

## CHAPTER 11

---

### Promoting Health Through Community Development

*Stephen B. Fawcett, Adrienne L. Paine,  
Vincent T. Francisco, and Marni Vliet*

---

#### DESCRIPTION OF THE PROBLEM

Cardiovascular disease, substance abuse, cancer, adolescent pregnancy, and accidents are major causes of death and disability in the United States (United States Department of Health and Human Services, 1989). Each of these health concerns is linked to clear, risk-increasing behaviors, such as tobacco use, poor nutrition, insufficient exercise, alcohol misuse, unprotected sexual activity, or riding in motor vehicles without a seat belt (United States Department of Health and Human Services, 1991). Accordingly, they are substantially preventable on both individual and community levels.

Health promotion is "the process of enabling people to increase control over, and improve, their health" (World Health Organization, 1986, p. iii; Green & Raeburn, 1988). Articulated in the Ottawa Charter for Health Promotion (Epp, 1986), this strategy emphasizes the importance of environmental influences on the behaviors associated with health promotion and injury prevention. In contrast to the disease-oriented medical treatment model, the health-promotion paradigm assumes that health is particularly affected by behavior or life-style (O'Donnell, 1986) and by the environmental conditions that support or impede health-promoting behavior.

Health promotion efforts attempt to change two types of factors: (a) personal factors, such as the knowledge and skill of individuals at risk for health impairment, and (b) environmental factors, such as smoking cessation programs or substance abuse policies, that might help protect health and prevent disease (Breslow, 1990; Minkler, 1989). In a community-oriented approach, responsibility for health is shared by individuals and by the systems that affect environmental supports for health and risks for disease and injury.

The World Health Organization endorsed a *community development* approach to health promotion in the Alma Ata declaration on primary health care (Green & Raeburn, 1988). This declaration emphasized community participation and self-reliance, with individuals, families, and communities assuming more responsibility for their own health (World Health Organization, 1978). These themes—self-help, citizen participation, and community control—are hallmarks of a community development approach to health promotion.

Rothman and Tropman (1987) discussed three approaches to community organization and development that are relevant to the challenge of health promotion: social planning, social action, and locality development. Social planning is a top-down approach that primarily involves expert planners in problem solving, building linkages, setting goals, and designing action plans related to such goals as reducing substance abuse or cardiovascular disease. The social action approach often relies on experienced community organizers and conflict tactics to redistribute resources and extend community control to disadvantaged, oppressed, or marginalized populations. The third approach—the locality development approach—involves broad citizen involvement in setting goals and taking action and is characterized by a bottom-up orientation, that is, the use of indigenous leadership to address local concerns including those related to health and injury.

The community development approach is consistent with a self-help and citizen participation paradigm for health promotion. It assumes that, to be successful, health promotion efforts require active citizen involvement in identifying health needs, setting priorities, controlling and implementing solutions, and evaluating progress toward health goals (Green, 1986). The community development approach is well suited to addressing the health promotion goals outlined by the Ottawa charter: creating healthy public policy and supportive environments, strengthening community action through citizen involvement and community development, developing personal skills and encouraging life-style changes, and reorienting health service to encourage community involvement (Green & Raeburn, 1988).

This chapter describes opportunities and challenges in promoting health through community development. First, it summarizes and critiques prominent models and programs that use elements of community development practice in health promotion. It next describes the case example of the Kansas Initiative, a statewide, comprehensive program of health promotion and disease prevention

using a community development model. Finally, we conclude by suggesting future research and action issues related to understanding and improving community health initiatives.

## REVIEW AND CRITIQUE OF THE LITERATURE

### *Prominent Models of Health Promotion and Community Development*

There are several prominent models and programs that use community development strategies to promote health. These include the PRECEDE model, PATCH programs, large-scale community demonstration projects, Healthy Cities/Healthy Communities, and the social reconnaissance model. Each is described below.

*PRECEDE Model.* The PRECEDE model (Green, Krueter, Deeds, & Partridge, 1980), and its successor, the PRECEDE-PROCEED model (Green & Kreuter, 1991), are social planning strategies that rely heavily on the input and analysis of experts in health planning and program development. The PRECEDE model—referring to “predisposing, reinforcing, and enabling causes in educational diagnosis and evaluation” (Green et al., 1980, p. 11)—is the dominant model in health education. It uses an interdisciplinary conceptual framework drawing on knowledge in the fields of epidemiology, behavioral science, administration, and education.

Consistent with a behavior-analytic model of community change (Fawcett, 1990; 1991), the PRECEDE model starts with the ultimate health outcome, such as the mortality and morbidity associated with heart disease, and works backward to the environmental determinants of a given health problem in designing an effective solution. According to the PRECEDE model, the first step is to study a community’s social problems and concerns. It uses epidemiological data to identify specific health problems, such as a disproportionate incidence of adolescent pregnancy, that contribute to social problems. Second, the specific behaviors linked to the health problem are identified, such as intake of dietary fat (heart disease) or unprotected sexual activity (adolescent pregnancy). Third, change agents identify the predisposing conditions, such as knowledge and attitudes, reinforcing events, such as social consequences, and enabling conditions, such as resources and skills, associated with the health problem. These factors are used to design an intervention. Finally, the intervention is implemented and evaluated with attention to the multiple factors that may be associated with health outcomes. Elements of the PRECEDE and behavior-analytic models of community change are incorporated into the featured approaches to health promotion and community development that follow.

