

Evidence-Based Public Health Benefits Communities



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What is evidence-based public health (EBPH), and how can it inform community benefit? Evidence-based public health has been defined as the “development, implementation and evaluation of effective programs and policies in public health through application of principles of scientific reasoning, including systematic uses of data and information systems, and appropriate use of behavioral science theory and program planning models.”¹ Like evidence-based medicine (EBM), EBPH seeks to use the best available evidence to guide the selection of interventions. And despite what some may think when they hear the term “public health,” its definition and scope are in keeping with health care’s understanding of “community health.” Public health seeks to improve the health of the population through the use of the five disciplines of behavioral science, biostatistics, environmental health, epidemiology, and health management and policy.

With increased attention to community benefit being paid at the federal and state levels, it becomes all the more imperative that decisions about institutional resource allocation affecting community priorities be based on data. The initial decision to undertake a community-oriented activity, as well as the subsequent continuation, must be justified to boards, physicians, patients and community leaders using solid, objective evidence. EBPH provides a framework for a health care organization to use in assessing community-oriented, population-based activities.

For those accustomed to using EBM, it is important to understand the similarities and differences between EBM and EBPH. The differences relate to the intended audience, the interventions, the people responsible for the implementation, and the types of evidence used. Consider physical activity. Within an EBM framework, the promotion of physical activity would probably be targeted at a specific group of patients, such as middle-aged individuals with one to three cardiac risk factors. The group is defined by easily quantifiable health factors and the intervention is initiated, and often administered, on an individual basis with a physician or nurse as the typical instigator. The interventions considered might be initiated within a physician’s practice: discussion with the patient of the need to exercise, referral to an exercise program, etc.

Selection among these interventions would depend upon the available scientific evidence as well as various location-specific feasibility factors. The scientific evidence would be based on randomized controlled trials of interventions to promote physical activity. Patients would be randomly assigned to different groups, such as a group that was advised by their physician to exercise more and a group that received a health club membership and attended weekly support group meetings. Based on well-defined scientific criteria, differences in observed health outcomes would be measured and compared to determine the most effective intervention. An economic

MORE ABOUT THIS NEW COLUMN

An integral part of the Catholic health care mission is to improve the health of communities. It is for this reason that *Health Progress* started this new column on evidence-based public health. Many readers will already be familiar with the beneficial outcomes of evidence-based medicine, but may not be aware that this approach to public health can bring equally positive results. Future issues of *Health Progress* will have columns that address specific public health areas that can benefit from an evidence-based approach.

Please share your experience with, or questions about, evidence-based public health via e-mail to hpeditor@chausa.org.

evaluation might be conducted as well to determine which intervention is the most cost-effective.

In an EBPH framework, the promotion of physical activity would be undertaken at the community level. In fact, physical activity might have been selected as the area to work on by consultation and engagement with the community. The driving force might be the health educator, the mission leader, the community benefit representative, or the case management department working with a major managed care company to reduce enrollee risk. Key community leaders and stakeholders may be asked to determine the most pressing health needs within the community as well as the areas where there is the most room for improvement. Though the aim of the promotion of physical activity may be to reach those most in need of exercise, the targeted groups are usually defined by some non-health characteristic, such as membership in the senior membership program or residence within a certain geographic area served by an outreach site. The intervention itself will be at the community level. For physical activity, interventions include the construction of walking trails, providing exercise classes at the local community center, media campaigns, etc.

To choose among these interventions, the scientific literature should be used. However, the underlying science is different from that of EBM. Rarely are randomized controlled trials available — consider the expense and logistics of randomly assigning persons to live near or far from a walking trail. In addition, the effects of the intervention are often complex and long-term. Further, not all members of the community will avail themselves of the intervention, and there will be migration into and out of the community, all making it difficult to determine precisely the effects of the intervention. Yet, despite these obstacles, there is information available on the relative effectiveness of various public health interventions. In fact, in the area of physical activity *The Community Guide*²

provides information on the effectiveness of informational, behavioral and policy approaches to promote physical activity. Economic evaluations to compare the relative cost-effectiveness of the different approaches are also provided.

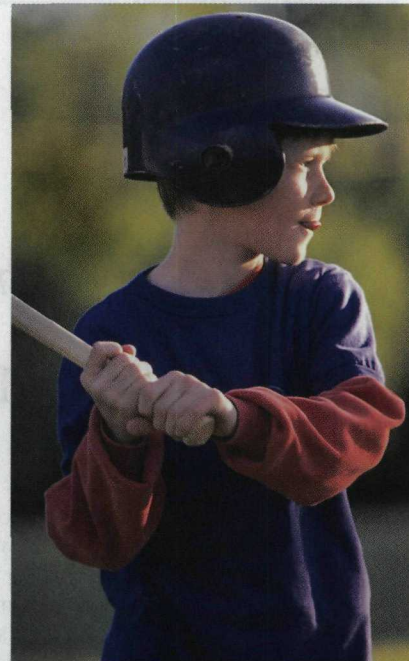
Community benefit challenges health care organizations to move outside their walls and broaden their perspective. CHA has long taken the position that the underlying purpose of community benefit goes beyond providing charity care or covering bad debt for individuals. Rather, its purpose is to improve the health of the entire population. EBPH provides a framework for community benefit leaders to define a problem objectively, develop an action plan based on data, find out what is known about the problem and proposed solutions, evaluate the program, and come full circle to modify the action plan going forward. Evidence-based public health is an approach that facilitates decision-making by administrators, policymakers, governing bodies, and others to ensure that resources are being used in a way that the health of the community can be not only improved, but measured as a guide for future improvements. The sooner community benefit programs move toward an evidence-based approach, the easier we will find it to deal rationally with the new and subsequent reporting requirements and, even more important, to demonstrate that we are using scarce health care resources as wisely and effectively as possible. ■

NOTES

1. RC Brownson, JG Gurney, G Land, "Evidence-based decision making in public health," *Journal of Public Health Management and Practice* 5 (1999): 86-97.
2. "The Community Guide — Physical Activity," www.thecommunityguide.org/pa/default.htm.



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