Boston's Codman Square Community Partnership for Health Promotion

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Dr. Schlaff's proposal won first prize in the contest for the 1990 Secretary's Award for Innovations in Health Promotion and Disease Prevention. The contest is sponsored by the Department of Health and Human Services and administered by the Health Resources and Services Administration, in cooperation with the Federation of Association of Schools of the Health Professions.

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Synopsis

The Codman Square Community Partnership for Health Promotion is a program designed to promote changes in individual behavior and community relationships to reduce the morbidity and mortality associated with the many problems affecting poor, minority communities in the United States. Problems of particular concern to be addressed by the program include violence, injuries, substance abuse, acquired immunodeficiency syndrome (AIDS), infant mortality, child abuse and neglect, and cardiovascular disease.

The failure of traditional health promotion approaches to poor communities has created a literature supporting community-based action directed at broad social forces. The Codman Square Community Partnership for Health Promotion uses a variety of models—community participation, community organization, empowerment education, and community-oriented primary care—to encourage new coalitions that can ameliorate the social isolation and health-averse social norms linked to poverty and poor health. The program uses local residents trained as lay health workers to deliver home-based health services and to help create the necessary partnerships, linkages, and communication networks to foster the reorganization of the community to better address its health problems.

CODMAN SQUARE in Boston is predominantly a minority community whose residents are of low socioeconomic status. As in other poor areas, the people suffer higher than average rates of morbidity and mortality from a wide range of problems including violence, unintentional injuries, substance abuse, acquired immunodeficiency syndrome (AIDS), infant mortality, cardiovascular disease, cancers, infectious diseases, and diseases attributable to cigarette and alcohol use (*1,2*; "Reported AIDS Cases by Zip Code," unpublished data, AIDS Surveillance Unit, Department of Health and Hospitals, City of Boston, 1989; and "Small Area Variation Study by DRG Classes—FY 1987." Unpublished data reports prepared by The Massachusetts Health Data Consortium, Inc., for the Health Planning Council for Greater Boston, 1989).

Most of these high rates of social and physical problems have as etiologic factors environmental, social, and behavioral determinants that are caused by poverty. Substandard housing, social isolation, poor self-esteem, lack of interpersonal skills, and hopelessness all contribute to the poor health status of the residents.

The Codman Square Health Center's mission is to serve as a resource to improve the health of the community. Neither the provision of primary health care services nor the linkage to State and city public health services has closed the gap between the health status of the people in Codman Square and that of more affluent communities (*2*). Lack of access to people at highest risk and poor compliance among those who are reached limit the effectiveness of potentially efficacious health promotion interventions.

To fulfill its mission, the health center's staff must look beyond traditional disease prevention interventions to a health promotion strategy that directly addresses the environmental, social, and behavioral consequences of poverty that affects the health of the population. This proposal addresses these determinants of health through a variety of community-based health promotion models. Programs that stimulate community organization and participation can have a direct effect on such

factors as social isolation and hopelessness and thus improve health status.

Literature Summary

The theoretical justification of my proposal is based on the premise that health behavior and outcomes are determined by social and environmental forces, and that health promotion activities should be targeted to changing these forces. Several related but distinct models of community-based social change are incorporated in this proposal. These models are community participation, community empowerment, community organization, and community-oriented primary care. The use of indigenous health workers has been featured in all of these models and is a major component of this proposal. The literature supporting the models used in the proposal is reviewed.

Poverty has been linked repeatedly to poor health outcomes (*3–10*). Although this link can be partially explained by poor access to care or specific risk factors, other studies suggest that income and social class have an effect on health not explained by access or known risk factors (*11–16*). Lack of education, social norms, social and cultural isolation, and real or perceived lack of control have all been proposed as mechanisms to explain the effect of poverty on health (*16–23*). Health promotion models to affect these possible determinants have been developed; they rely on changing social and organizational structures at the community and societal levels (*24–29*).

There are several related models of community-based social change. Community participation models stress the importance of participation by the people who are the targets of an intervention so as to increase the likelihood of both addressing true community needs and gaining acceptance by the community (*30–35*). Health promotion programs have demonstrated the importance of this strategy in gaining broad community support to achieve success in combating AIDS (*36*), lead poisoning (*37*), improper pesticide use (*38*), coronary disease (*39,40*), and other outcomes (*35,41*).

