Evaluating Obesity Prevention Efforts
A Plan for Measuring Progress

Obesity poses one of the greatest public health challenges of the 21st century, creating serious health, economic, and social consequences for individuals and society. Despite acceleration in efforts to characterize, comprehend, and act on this problem, including implementation of preventive interventions, further understanding is needed on the progress and effectiveness of these interventions.

With funding from the Michael & Susan Dell Foundation, the Institute of Medicine (IOM) formed a committee to develop a concise and actionable plan for measuring the nation’s progress in obesity prevention efforts—specifically, the success of policy and environmental strategies recommended in the 2012 IOM report Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. The committee also developed guidelines for local communities to conduct evaluations.

The resulting report, Evaluating Obesity Prevention Efforts: A Plan for Measuring Progress, offers a framework that will provide guidance for systematic and routine planning, implementation, and evaluation of the advancement of obesity prevention efforts. This framework is for specific use with the goals and strategies from the 2012 report and can be used to assess the progress made in every community and throughout the country, with the ultimate goal of reducing the obesity epidemic. It offers potentially valuable guidance in improving the quality and effect of the actions being implemented, as will investing in further research.
Developing National and Community Obesity Evaluation Plans

While it is well established that obesity is a health epidemic in the United States and preventive interventions are in place, the nation still lags behind international efforts in providing the leadership, guidance, support, and necessary infrastructure to support evaluation efforts. The IOM committee recommends that centralized leadership is necessary to coordinate the resources needed for systematic and routine evaluation. In order for all sectors and levels of society to engage in effective obesity prevention efforts, evaluation plans should be adopted at both the national and community level to evaluate progress of the recommended goals and strategies in the 2012 report.

An obesity evaluation task force or other entity should oversee and implement a National Obesity Evaluation Plan with coordination among other federal, state, and local public- and private-sector groups. The committee recommends a national plan that provides a framework for planning, implementing, and evaluating the results of obesity prevention-related policies and programs, including aspects of data collection and infrastructure systems, capacity for conducting evaluations, and feedback mechanisms for the data collected. This national plan can be a model for state and multi-state regional evaluations, providing comparable data that can be used as benchmarks for progress over time or to compare to other state, regional, or national data.

While a national plan can show changes in general trends over time, state and community-level plans provide an additional level of detail and local context-specific information, offering the potential to identify relative degrees and types of success and to better deliver first-time status assessments along with overall trends in a community. Therefore, the report outlines a Community Obesity Evaluation Plan that identifies key components of implementing evaluations at the community level.

This plan includes four sets of activities: community health assessment, surveillance, community program and intervention monitoring, and summative evaluation. “Assessment” means providing a first-time status of obesity within a community—this includes looking at the number and distribution of obese people within a community and at efforts to eliminate the problem—and “surveillance” refers to the continuous assessment of progress over time. “Monitoring” means tracking the implementation of these interventions, and “summative evaluation” seeks to detect changes in output, outcomes, and effects associated with interventions and then attribute them to those interventions. Together, these activities can provide data on the state of obesity and related conditions in the community and offer opportunities to establish and share what works.

The national and community plans are interdependent and have the potential to provide essential support and feedback to each other. Successful implementation of the community plan should be supported by components of the national plan, using common “indicators” of obesity—which are measurements such as the proportion of schools that require daily physical education for all students; sources of data; resources; and methodologies that are coordinated, developed, and disseminated through leadership at the national level.

Overall, these recommended evaluation plans will not be fully realized without organizational changes and support across multiple federal, state, and local governmental agencies and departments in collaboration with nonfederal partners who have a stake in obesity prevention-related activities.

Improving Data Collection and Creating Indicators of Progress

The recommendations in the 2012 report include environmental and policy-related actions as well as system-wide changes necessary for obesity pre-
vention. After looking at the current approaches for collecting both national and community-level data on these prevention efforts, the committee finds that current approaches do not adequately track these interventions’ effectiveness. This is primarily because existing practices focus on calculating individual behaviors, energy expenditure and intake, and overweight and obesity without including more policy, environmental, and systems changes, especially at the community or population level. Compounding this problem is the absence of consensus among users of evaluation data and conclusions and evaluators on a set of core indicators for evaluation.

This report identifies 83 indicators that can be considered by evaluators and that are best aligned with goals and strategies included in the 2012 report. This list is not exhaustive but is intended to illustrate a range of indicators that could be considered based on available and ongoing data sources. It is divided into goal-area and strategy indicators—which specifically refer to the goal areas and individual strategies in the 2012 report—as well as overarching indicators, which focus on obesity, overweight, and weight status for evaluating the combined effect of the full system of the goals and strategies outlined in the 2012 report.

The committee finds that all federal agencies and state and local health departments responsible for collecting data relevant to obesity prevention efforts should use the recommended indicators as a guide to identify, coordinate, and maximize current efforts for ongoing collection of recommended indicators. Employing these indicators to measure and compare social and policy determinants of obesity and health will provide better, more informed guidance for future action.

The report also recommends that relevant federal agencies—in collaboration with non-federal partners such as state and local health departments, nongovernmental organizations, and professional organizations—standardize data collection and analysis, including common indicators, measures, methods, and outcomes. Evaluation systems also should include a dissemination mechanism that facilitates wide access to the information collected.

**Increasing Workforce Capacity and Improving Health Equity**

Other efforts to improve infrastructure should focus on increasing the capacity of a diverse and interdisciplinary workforce engaged in conducting the assessments, surveillance, monitoring, and summative evaluation activities. The report recommends that the Centers for Disease Control and Prevention, National Institutes of Health, U.S. Department of Agriculture through the National Collaborative on Child Obesity Research, and various nongovernmental and professional organizations build on their existing evaluation efforts, providing training and developing mechanisms for offering technical assistance.

In addition, there is a growing recognition of the disparities in health equity—particularly
Concerning efforts to reduce obesity—between segments of the population that are more affluent and more educated as compared with those that are poorer and less educated. These disadvantaged populations may be ethnic or racial minorities and may be exposed to varied living and working conditions. The committee recommends that the Department of Health and Human Services, in collaboration with nonfederal partners, work to improve health equity through additional evaluation that engages participants and is culturally relevant; standardized collection, analysis, and reporting of data; and increased accessibility of tools and methods for measuring social determinants that put certain populations at elevated risk for obesity.

Conclusion

The solution to the obesity crisis depends on finding what is working to affect the causes of obesity. The recommendations made by the IOM committee focus on efforts to increase the likelihood that actions taken to prevent obesity will be evaluated, that their progress in accelerating the prevention of obesity will be monitored, and that the most promising practices will be widely disseminated. Flexible and responsive evaluation plans at the national, state, and community level are central to providing informed, improved guidance.

Even modest improvements in evaluation will provide clarity and refined direction to this effort, helping legislators to amend or change policies, advocates to better support their efforts, and administrators to steward resources and programs effectively.