*PATCH Programs.* The Planned Approach to Community Health (PATCH) is an adaptation of the PRECEDE model for use at the grassroots community level (M. Kreuter, personal communication, October 1990). Sponsored by the Centers for Disease Control, local coordinators of PATCH programs are provided with training and workbooks that help in identifying key community members, setting up lines of communication, generating monetary and human resources, and formulating an action plan. The PATCH handbook guides participants through the complicated process of identifying problem areas, collecting and summarizing epidemiological and other data related to those problem areas, and disseminating that information to members of the community who can make necessary changes. With support from CDC staff, the PATCH model has been adopted by more than 17 states and 50 communities (Research Triangle Institute, 1990). Results from local application suggest that PATCH is a promising means of developing relationships among communities, local health departments, and the Centers for Disease Control. Although the PATCH program has been effective in producing changes in awareness and interest in health issues, few changes in community conditions or health outcomes have been documented.

As with the PRECEDE model, the intended result of PATCH programs is that community members change predisposing and enabling conditions in the community such that the overall health of local people is improved. Although this approach uses carefully crafted technology and would appear to be replicable, its complexity demands a degree of sophistication seldom available at the grassroots level. To be implemented widely, it would appear to require extensive support from trained outside professionals.

*Large-scale Community Demonstration Projects.* Several important community health-promotion initiatives are distinctive in the large scale of the intervention and the degree of control over the project exerted by outside researchers. Four projects particularly exemplify this model: the North Karelia Project in Finland, the Stanford Five-City Project, the Pawtucket Heart-Health Program, and the Minnesota Heart-Health Program.

The North Karelia Project in Finland was one of the first major community-wide approaches to health promotion (Puska, 1984). This project began after a community petition requested that action be taken on the high incidence of deaths owing to cardiovascular disease. The North Karelia Project focused on the primary prevention of heart disease by reducing risk factors, such as smoking, serum cholesterol, and blood pressure, and promoting secondary prevention among people already affected by heart disease.

The main independent variables used in the North Karelia Project included preventive services, education, behavior change programs, skills training, social support, environmental change, and community organization. A 10-year evaluation of the project found, for men, a 36% reduction in smoking, an 11% reduction in mean serum cholesterol levels, and a 5% reduction in mean diastolic blood

pressure compared with a much smaller change in risk factor levels found in the control community (Puska et al., 1985); similar changes were found with women. These findings suggested the efficacy of this community demonstration project designed and implemented by expert researchers.

The Stanford Five-City Project (Farquhar et al., 1985) was an outgrowth of the Three Community Study (Fortman, Williams, Hulley, Haskell, & Farquhar, 1981). Supported by large external grants, the Five-City Project was a 6-year, community demonstration project designed to reduce the risk of heart disease. It used a media approach and was conducted in two cities, with three other cities serving as control communities. Information about risk reduction was provided through community-wide use of media and community-based programs, such as classes and seminars (see chapter 10 by Winett, in this book, for additional details of the media component). Community involvement was encouraged, and training of indigenous leaders was provided by Stanford University staff. A 5-year evaluation found significant reductions in average cholesterol levels (2%), blood pressure (4%), resting pulse rate (3%), and smoking rate (13%) in the treatment cities when compared with the control cities (Farquhar et al., 1990).

The Pawtucket Heart-Health Program targeted individuals, groups, and organizations in this small Rhode Island city in an attempt to reduce risk factors associated with cardiovascular disease. Relying on massive and long-term federal grant support, project researchers provided support and training for a volunteer-based delivery system that emphasized citizen involvement in planning, implementation, evaluation, and administration. The program targeted various channels through which to reach residents including schools, supermarkets, restaurants, senior citizen groups, and community events. Although data on broad program impact are not yet available, preliminary results suggested the efficacy of specific interventions, such as a point-of-purchase nutrition program in supermarkets that increased (from 36–54%), during a 4-year period, the percentage of customers who reported purchasing targeted heart-healthy items (Hunt et al., 1990).

Also funded by large federal grants, the Minnesota Heart-Health Program (Blackburn et al., 1984) involved three Minnesota communities in a 9-year project designed to reduce risk factors—including blood pressure, cholesterol, smoking, and exercise—associated with cardiovascular disease. The project consisted of mass media, education through classes and workshops, youth education programs, incentive programs, and community activities implemented by local task forces. Although designed by researchers, the program was reported to be implemented collaboratively by project administrators, local staff, and community leaders. An evaluation of a peer-led information and skills training program designed to reduce cigarette smoking among youth found significantly lower levels of students who reported ever smoking (61% compared with 70%) and current smokers (13% compared with 22%) in the treatment group when compared with the control group (Perry, Klepp, & Sillers, 1989).

*Healthy Cities/Healthy Communities.* The Healthy Cities/Healthy Communities project grew out of the World Health Organization's initiative, "Health for All by the Year 2000" (Ashton, Grey, & Barnard, 1988). Sponsored in the United States by the U.S. Office of Disease Prevention and Health Promotion (ODPHP), the approach begins with a definition of what a model healthy city or community should include, such as adequate sanitation, clean air, and potable water. The organizers took a top-down approach, convincing city officials to collaborate with leaders from a variety of sectors to develop plans designed to improve public health. Early applications suggested that this model may rely heavily on the artistry of ODPHP staff and outside contractors to design and implement projects. The Healthy Cities program, rather than encouraging grassroots change within communities, suggests a broad policy adoption format designed to affect long-term community variables such as clean air, sanitation, and clean water supply. Preliminary results from early applications suggest that coordinators find this approach useful (World Health Organization, 1988). Interim and long-term evaluations of the impact of this approach on morbidity and mortality have yet to be conducted.