Empowerment models also stress participation, but for a different reason. Participation increases the real and perceived control that people have over their environment, and it is the resulting exercise of control that determines health outcomes (*42–46*). Case studies demonstrating this approach are rare, partly because of the difficulty of documenting increased empowerment. Nevertheless, this model has been successfully used in programs to reduce adolescent drug use (46) and crime-related injury among the poor elderly (*47*).

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Community organization models stress methods of reaching large numbers of people and of demonstrating success to build momentum for change (*48–52*; unpublished paper by L. Staples, "Can't Ya Hear Me Knocking?" Boston University School of Social Work, 1987; and "Direct Action Organizing," unpublished paper issued by Midwest Academy, Chicago, 1973). Successful programs have mobilized communities for political action to prevent the use of toxic spraying of pesticides (*53*) or used the media and community volunteers to change health-related behaviors of large numbers of residents (*40*).

The distinctive characteristic of community-oriented primary care (COPC) is its use of community-based health professionals to work with a defined community to develop health promotion programs (*54–65*). The resulting partnership brings together health and community expertise to design better programs. COPC programs in poor communities have documented an improvement in child development (*66*), cardiovascular disease (*67*), infant mortality (*68*), and other health outcomes (*69–73*).

Community health workers (CHWs) have been used in a variety of programs to facilitate community participation, organization, and partnerships with health professionals (*35,74–80*). They are a major component of World Health Organization's (WHO) strategy to improve world health (*35*). Although evaluations of health outcomes are scarce, CHWs have been shown to improve participation in and acceptance of community health development programs throughout the third world (*35,74–76*). There are few published accounts of the use of lay health workers in the United States, but one program using Navajo "health visitors" in the 1950s to reduce the spread of tuberculosis documented a dramatic fall in the prevalence of disease associated with implementation of the program (*78,79*).

Project Objectives and Methods

The objectives of the program are

- to make the services offered by the health center more responsive to community needs and concerns,
- to increase the organizational capacity of community residents and voluntary agencies to work on health issues,
- to increase residents' control over and satisfaction with life in the community,
- to create an ongoing community-health professional partnership to plan and implement community health initiatives,
- to recruit and train 10 community residents as lay health workers to supply home-based health education and referral services to every household in Codman Square, and
- to develop an ongoing health data collection system in the community for use in program planning and evaluation, surveillance, and research.

Using a COPC model, the health center will develop this program in partnership with the Neighborhood Council, an elected body of residents and activists representing the entire community. The partnership will be formalized by having the program director (the health center medical director) report jointly to the Neighborhood Council and the health center board of directors. Working with the program director will be a project coordinator and 10 CHWs. Project staff will provide direct services (description follows), but they will also be responsible for organizing community activities, encouraging participation in these activities, and fostering a sense of community ownership of health promotion activities.

The project coordinator will be responsible for the training and supervision of the CHWs and for maintaining liaisons with all interested community residents and agencies. The coordinator will also design data collection instruments, collect and analyze community-based data, and present the data to the program director and community groups for decision-making about program planning, targeting interventions, evaluation, and research.

The CHWs are the key component to the program. They will be recruited from the community and should reflect the ethnic and cultural diversity of Codman Square. They will have multiple roles, which include delivering home health education and referral services, collecting data, and participating in community-based health promotion programs and community development. Community development activities will include participating in activities undertaken by other community groups, giving health education sessions for interested groups and agencies, and recruiting community volunteers for participation in community activities, health promotion program development, and block club activities.

In addition, the workers will recruit interested volunteers to serve as "block health coordinators." These coordinators will serve as a link between the worker and the coordinator's immediate neighborhood. This link will facilitate acceptance of the worker by the residents and serve as a channel of communication between the worker and the residents regarding community needs and concerns. Block health coordinators may serve as a recruitment pool when CHWs leave to seek career or educational advancement—a hoped for byproduct of the training.

