Editorial Column

Community Health Improvement Approaches: Accounting for the Relative Lack of Impact

The articles in this issue speak to the broad field of health services research. They range from the opening article, which evaluates the impact of community health improvement interventions, to the concluding article, which identifies a more restrictive set of criteria for determining psychiatric emergencies. In between, readers will learn about the effect of capitated and resource-based individual physician payment on costs of care; the use of home care as the most cost-effective post-hospital treatment modality for selected groups of patients; the cost of workplace-related physical assaults and the identification of subgroups for targeting prevention efforts; the use of randomized clinical trials in continuous quality improvement research; and the development of new and creative measures for determining the "managedness" and covered benefits of health plans. Given the limited space available, we choose to highlight the opening study, by Wagner, Wickizer, Cheadle, et al., which represents the first to be published in our section on "Community Health Improvement Research," supported by a grant from the W. K. Kellogg Foundation.

Using a randomized design together with matched controls in four communities, Wagner et al. find little evidence that positive changes in health outcomes result from targeted interventions. Their results are consistent with other recent evaluations of community health improvement initiatives (cf. Luepker, Murray, Jacobs, et al. 1994; Carleton, Lasater, Assaf, et al. 1995; Green and Kreuter 1993; and Susser 1995). Why is this? Is the community health coalition approach to health improvement simply an ineffective model for addressing difficult community health problems?

First, Wagner and colleagues note the usual "suspects" for lack of results, namely, (1) an insufficient period of time to observe results—in this case, four years; (2) lack of statistical power; and (3) measurement error

associated with self-reported behaviors. But it is reasonable to expect that some positive changes might have occurred by the end of the fourth year in some of the targeted health behaviors, for example, teenage pregnancy and injury prevention. As for level of statistical power, the authors note that the differences between the experimental and control communities were both positive and negative suggesting that they did not miss "small, but unintended effects." Measurement error did not appear to differ between the experimental and control communities, so this alone cannot account for lack of differences. A fourth possibility, however, might be considered: that the 11 control communities—the original applicants—may have gone ahead anyway to implement various initiatives designed to address the problems of interest even though they did not receive funding from the Henry J. Kaiser Family Foundation. It is important to recognize that one is dealing with a highly motivated self-selected group of applicants who, despite the lack of funding or technical assistance provided by the Foundation, nonetheless might have obtained other sources of support for their efforts.

The above aside, the authors draw on their own experience and that of others (cf. Green and Kreuter 1993; McKinley 1996; Murray 1995; and Dusenbury and Falco 1995) to suggest three major underlying "hypotheses" for the lack of results. First, they suggest that the interventions were too weak to affect individual behavior. Second, they suggest that the interventions were too limited to reach broad segments of the population at risk—the intervention was "underexposed." Third, they suggest that some specific intervention components, such as parenting classes, are relatively untested interventions to be used as part of an overall strategy. The net conclusion appears to be that stronger, bigger, better interventions are needed.

We suggest two additional considerations: (1) the need for more refined "theories of action" (Patton 1978) regarding how community health interventions ought to improve outcomes for a specific problem or condition, and (2) the need for mid-level theories and measurement of the organizational behavior of coalitions to obtain a fuller understanding of the implementation issues involved.

The Kaiser Family Foundation Community Health Promotion Grants Program was based on a "trickle-down" macro theory of action. The logic model of cause and effect might be diagrammed as follows:

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Activated community \longrightarrow (produces) interventions with broad population exposure \longrightarrow (leading to) changes in community norms and environment \longrightarrow (resulting in) changes in individual behavior.
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This model was assumed to apply "across the board" to five different conditions: substance abuse, teenage pregnancy, cancer care, cardiovascular health, and senior-related injuries. We suggest that an additional reason for lack of impact may have been the use of such a broad global model. Approaches for improving community health may need to be more contingent on and "tailored" to the specific problem addressed. For example, one might even begin with the assumption that each of the five conditions has a different logic model or causal path. For example, some of the conditions, such as cardiovascular disease, cancer, and, to a lesser extent, substance abuse, have strong biological and genetic components relative to teenage pregnancy or, obviously, household injuries. These conditions are also associated with different age groups and differ in the extent to which the problem is under the influence of the individual versus the external environment. Even though it is efficient, parsimonious, and elegant to construct large-scale, overarching frameworks or models on which to base and evaluate community health improvement initiatives, the idiosyncrasies, nuances, and complexities of the problems addressed simply appear to elude or defy such "logical" models.

In particular, these approaches seldom take into account differences in the severity or difficulty of dealing with the problems addressed. For example, dealing with substance abuse may be a problem inherently more difficult than that of increasing immunization rates for school-age children. Similarly, changing longstanding dietary habits of adults prone to coronary artery disease may be more difficult than getting senior citizens to install grab bars. Community health improvement interventions and evaluations might be well served to emulate medical care interventions that increasingly risk-adjust for differences in patient severity of illness-particularly in observational studies but also in randomized trials—by first stratifying or blocking on stages of illness severity. The recommendation is that greater attention should be given to understanding the specific nature of a particular health problem or condition being addressed-its etiology, the extent to which it is biomedically/genetically determined versus environmentally determined, the extent to which the behaviors are under the control of the individual versus being influenced by external factors, and so on-before designing a specific conceptual approach to an intervention or series of interventions. This is particularly the case when one is attempting to address a number of different problems within the context of an overall community health improvement approach.