*Social Reconnaissance Model.* The social reconnaissance model (Williams, 1990) combines top-down (social planning) and bottom-up (locality development) approaches to health promotion. Initially, elected officials, potential funding agents, and interested community members are assembled to discuss health problems, resources and barriers, and to establish priorities for community health initiatives. Supported by the Henry J. Kaiser Family Foundation, this interactive approach was used to establish collaborative programs in Kansas (with the Kansas Health Foundation), Washington, D.C., and eight southern states (Tennessee, South Carolina, Georgia, West Virginia, Mississippi, Arkansas, Louisiana, and Texas). Although results are not yet available, potential limitations of the approach include its lack of specification of the intervention and limited monitoring information about community action and change related to health goals

### *Critique of the Literature*

Fawcett (1990, 1991) described several standards for community research and action that can be used to characterize the literature on health promotion and community development. The standards outline criteria for collaborative relationships, research goals and methodology, intervention and dissemination, and advocacy and community change. The health promotion models and projects vary in the extent to which they maximize these dimensions.

*Collaborative Relationships.* Collaborative relationships are characterized by maximal community influence on the goals of the initiative and the design, implementation, and evaluation of its specific preventive interventions. Larger

field trials and community demonstration projects, such as the Stanford Five-City Project, permit less community involvement, because the health problems and major aspects of the intervention are determined by outside university researchers and the granting agencies from which they receive support. By contrast, smaller scale or generic development processes, such as programs using the PATCH or social reconnaissance methodologies, provide considerably more community involvement in selecting health goals and designing and implementing interventions.

*Research Goals and Methodology.* Health promotion initiatives should respond to community needs and provide information about their effectiveness. Some variations of the PRECEDE model, such as PATCH programs, stress the importance of using information about the community's concerns as a partial basis for setting goals for research and action. Similarly, the North Karelia Project started in response to a community petition calling for action to prevent heart disease. By contrast, many community demonstration projects, such as the Stanford Five-City Project, are supported by categorical funding that restricts potential goals to particular health concerns, such as cancer or heart disease, and even to specific types of intervention, such as mass media. The social reconnaissance and Healthy Cities/Healthy Communities models appear to maximize community involvement in the choice of health goals and the design of interventions.

Evidence of program effectiveness varies in its availability and quality. For example, a 10-year evaluation of the North Karelia Project suggested the program's efficacy in reducing risk factors for cardiovascular disease. Similar evaluations of specific interventions, such as those for the Pawtucket and Minnesota Heart-Health Programs, suggested that particular components of community health interventions were successful in reducing risk factors for heart disease. However, the impact of community health initiatives on community action and change related to health goals—critical aspects of this development and change process—have not been well documented.

*Intervention and Dissemination.* Community health initiatives might also be judged against criteria for the design, diffusion, and maintenance of community health innovations. Virtually all of the programs rely on external, potentially unsustainable resources to implement the interventions. It is unclear whether even those projects using local volunteers, such as some interventions of the Pawtucket and Minnesota Heart-Health Programs, would continue without external grant monies and the large support services they provide. Some of the more technological programs, such as PATCH, are potentially replicable because they provide rather complete descriptions of what is necessary to implement the program. Other more general approaches—such as the social reconnaissance and Healthy Cities/Healthy Communities models—appear to rely more on artistic leadership

than well-specified methodology. The complexity of even the more technological programs suggests, however, that dissemination likely would require extensive and long-term technical assistance.

*Advocacy and Community Change.* Results of community health initiatives should be used to maximize the program's impact and to empower people affected by the health concern including those of marginal status. Although a few studies (e.g., Fawcett, Seekins, & Jason, 1987) suggested that research data could be used to bring about changes in health-related policy, case studies of the instrumental uses of research data have been rare. Similarly, with few exceptions (e.g., Braithwaite & Lythcott, 1989; Couto, 1990; Wolff & Huppert, 1987), empowerment of people affected by health concerns has not been a primary goal of community health initiatives. Yet, empowerment of people with marginalized status may be central to the development process at individual and community levels (Fawcett et al., in press-b).

*Conclusion.* The literature suggests a continuum of community control over the process of health promotion and community change: from maximum community influence, such as with the social reconnaissance process, to minimum community control, such as with the larger scale community demonstration projects. Experimental data suggest the effectiveness of specific interventions for risk factors related to heart disease, but such data are lacking for other health concerns. The critical aspects of community development processes are not well specified, making it difficult to draw conclusions about causal relationships and to replicate successful interventions. Finally, although community mobilization strategies help set agendas and provide impetus for change, the absence of a system for monitoring community action and change limits opportunities to maintain and enhance the effectiveness of local community health initiatives.

## CASE EXAMPLE

The Kansas Initiative is an ongoing community development effort attempting to build a statewide, comprehensive program in health promotion and disease prevention. The initiative is designed to address the major health concerns in Kansas: cardiovascular disease, substance abuse, certain forms of cancer, and adolescent pregnancy. Programs are designed to fit the state's values and profile, improve health outcomes, and be sustained over the long term. Begun in 1989, this initiative is sponsored by the Kansas Health Foundation, a statewide health care foundation based in Wichita, Kansas, with the mission of improving the health of the people of Kansas.

Kansas, with its 2.5 million people, is a 200 × 400 mile rectangle located in the geographical center of the United States. Its current relatively stable economy is



based on agriculture, oil and natural gas production, business, and aeronautical and other industry. The leading causes of death in Kansas are cardiovascular disease and cancer, with unintentional injuries the leading cause of years of potential life lost before age 65. A review of available survey data suggested that substance abuse, particularly of tobacco and alcohol, may be relatively prevalent among adolescents; use of illegal drugs, such as marijuana and cocaine, appears to be higher in urban areas. Adolescent pregnancy, a particular problem in urban areas, appears to be increasing.

Conducting the Kansas Initiative involves several integrated and somewhat overlapping activities: (a) preparing the environment for action; (b) planning and developing a model for change; (c) implementation; (d) evaluation; and (e) developing a support system for program maintenance, dissemination, and quality control.