A major mechanism whereby CHWs can create participation and expose residents to health-related empowerment education is Planned Approach to Community Health (PATCH). PATCH is a Federal technical assistance program already beginning in Codman Square. It provides training for community volunteers to design and implement their own health promotion program. With adequate resources and interest, this program can become an institutionalized, volunteer-based community activity. Part of the CHWs' work will be to maintain the momentum of the PATCH process by recruiting volunteers and by helping the active volunteers with the work of defining health problems, implementing programs, and evaluating programs. The Neighborhood Council's commitment and the supplemental work force made available by the CHWs should create an organizational structure around which PATCH can function as an ongoing conduit for the expression of a community and health professional partnership. Further, the PATCH volunteers will be expected to help set policy and projects for the activities of the CHWs and the overall health promotion program described in this paper.

A major portion of the CHWs' time will be spent making home visits. Over a 3-year period, the CHWs should visit every household in the community—approximately 10,000. During each visit, if permitted, the CHW will offer health educational materials; give information about available health care, social service, and community resources; perform a health risk appraisal; and recruit people for PATCH, block health coordinator positions, and other community volunteer activities. The content

of the health education and risk appraisal offered will vary depending on both community concerns (as documented from community meetings and the data collection process) and individual need. Based on current information about community concerns and health problems, initial areas that the CHWs will be trained to focus on will include mental health, prenatal and well-child care, parenting skills, prevention of unintentional injury, violence, substance abuse, and AIDS.

Through the program, multiple channels will be fostered by which the health center's staff will be made aware of community needs and concerns. These channels include feedback from CHWs, internal analyses of data collected during home visits, the PATCH process, and feedback from the Neighborhood Council and other community groups. In this way, the health center will be able to introduce or adapt its services in response to changing community needs.

Significance of the Project

The proposed project addresses the primary determinants of poor health status in a poor community. The failure of medical care, media campaigns, and disease-specific prevention efforts to impact on the widening gap in health outcomes between the poor and the rest of society is one of the major public health problems we face (*3,5,29*). The proposal combines the successful features of a variety of community organizing methods and reintroduces to the United States the use of lay health workers—a major method of health promotion throughout the rest of the world. It combines attention to the specific needs and attributes of the community with a reproducible theoretical and practical framework, thus combining an increased opportunity for success with a potential for reproducibility in other poor communities throughout the country.

Summary of Evaluation Methods

The evaluation program must take into account the need for flexibility required by community participation. Objectives may change based on input from the participation process. In addition, the power to measure changes in health outcome, if they occur, will be low in a small community. The stated objectives of the program, therefore, focus more on measures of community involvement and program process than health outcome, and the evaluation program will reflect these objectives. Community involvement and satisfaction with the program will be measured through documenting community activities and their relationship to the project, counting numbers of people at meetings and in roles such as block health coordinators, and through annual surveys conducted by the health workers as they conduct home visits. Specific measures may include the number of PATCH participants, penetration of health center services in the community, and numbers of residents who know of, approve of, or have used CHWs' services.

Program process will be evaluated by maintaining records on the number of home visits and other program activities. Quality of home visits and health worker training will be monitored through observed visits and documentation reviews by the program director and coordinator.

Although not the major focus of evaluation, changes in community health risk status will be monitored by random reviews of the aggregated health risk appraisals conducted by the CHWs. In addition, health outcome data from vital statistics and hospital discharge rates will be reviewed on a yearly basis. These reviews will allow for evaluation of whether the problems addressed by the program are those that continue to pose health risks for the community.

Budget Estimate

The budget per year is

Category	*Cost*
Personnel:	
Program director (0.33 full-time equivalent [FTE] medical director)	$ 30,000
Project coordinator (1.0 FTE master's level)	30,000
Community health workers (10.0 FTE)	170,000
Space	20,000
Supplies	5,000
PATCH support:	
Meetings expenses	5,000
Volunteer stipends	10,000
Total	$270,000

The program director, the medical director of the health center, will devote one-third of his or her time to maintaining the community-profession—partnerhip and supervising and evaluating the program. The coordinator will supervise the CHWs and maintain the computer-based data system. Support for PATCH will be needed to cover expenses at meetings and for stipends for the more active volunteers. There is no computer cost in the budget. These one-time expenses can come out of CHWs' salaries in the first year, as there will be a lag time of 2 or 3 months before the CHWs are hired.

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