethought and coordination) at different levels of the health care system, depending on the responsibilities and capabilities of stakeholders at those levels. Thus, the core measure set used by state public health agencies for accountability would likely differ from the core measure set used by an independent group of 5 cardiologists practicing in a suburban community. The committee believes that all those sets should be aligned in demonstrating how each stakeholder is contributing toward a set of overarching goals such as those elaborated in this report.

Implementation of the committee's vision for core measures will face challenges. Consensus development is an extraordinary difficult task in the decentralized US health care system. Many stakeholders are invested in current measures and will not readily agree to modify or abandon them. Some will be disappointed that this report has not provided a fully specific menu of measures that meet all needs in all situations, even though such a menu would likely have encountered fierce criticism from parties not consulted in its development. Nevertheless, the committee believes these challenges can be overcome.

The nation is at a turning point in the history of US health and health care progress. Across partisan divisions, regions, institutions, and professions, there seems to be increasing agreement that ever more resources cannot be committed to health care without accounting for what patients and the public get in return and without being accountable for improving the health system's performance. Measurement of the performance of the US health system in achieving shared goals lies at the heart of this new commitment to accountability and improvement. *Vital Signs* has the potential to turn the aspiration for better health and health care into a reality.

ARTICLE INFORMATION

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