### *Preparing the Environment for Action: The Social Reconnaissance Process*

The social reconnaissance process was used to prepare communities for action on identified health concerns. This process was implemented as part of a philanthropic partnership between the Kansas Health Foundation and the Henry J. Kaiser Family Foundation. The process involved community leaders, health experts, health consumers, and others in discussions of health issues, and opportunities and barriers for grantmaking in health promotion and disease prevention. In a series of 40 meetings in urban and rural communities, participants were asked to identify specific health promotion issues, such as substance abuse or adolescent pregnancy, and opportunities and barriers in addressing those issues. The process examined the history of problem solving in their community and local experiences with public-private partnerships. These discussions helped identify community leaders and yielded information about other state and local resources. The reconnaissance also provided opportunities for funders to obtain advice about the grantmaking needs of local communities from the perspective of representatives of agencies involved in health, education, and welfare.

Results of the Kansas Initiative town meetings suggested the need to better coordinate services and other resources relevant to health promotion and disease prevention. Identified strengths included an eagerness to use expertise for planning and coordination, successful experiences with public-private partnerships, and history of social planning in rural areas, especially through religious organizations. Additionally, local health care facilities were generally considered innovative and were the most often-cited local resources for solving community health problems. Finally, there existed a variety of health and human service networks and a strong system of higher education.

The major barrier facing health promotion programming in Kansas surfaced as the lack of leadership in health care and comprehensive planning for health.

Epidemiological data and vital statistics were available for only some health concerns. Inadequate incidence and prevalence rates for several risk factors made impossible the establishment of baseline data useful in local decision making. Additional barriers included the lack of technical and support services for local communities; a shortage of health care professionals, especially in rural areas; the large numbers of medically uninsured and underinsured (it was estimated that of the 2,500,000 Kansans, a minimum of 500,000 fall into this category); the absence of a school of public health within the state; the failure of county commissioners and state legislators to be informed and educated properly on issues pertaining to health, and a culture of self-reliance that can inhibit the use of formal service systems.

A companion survey distributed to those invited to the community meetings helped identify health concerns, such as substance abuse (26% of the respondents indicated it to be a concern) and inadequate health care services (noted by 60% of the respondents). Forty percent indicated that health education for the public, particularly in terms of wellness, was a major community need.

### *Planning: A Model of Health Promotion and Community Development*

This section describes the planning process that followed the initial social reconnaissance and outlines the model used for health promotion and community development. The overall strategy for the Kansas Initiative underscored the importance of the following: (a) combining top-down (social planning) and bottom-up (locality development) approaches that include coalition building, leveraging human and fiscal resources, planning, developing model programs and policies, and building local capacity through leadership training and technical assistance; (b) supporting community health initiatives with consultation, technical assistance, and monitoring and feedback on progress and accomplishments; (c) encouraging implementation, evaluation, and maintenance of health promotion and community development efforts; and (d) promoting widespread adoption of model programs and policies within communities (and across the state) and encouraging adaptation of successful programs to fit new contexts and address other health issues.

The Kansas Health Foundation developed a plan for health promotion and disease prevention in the state that draws on identified resources and is consistent with the national Health Objectives for the Year 2000 (U.S. Department of Health and Human Services, 1990). The plan endorsed the establishment of initial prototype projects in areas of health concern and the development of a support system for health promotion initiatives.

*Model of Health Promotion and Community Development.* Drawing on models of health promotion and community development, this model has four interrelated elements: planning, preventive intervention with targets and agents of

change, change in risk and protective factors, and change in ultimate and intermediate health outcomes. Figure 11.1 provides a depiction of the model as it might be used with initiatives to reduce the incidence of substance abuse, cardiovascular disease, adolescent pregnancy, unintentional injuries, or other health goals. Consistent with an outcome orientation, the model is best reviewed by starting with the desired ultimate and intermediate health outcomes.

The *ultimate and intermediate health outcomes* define the mission of the health promotion initiative. Thus, as the case examples will illustrate, Project Freedom has the mission of reducing substance abuse, and Kansas LEAN that of reducing intake of dietary fat. Archival records, such as health statistics, are used to provide a measure of the incidence (new cases) and prevalence (existing cases) of diseases, injuries, and their outcomes. These health statistics may focus on mortality (death) and morbidity (disability). These ultimate health outcomes are usually quite delayed consequences of unhealthy behavior, however. Heart disease, for example, may develop only after decades of smoking and a higher fat diet. Accordingly, more intermediate health outcomes, such as the levels of intake of dietary fat, represent a better target for health promotion initiatives.

Laboratory research and field experiments establish relationships between the ultimate health outcomes of death and disability, and intermediate health outcomes sometimes referred to as behavioral risk factors. The latter denote those behaviors associated with life-style that have been shown to be related to the likelihood of disease or injury. Behavioral risk factor surveys, adolescent health surveys, and other self-report instruments are used to track intermediate health outcomes, such as the self-reported incidence of smoking or dietary fat intake, associated with an ultimate health outcome such as heart disease.

*Risk and protective factors*, such as peer support or opportunities, affect the likelihood of intermediate outcomes, such as abstinence or unprotected sexual activity. Risk and protective factors include personal factors, such as knowledge, skills, and values and beliefs related to relevant behaviors. They also include environmental factors, such as family and peer support, resources and opportunities, and supportive policies and laws.

Community health initiatives attempt to bring about *community changes*—changes in programs, policies, and practices consistent with the mission. Community changes are immediate health outcomes; they provide the most solid early evidence of the functioning of community health initiatives. Intervention research studies help establish causal relationships between particular community changes and behaviors and outcomes associated with health and avoidance of injury (Fawcett et al., in press—a). The efficacy of a particular community change, such as a police crackdown intended to reduce sales of cigarettes to minors, should not be assumed without experimental evidence. Intervention research results help select for specific changes in risk or protective factors worthy of widespread adoption.



