For the Public’s Health
The Role of Measurement in Action and Accountability

Despite having the costliest medical care delivery system in the world, Americans are not particularly healthy. Recent international comparisons show that life expectancy in the United States ranks 49th among all nations, and infant mortality rates are higher in the United States than in many far less affluent nations. While these statistics are alarming, the bigger problem is that we do not know how to reverse this trend. Our lack of knowledge is due in large part to significant inadequacies in the system for gathering, analyzing, and communicating health information about the population. Current data collection strategies focus mostly on clinical care and often neglect the underlying social, economic, and environmental factors that contribute to poor health in our country. Further, the nation has not developed reliable approaches to measuring the effectiveness of public health agencies and other organizations in improving the health of Americans.

To inform the public health community and all other sectors that contribute to population health, the Robert Wood Johnson Foundation commissioned the Institute of Medicine (IOM) to examine three major topics that influence the health of the public—measurement, laws, and funding. The first of three corresponding reports, For the Public’s Health: The Role of Measurement in Action and Accountability, reviews current approaches for measuring the health of individuals and communities and creates a roadmap for future development. The report’s authoring committee finds that the United States lacks both a cohesive national strategy and the appropriate measurement tools to track and respond to the social and environmental factors that affect health outcomes. To improve health in the United States, the committee suggests changes in the processes, tools, and approaches used to gather infor-
information about health outcomes and their determinants. In addition, the committee describes approaches to measurement that can assess and enhance accountability on the part of governmental and other entities that bear responsibility for population health.

**Measuring Health**

Achieving gains in the nation’s health will require a robust and useful set of indicators that are made available both nationally and locally and can promote impactful strategies and actions by the U.S. health system. The report’s authoring committee defines the system as communities and their organizations, the clinical care delivery system, employers and businesses, the media, and other public and private stakeholders whose policies and actions affect the longevity and quality of life of Americans.

Improved data collection and measurement can have a large impact on the health of local communities. Government executives and policy makers often lack sufficient information to guide action that will have the greatest effect on their constituents. The population health statistics and information enterprise, which compiles, generates, analyzes, and communicates pertinent information, needs greater coordination, integration, coherence, and enhanced capabilities at all levels if it is to provide comprehensive and useful data. The committee prioritizes the revamping of the National Center for Health Statistics (NCHS)—the nation’s lead health statistics agency in the U.S. Department of Health and Human Services (HHS). A stronger, better resourced NCHS can support coordination and development of capacities in the population health statistics and information system by expanding research and supporting the development or refining of health indicators that further understanding and avenues for action. As an example, there is little consensus about the best indicators to measure the “walkability,” or exercise-promoting characteristics, of a community, but coordinated research and dialogue on this and many other domains will help identify optimal indicators and strengthen the underlying science.

**Assessing the Factors that Influence Health**

While most health professionals recognize the health effects of social and environmental factors—for example, the ability of residents in a community to access healthy foods or the presence of sidewalks and parks in a neighborhood—many of these factors are not routinely measured, so trends or disparities may go unnoticed. Today, health outcomes are listed under categories such as “infant mortality” or “myocardial infarction,” but less obvious are the missed opportunities and environmental failures—for example, lack of transportation or availability of healthy food—that could have prevented or improved these results. The committee recommends that HHS develop and implement a standardized, core set of health outcome indicators and indicators of community health that can reflect national, state, and local priorities and enable an “apples to apples” comparison of jurisdictions. In addition, HHS should adopt a single, broad measuring tool for population health that could serve as the equivalent of the Gross Domestic Product for the health sector. This type of measure could be used to calculate Health-Adjusted Life Expectancy and could be employed to track trends, mark progress, and encapsulate an overall picture of the health of communities and of the nation, improving the ability of decision makers to monitor health status, make forecasts, and set priorities.

The committee also recommends that HHS begin reporting annually the social and environmental factors that influence the health of the population as a means of helping the public better understand the factors that shape their well-
being. A report of this kind would help people recognize major forces that lie outside of the clinical care delivery system that can promote or undermine health, from trends in access to food and educational attainment to economic and labor policies. Such a report could also galvanize action and inform consideration of health in all policy making.

**Integrating the Evidence and Sharing Knowledge**

Greater collaboration between public health agencies and medical care systems is needed to facilitate the use of clinical data to inform relevant population health priorities as well as provide information for increasing the effectiveness and efficiency of the clinical care system. The committee recommends that state and local public health agencies ensure that the public is more aware of the quality and safety of select clinical interventions in their states and communities. Local performance reports describing the overuse, underuse, and misuse of these interventions, including preventive and diagnostic tests, procedures, and treatments, should be made available to the public to provide a sense of the effectiveness of health care in a community.

Simply collecting more or better information will not improve health if that information is not shared with all potential users. Data sources that have not traditionally been considered health-related, such as the availability of public transportation and agricultural policies, also could be incorporated in data sets and reports that inform stakeholders. By granting communities access to this type of health data, public health practitioners and clinical care providers can better target their interventions in those communities. For example, if community leaders learn that their community has a high rate of childhood obesity, then they can assess whether children in the community are getting adequate nutrition and exercise in schools.

**A Measurement Framework for Accountability**

The absence of a robust and available set of health indicators makes it difficult to hold the health system accountable for improving population health. This problem is worsened because the roles and responsibilities of different parts of the health system—from governmental public health agencies to schools and hospitals, from transportation networks to local zoning departments, from community-based organizations to local and national businesses—are not clear. The IOM report describes and makes recommendations for implementing a measurement framework that provides the clear accountability needed to enable communities and policy makers to understand, monitor, and improve the contributions of various partners in the health system.
Conclusion

Improving health data and measurement is a necessary—though not sufficient—ingredient in building a healthier population, environment, and economy. But these data must be integrated, assembled, and communicated to the public, policy makers, and other stakeholders in the health system. An integrated and coordinated system in which all parties have access to timely and meaningful data can help foster individual and community awareness and action. The Affordable Care Act of 2010 was intended to transform the clinical care system, but to create broader improvements in population health, underlying social and environmental factors will need to be transformed as well. To make this vision a reality, governmental and private sector partners at all levels—including the clinical care delivery system, nonprofit and business organizations, schools, communities, and individuals—must coordinate and integrate their efforts at measurement.