Of potentially greater significance, however, is that most community health improvement initiatives and associated evaluations have failed to adequately recognize the importance of the governance and management functions of community health coalitions. There is little or no analysis of the participating organizations as instruments of collective action for expressing and implementing the will of those involved. For example, in the Kaiser Foundation Grants Program, what were the underlying assumptions of the community coalitions' role in regard to community activation, designing broad-based interventions to influence the population, changing community norms and the environment, and influencing individual behavior? There does not appear to be an organizational or managerial "theory of action" that accompanies the overall program design. In fact, the only mention made in the current article about the coalitions themselves is that members averaged six hours a month of participation and that some coalitions had prior working relationships with each other and some did not. We do not even know what percentage of the community informants were actually involved as members of the coalition itself.

Thus, our second recommendation for those undertaking community health improvement initiatives is to pay more explicit attention to the organizational characteristics and processes of the coalitions charged with implementing and overseeing the interventions. These entities typically represent complex, inter-organizational networks that are facing challenging issues of both governance and management (Alexander, Comfort, and Weiner 1997; Hageman, Zuckerman, Weiner, et al. 1998; Mitchell and Shortell 2000). As governing entities, they not only provide direct oversight and accountability but they must position themselves relative to the larger sociopolitical and economic environment of the community to obtain needed resources. In their managerial role they must establish mechanisms for implementing the intervention's plan of action including the constructive management of conflict among the individual parties. In both roles they face the challenge of maintaining individual membership interest by demonstrating how the coalition can meet the individual organization's needs while still addressing the shared objectives of the coalition itself (Mitchell and Shortell 2000). All of this requires that program designers and evaluators take into account issues of coalition size, composition, range of problems addressed, services offered, centralization of decision making, coordination and integration, culture, information systems required for accountability, the political and economic influence of the coalition within the community, and related factors. Assessment of the quality of coalition governance and management is likely to be particularly important in evaluating multifaceted interventions designed to address multiple problems, because the only thing common in such initiatives is that they are all under the responsibility of the community-wide coalition. Before program planners, policymakers, evaluators, and funding agencies conclude that initiatives were too weak, too limited, or too untested, they should also examine the capability of community coalitions, as interorganizational networks, to govern and manage the initiatives.

Public-private partnerships designed to improve community health are likely to continue to receive considerable attention. We suggest that the development of more targeted problem-specific theories of action and more attention paid to the governance and management of the implementing organizations will provide a greater understanding of ways to maximize the impact of such efforts.

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REFERENCES

- Alexander, J. A., M. E. Comfort, and B. J. Weiner. 1997. "Governance in Public-Private Community Health Partnerships: A Survey of the Community Care Network Demonstration Sites." University of Michigan, School of Public Health, Ann Arbor.
- Carleton, R. A., T. M. Lasater, A. R. Assaf, H. A. Feldman, and S. McKinlay. 1995.
 "The Pawtucket Heart Health Program: Community Changes in Cardiovascular Risk Factors and Projected Disease Risk." American Journal of Public Health 85 (6): 777-85.
- Dusenbury, L., and M. Falco. 1995. "Eleven Components of Effective Drug Abuse Prevention Curricula." *Journal of School Health* 65 (10): 420–25.
- Green, L., and M. W. Kreuter. 1993. "Are Community Organizations and Health Promotion One Process or Two?" American Journal of Health Promotion 7 (1): 209.
- Hageman, W. M., H. S. Zuckerman, B. J. Weiner, J. A. Alexander, and R. Bogue. 1998. "Navigating the Rapids of Collaborative Governance." *Healthcare Forum Journal* 41 (2): 47-52.
- Luepker, R. V., D. M. Murray, D. R. Jacobs, Jr., M. B. Mittelmark, N. Bracht, R. Carlaw, R. Crow, P. Elmer, J. Finnegan, A. R. Folsom, R. Grimm, P. J. Hannan, R. Jeffrey, H. Lando, P. McGovern, R. Mullis, C. L. Perry, T. Pechacek, P. Pirie, J. M. Sprafka, R. Weisbrod, and H. Blackburn. 1994. "Community Education for Cardiovascular Disease Prevention: Risk Factor Changes in the Minnesota Heart Health Program." American Journal of Public Health 84 (9): 1383-93.
- McKinlay, J. B. 1996. "More Appropriate Evaluation Methods for Community-Level Health Interventions: Introduction to the Special Issue." *Evaluation Review* 20 (3).

- Mitchell, S. M., and S. M. Shortell. 2000. "The Governance and Management of Effective Community Health Partnerships: A Typology for Research, Policy and Practice." *The Milbank Quarterly* 78 (2).
- Murray, D. M. 1995. "Design and Analysis of Community Trials: Lessons from the Minnesota Heart Health Program." American Journal of Epidemiology 142 (6): 569-75.
- Patton, M. Q. 1978. "The Program's Theory of Action: Evaluating Causal Linkages" In *Utilization-Focused Evaluation*, pp. 179–98. Beverly Hills, CA: Sage Publications, Inc.
- Susser, M. 1995. "The Tribulations of Trials: Interventions in Communities." *American Journal of Public Health* 85 (2): 156–58.

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