*Preventive interventions* attempt to change the behavior of targets of change, such as adolescents, and agents of change, such as parents and teachers, consistent with the mission of the initiative. Targets and agents are reached through various community sectors, known as channels of influence including the media, schools, businesses, religious organizations, and law enforcement agencies. The immediate outcome of preventive interventions is a change in programs, policies, and practices in relevant channels of influence.

Preventive interventions may be launched by state and local coalitions, task forces, or other action groups. They may consist of universal initiatives for the general population, such as adoption of a problem-solving curriculum that may contribute to the health goals of reducing substance abuse and adolescent pregnancy. Preventive interventions also may include high-risk programs for people with multiple risk factors or experiencing critical events, such as youth whose siblings use drugs or experience adolescent pregnancy. A comprehensive intervention to reduce intake of dietary fat, for example, may include universal initiatives to increase awareness and availability of lower-fat alternatives and high-risk programs for people with elevated serum cholesterol.

*Planning* is an important beginning and end point of this interactive model. The two most important products of the planning process are community health goals and community change objectives. Community health goals refer to specific levels of ultimate and intermediate outcomes that are targeted for attainment at a specified time, such as reducing the estimated pregnancy rate by 50% within 5 years. Community change objectives refer to those changes in programs, policies, or practices assumed to contribute to the mission. Community participation in goal setting is central to the process of health promotion and community development. Ongoing information about community changes helps determine the extent to which these immediate outcomes are produced. Periodic reports on intermediate and ultimate health outcomes informs later determination of which (if any) health concerns warrant new or continued community health initiatives.

### *Implementation*

In the early stages of implementation, the Kansas Health Foundation funded the Work Group on Health Promotion and Community Development at the University of Kansas to provide consultation, technical assistance, and evaluation for selected initiatives. Two community health initiatives were funded initially—Project Freedom, with the mission of reducing adolescent substance abuse, and Kansas LEAN, with the mission of reducing intake of dietary fat. A Health Action Microgrants Program was also piloted to test this approach for supporting small self-help initiatives related to health concerns. Each initiative was conducted as part of a collaborative relationship between the foundation, the work group, and the funded community projects. Following a description of the work group's role, each project is described subsequently.

*Work Group on Health Promotion and Community Development.* The work group's mission is to develop the capacities of communities to address their health concerns and to contribute to understanding about effective means of health promotion and community development. The work group is a program of the Schiefelbusch Institute of Life Span Studies and the Department of Human Development at the University of Kansas. The work group's students and faculty provide consultation and technical assistance to community health projects associated with the foundation's health promotion and disease prevention initiative. The work group also conducts intervention research studies within the projects, experimentally evaluating intervention prototypes that are candidates for widespread dissemination in the state. Finally, the work group monitors community action, community change, and ultimate and intermediate outcomes of initiatives. This information is fed back to project leadership and foundation program officers to help improve project functioning.

*Project Freedom.* Project Freedom is a community coalition of more than 300 agencies with the mission of reducing adolescent substance abuse in Wichita (population, 401,000) and in the surrounding Sedgwick County. The coalition set community health goals specifying specific reductions in reported use of tobacco and illegal drugs. Its subcommittees targeted community changes in programs, policies, and practices of relevant channels of influence. These included schools, businesses, legislative bodies, religious organizations, law enforcement agencies, social service organizations, and other channels of influence.

The work group provided consultation during the strategic planning process in which community change objectives were set for each channel. Critical audiences for the coalition—its members, foundation officials, and outside experts on substance abuse—rated the feasibility of the candidate objectives and their importance to the mission of reducing substance abuse. These data were used to refine the final choices of objectives. Similarly, the work group provided technical assistance on the design of specific interventions, also conducting evaluations of their efficacy. The challenge for the coalition is to move beyond its networking, service, and resource generation activities to concentrate on bringing about community changes related to substance abuse and its prevention.

*Kansas LEAN.* Kansas LEAN is a state and local coalition with the mission of reducing dietary fat intake associated with cardiovascular disease and some cancers. The coalition is comprised of members from the state, county, and city departments of health, the Dillons grocery store chain, Pizza Hut Inc., the State Cooperative Extension Service, a local television station, and a variety of other organizations. This project is patterned after a national program called Project LEAN (Low-Fat Eating for America Now) that was sponsored by the Henry J. Kaiser Family Foundation of Menlo Park, California (Samuels, 1990).

The work group provided similar consultation during strategic planning and

the development of specific interventions. In collaboration with program officers and the project director, staff designed and conducted intervention research studies that evaluated promising methods, such as the use of price reductions and product sampling to encourage purchases of lower fat foods in grocery stores and the use of incentives to reduce serum cholesterol levels in health fair participants. Kansas LEAN is similarly challenged to focus on bringing about those community changes that are most likely to contribute to its mission.

*Health Action Microgrants Program.* The foundation also developed a program of "microgrants," small grants of \$500 to \$1,000, to stimulate self-help initiatives in health promotion and community development (Paine, Francisco, & Fawcett, in press). The program was designed to remove barriers and provide resources for community change efforts. Microgrant projects consisted of grassroots attempts to change or develop new policies, programs, personal competence, or resources related to the foundation's priorities and consistent with local health concerns. Priority was given to proposed projects in which those affected by the health concern, such as teenaged mothers in the case of adolescent pregnancy, were significantly involved in project planning and implementation.

Awards for the first cycle of microgrant funding in Douglas County illustrate the types of grassroots initiatives that can be supported: (a) a teen speakers' bureau to deliver programs intended to help prevent adolescent pregnancy, (b) a program of fee reduction for mammograms directed by older women who had previously experienced breast cancer, (c) an innovative nutrition program for recovering alcoholics, and (d) a coalition of health consumers that was working to address identified health concerns in the county. This prototype grantmaking program was replicated successfully by Project Freedom in its own "minigrant" program. The health action microgrants program is unique in its commitment to attracting and supporting grassroots, self-help initiatives in health promotion.

