An Integrated Framework for Assessing the Value of Community-Based Prevention

Over the last century, the major causes of disease and death among Americans have changed, shifting from predominantly communicable diseases spread by germs to chronic ailments. This shift has been accompanied by a deeper understanding about what keeps people healthy or leaves them vulnerable to becoming ill. To get at the heart of the challenges to living a healthy life, we must increasingly emphasize factors that affect today’s causes of morbidity and mortality.

Despite their importance to preventing illness, determining the value of community-based interventions has proven difficult. Preventing illness requires immediate investments with benefits that might not be realized for many years. Another complicating factor: Some people would remain healthy even in the absence of an intervention, but share its cost.

In its new study, An Integrated Framework for Assessing the Value of Community-Based Prevention, an Institute of Medicine (IOM) committee proposes a framework to assess the value of community-based, non-clinical prevention policies and wellness strategies. Sponsored by the California Endowment, the de Beaumont Foundation, the Robert Wood Johnson Foundation, and the W.K. Kellogg Foundation, the report aims to enhance intelligent decision making about which prevention activities and interventions are worthwhile.

Essential Framework Elements

For the purposes of its report, the IOM committee defines community-based prevention interventions as focused on populations with the aim of preventing disease from occurring, increasing behaviors that improve health and
well-being and—when disease does occur—slowing or stopping its progress, reducing or eliminating negative consequences, and decreasing disparities that result in inequitable distribution of health. In its report, the committee concludes that a comprehensive framework for valuing community-based prevention programs and policies should meet three major criteria.

First, the framework should account for benefits and harms in physical and mental health, community well-being, and community process. The physical and mental health domain includes reductions in the incidence and prevalence of disease, declines in mortality, and increases in health-related quality of life. The community well-being domain includes social norms, how people relate to each other and their surroundings, and their willingness to invest in themselves and the people around them. The community process domain encompasses elements that influence community participation in decision making, such as civic engagement, development of local leaders, social support, and social networks.

Second, the framework should consider the resources used and compare the benefits and harms associated with those resources. To effectively compare interventions, it is essential to quantify the magnitude of benefits in relation to the associated cost for each intervention. Third, the framework must take into account differences among communities that can affect the link between interventions and outcomes.

Because none of the eight existing frameworks that were analyzed met all of these criteria, the IOM committee proposes a new framework to assess the value of community-based prevention interventions. (See Figure.)

**Taking a Comprehensive View**

Selecting one community-based prevention policy or program over another can be difficult, and this challenge can be further complicated by a large menu of intervention options with a dizzying array of desired outcomes. The committee

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**FIGURE: Framework for Assessing the Value of Community-Based Prevention Interventions**
recommends that decision makers weigh the benefits and harms to health, community well-being, and community process as they assign value to specific interventions.

While changes to population health can be documented by using quality-adjusted life years or health-adjusted life expectancy, well-defined data sources for valuing community well-being and community processes still need to be developed. For that reason, the committee recommends that the Centers for Disease Control and Prevention create an expanded inventory of data sources and needs for community-based prevention and, after identifying data gaps, develop sources of information to fill those gaps.

In addition, public and private sponsors, including the National Prevention, Health Promotion, and Public Health Council, should support research that develops a single metric for community well-being, a single metric for community processes, and a single metric for combining the community well-being and community process indicators with health to create the single indicator of community benefit. One advantage of this approach is to facilitate expressing the value of community benefits per dollar spent. Because prevention can save money that otherwise would be spent treating illness, the committee notes, it is important to assess changes that are expected to occur as a result of the intervention.

The Value of Transparency

What is important to one community may not be important to a different community. The value of an intervention depends on the community’s perspectives, beliefs, and priorities. The value of an intervention also hinges on how, where, and how effectively it is carried out.

In addition, the ultimate goal of the intervention has an effect on the perceived value of that intervention. A community-based prevention action may improve the overall health of a community, for example, but may achieve more strikingly positive results among citizens with a certain income level or occupation, exacerbating health disparities. If achieving health equity is at odds with improving overall community health, priorities will have to be determined.

Decision makers should consult with the community and other stakeholders to ensure that the value of community-based prevention policies and wellness strategies reflect their preferences. Even if the appropriate decision makers are involved, they must be sure to make decisions in the right way in order to gain legitimacy. The committee’s framework emphasizes the importance of transparency. Open and transparent assessments of the value of a given intervention can enhance its legitimacy among community members.

To ensure transparency, the committee recommends that analysts make public the evidence used to value a prevention action and provide estimates of the uncertainty of their results, and it counsels decision makers to make their rationales for decisions public.
Conclusion

The committee’s framework is just the first step. Additional efforts will be needed to build consensus on the importance of its key outcomes—health, community well-being, and community process—in community-based prevention. Though much remains to be learned, the framework represents a valuable step toward realizing the elusive goal of appropriately and comprehensively valuing community-based prevention.

This framework has the potential to be used in many ways, years down the road: it might be formally incorporated into policy making; funders might require its use in impact assessments that accompany legislative or grant proposals; or agencies could be required to use the framework to evaluate their programs’ output, strengthening the evidence base. As a next step, however, communities and decision makers should begin to use and refine the framework, strengthening its value today and into the future.