### *Monitoring and Evaluation*

As detailed elsewhere (Francisco, Paine, & Fawcett, 1993), the monitoring and evaluation system designed for the Kansas Initiative has two primary purposes: (a) to improve the management of health action groups, and (b) to provide information on group process and outcome that can be used to evaluate a project's success. The objective is not to make a single, post hoc judgment on an action group's effectiveness but rather to provide ongoing information that can be used for improvement.

The monitoring and evaluation system consists of three interrelated activities: (a) monitoring key measures of coalition process and outcome, (b) obtaining feedback from clients on the importance of the coalition's objectives and accomplishments, and (c) using the information to improve group functioning and accomplishments.

*Monitoring Key Measures of Coalition Process and Outcome.* The method system provides data on seven key measures: the number of members recruited, planning products, financial resources generated, dollars obtained, services provided, community actions taken, and community changes produced.

Members recruited refers to new members, affiliates, or partners of the coalition. Planning products consist of new objectives, bylaws, committees, and other results of planning activities. Financial resources generated reflect instances of grants, donations, and professional services received by the group. Dollars obtained refer to the dollar amounts of grants and other monies received. Services provided refer to classes, workshops, newsletters, screenings, and other informational or service programs provided by the coalition for members of the community.

Community actions are those actions taken by group members to bring about changes in the community related to the group's health goals and community change objectives. If a coalition on substance abuse, for example, is trying to discourage merchants from selling alcohol to minors, group members might write letters to the editor, make telephone calls to the mayor's office, or arrange meetings with police officials. Community changes are those changes in programs (e.g., new services established), policies (e.g., modified city ordinance), or practices (e.g., enhanced enforcement) of governmental bodies, agencies, or businesses that are related to the group's health goals and community change objectives. The efforts of a coalition on infant health, for example, might result in a new outreach program for immunizations or new policies that remove barriers to prenatal care.

Coalitions associated with the Kansas Initiative, such as Project Freedom and Kansas LEAN, use event logs to monitor important events and outcomes related to the group's mission. Coalition leaders, committee chairpeople, and other active group members complete the logs. Accuracy and completeness is verified by interviews with group members and by minutes from group meetings. This information is gathered and summarized each month, and fed back in quarterly reports.

The level of these seven key measures of process and outcome are charted in cumulative records to provide a picture of the group's level of activity and accomplishment over time. The graphs show trends that may suggest the need for various kinds of technical assistance and support. For example, consistently high levels of activity or upward trends may suggest strong group motivation and no need for additional consultation. Alternatively, low levels of activity or downward trends may suggest the need for a review of group goals, methods, or membership so as to improve the level of community activation and change.

In addition, archival records and surveys are used to assess progress on ultimate and intermediate health outcomes. With Kansas LEAN, for example, data from Behavior Risk Factor Surveys are used to establish a baseline for self-re-



ported intake of dietary fat. For Project Freedom, survey data on drug use among in-school youth and archival records, such as for single nighttime vehicle accidents, provide some indication about outcomes. Data sources for different initiatives vary greatly in their accuracy and sensitivity, with those initiatives dealing with illegal behavior such as substance abuse posing the greatest challenges for measuring outcome.

*Obtaining Feedback on the Coalition's Objectives and Outcomes.* Key client audiences—including members of the coalition, funding partners, and health experts—are given the opportunity to assess the importance of community health goals and community outcomes resulting from the group's efforts. Information obtained from these client surveys is used to help guide adjustments in the group's health goals and objectives, and attempts to achieve them.

*Using the Information.* The information obtained from monitoring and evaluation system has several important uses. These include (a) to provide an occasion for the group to celebrate accomplishments, (b) to provide corrective feedback when actions or outcomes occur at too low a rate, (c) to help establish relationships between changes in the environment and changes in behaviors associated with health outcomes., and (d) to justify requests for continued or enhanced funding from the foundation or other local sources. This management information is designed to strengthen group process, enhance the level of accomplishment, and promote institutionalization of successful projects.

### *Support System for Program Maintenance and Dissemination*

Chavis, Florin, and Felix (1993) argued for the importance of "enabling" systems—intermediate support organizations and resources networks—in nurturing community development efforts. The support system for the Kansas Initiative has six functions: (a) promoting interest, (b) providing consultation and technical assistance, (c) removing barriers and providing resources, (d) monitoring and evaluating outcomes, (e) rewarding accomplishments, and (f) promoting adoption of successful innovations. Figure 11:2 outlines these general functions and related activities.

To promote local interest in its community health initiatives, the Kansas Health Foundation used a variety of mechanisms including the social reconnaissance process, information gathered on community health concerns, and announcements of available resources and grants. These mechanisms helped involve community members in setting the agenda for local change and offered incentives for coordinated action. The work group's consultation and technical assistance helped with setting goals and objectives, planning actions, and leadership development. By brokering resources, arranging opportunities for peer support, and

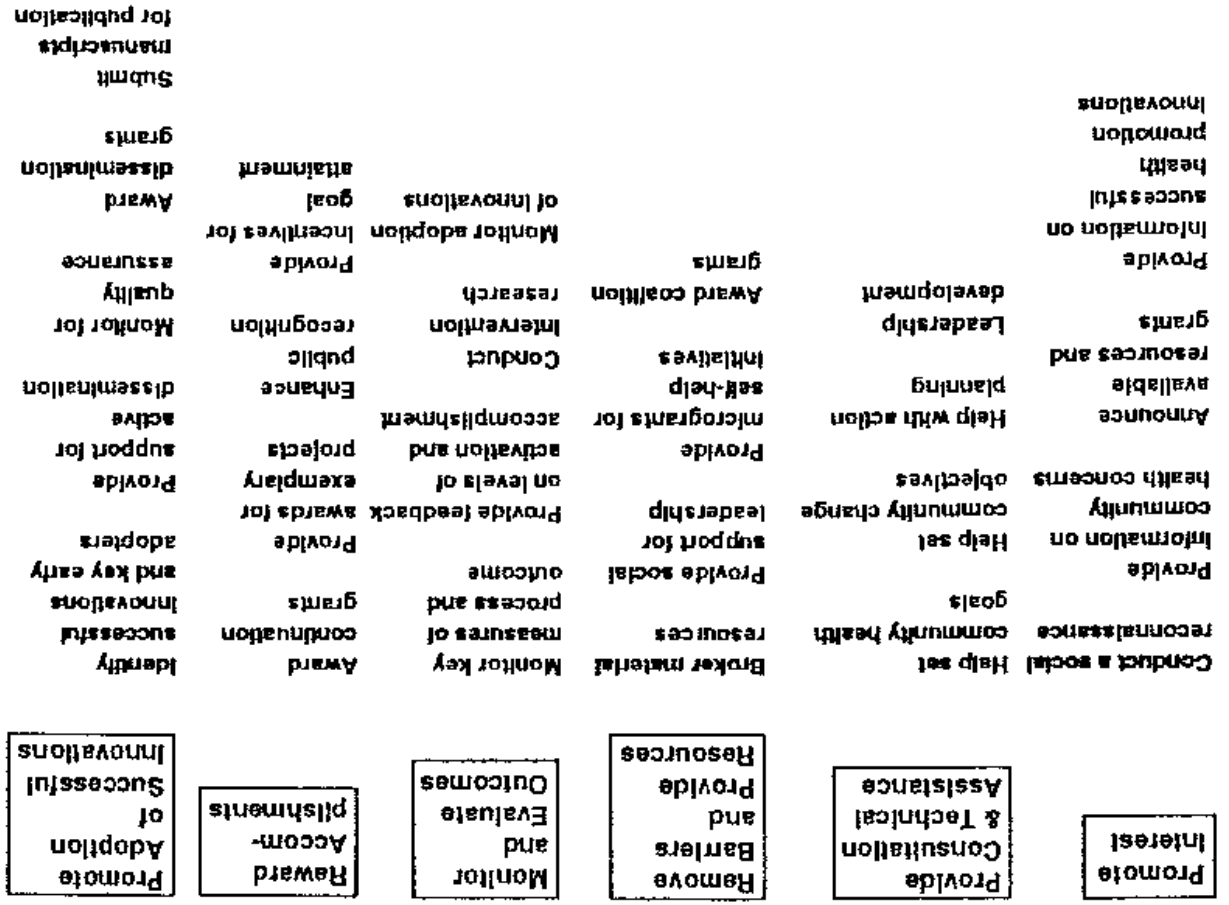


FIGURE 11.2 Functions and activities of a support system for health promotion and community development.

administering microgrants and other programs, the Kansas Health Foundation helped remove barriers and provide resources for its health-promotion initiatives.

As described earlier, the work group helped monitor and evaluate outcomes using data-gathering and feedback systems and intervention research studies. The Kansas Health Foundation attempted to reward accomplishments of participating projects by continuation grants, awards, and incentives for goal attainment. Finally, the Kansas Health Foundation and work group tried to promote adoption of successful innovations by identifying successful innovations and key early adopters, providing support for active dissemination, monitoring the quality of replicated programs, and other dissemination activities.

### *Conclusion*

To be successful, community health initiatives must encourage active involvement of key people of influence, individuals, grassroots groups, and other interested citizens. Through community involvement, specific health concerns are identified, community change objectives are set, and barriers that can subvert program success are noted. Permitting community control of health promotion initiatives serves to mobilize the local human and material resources that are necessary for sustained change efforts. These grassroots efforts should result in programs small enough to manage, and large and durable enough to produce a significant impact on community conditions supportive of health. Ongoing evaluations assess the Kansas Initiative's success in promoting community activation and change, and their effects on longer term health outcomes.

## FUTURE DIRECTIONS

A comprehensive approach to health promotion and community development, such as the Kansas Initiative, faces several challenges. First, it must assist local communities in identifying their health concerns and setting agendas for action. This may require widespread use of social reconnaissance, health concerns assessment, or other methodologies to promote interest and ownership of local health concerns. Second, it must create mechanisms for identifying and creating projects that can produce changes in local communities related to health outcomes. Perhaps resource inventories and networks can be established to help identify and support potential partners. Third, community health initiatives must develop a system for monitoring coalition process and outcome. These data can be used to improve the management of local projects and to elicit support for continuance.

Fourth, a comprehensive initiative must develop a support system necessary to assist local programs in being successful and surviving for the time required to meet its health goals. Consultation and technical assistance and monitoring and

feedback systems may be particularly helpful. Finally, a long-term health promotion initiative must produce evidence of effectiveness and program satisfaction to help ensure its own survival. This is important because support must be maintained over the extended time necessary to meet the initiative's community health goals.

Changes in intermediate health objectives, such as a reduction in smoking or intake of dietary fat, and ultimate health objectives, such as a reduction in heart disease, can take a long time—perhaps 5, 10, or 15 years, or more. Community changes—changes in programs, policies, and practices related to the group's mission—can be observed in a shorter time frame. By carefully tracking these more immediate community outcomes over time and obtaining information about relevant risk factors and health indicators for the same period, it may be possible to establish linkages between community changes and intermediate outcomes.

However, such attempts to contribute to the science of health promotion and community development face several challenges. First, community health initiatives usually consist of multiple program components implemented by different agents, in a variety of channels of influence, and unfolded over long periods. This makes it difficult to specify the independent variable and determine the timing of its implementation. Second, field conditions do not often permit the degree of methodological rigor needed for clear demonstrations of experimental control. For example, the absence of adequate comparison groups may preclude use of control group designs; also, a paucity of opportunities for staggered replication of the intervention across groups may limit use of time-series designs to demonstrate experimental control. Finally, there are several aspects of the social context, such as level of competent leadership and history of success in community change efforts, that may affect the immediacy, magnitude, and durability of program success. Accordingly, it is difficult to ascertain the generality of program effects without multiple replications in a variety of community contexts, and information on durability requires longitudinal studies in several communities.

Comprehensive community health initiatives reflect tensions between top-down (social planning) and bottom-up (locality development) approaches. Top-down approaches use experts to inform choices of health-promotion goals and means. For example, foundations typically use epidemiological data and expert consultants to develop their own health goals and grantmaking priorities. By embracing a community development approach, a granting agency pledges to respect the importance of full participation by individuals, families, and communities in promoting and protecting their own health. However, what if a local health coalition elects to shift its efforts to a health goal not addressed by the funding agency or to use a change tactic inconsistent with the funding agency's policies or values? The degree to which collaborating communities ultimately choose their own health goals and select their intervention strategies will provide an indication of the ultimate balance between top-down and bottom-up methods.

Callahan (1990, p. 40), a medical ethicist, posed some basic questions that affect the nature of health care and health-promotion programs in a society: "What kind of life should we live? What do we want to do with the life that good health can give us?" Implicit in the strategy of health promotion and community development is the valuing of citizen action, of neighbors working together to improve the world that affects us. Collaborative approaches to health promotion contribute to health goals and community empowerment. In so doing, they offer a glimpse of the connectedness that is part of the essence of a good life.

## ACKNOWLEDGMENTS

This research was supported by a grant from the Kansas Health Foundation (#9004041) to the Work Group on Health Promotion and Community Development at the University of Kansas, Lawrence, Kansas. The authors wish to thank our collaborators: Mary K. Campuzano, senior program officer of the Foundation; Steve Coen, program officer of the Foundation; Judy Johnston, Director of Kansas LEAN; and Jim Copple and Barbara Bradley, former executive director and associate director of Project Freedom.

## REFERENCES

- Ashton, J., Grey, P., & Barnard, K. (1986). Healthy cities: WHO's new public health initiative. *Health Promotion International, 1*, 55-60.
- Blackburn, H., Luepker, R., Kline, F. G., Bracht, N., Carlaw, R., Jacobs, D., Mittelmark, M., Stauffer, L., & Taylor, H. L. (1984). The Minnesota Heart Health Program: A research and demonstration project in cardiovascular disease prevention. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, & S. M. Weiss (Eds.), *Behavioral health: A handbook of health enhancement and disease prevention* (pp. 1171-1178). New York: John Wiley.
- Braithwaite, R. L., & Lythcott, N. (1989). Community empowerment as a strategy for health promotion for black and other minority populations. *Journal of the American Medical Association, 261*, 282-283.
- Breslow, L. (1990). A health promotion primer for the 1990's. *Health Affairs, 9*, 6-21.
- Callahan, D. (1990). *What kind of life?: The limits of medical progress*. New York: Simon & Shuster.
- Chavis, D. M., Florin, P., & Felix, M. R. J. (1993). Nurturing grassroots initiatives for community development: The role of enabling systems. In T. Hizrahı & J. D. Morrison (Eds.), *Community organization and social administration: Advances, trends, and emerging principles*. New York: Haworth.
- Cuoto, R. A. (1990). Promoting health at the grass roots. *Health Affairs, 9*, 145-151.
- Epp, J. (1986). Achieving health for all: A framework for health promotion. *Health Promotion, 1*, 419-428.
- Farquhar, J. W., Fortman, S. P., Flora, J. A., Taylor, C. B., Haskell, W. L., Williams, P. T., Maccoby, N., & Wood, P. D. (1990). Effects of communitywide education on cardio-

- vascular disease risk factors: The Stanford Five-City Project. *Journal of the American Medical Association*, 264, 359-365.
- Farquhar, J. W., Fortman, S. P., Maccoby, N., Haskell, W. L., Williams, P. T., Flora, J. A., Taylor, C. B., Brown, B. W., Solomon, D. S., & Hulley, S. B. (1985). The Stanford Five-City Project: Design and methods. *American Journal of Epidemiology*, 122, 323-334.
- Fawcett, S. B. (1990). Some emerging standards for community research and action: Aid from a behavioral perspective. In P. Tolan, C. Keys, F. Chertok, & L. Jason (Eds.), *Researching community psychology: Issues of theory and methods* (pp. 674-675). Washington, DC: American Psychological Association.
- Fawcett, S. B. (1991). Some values guiding community research and action. *Journal of Applied Behavior Analysis*, 24, 621-636.
- Fawcett, S. B., Seekins, T., & Jason, L. A. (1987). Policy research and child passenger safety legislation: A case study and experimental evaluation. *Journal of Social Issues*, 43, 133-148.
- Fawcett, S. B., Suarez-Balcazar, Y., Balcazar, F. E., White, G. W., Paine, A. L., Blanchard, K. A., & Embree, M. G. (in press-a). Conducting intervention research: The design and development process. In J. Rothman & E. J. Thomas (Eds.), *Intervention research: Creating effective methods for professional practice*. New York: Haworth.
- Fawcett, S. B., White, G. W., Balcazar, F. E., Suarez-Balcazar, Y., Mathews, R. M., Paine, A. L., Seekins, T., & Smith, J. F. (in press-b). A contextual-behavioral model of empowerment. Case studies with people with disabilities. *American Journal of Community Psychology*.
- Fortman, S. P., Williams, P. T., Hulley, S. B., Haskell, W. L., & Farquhar, J. W. (1981). Effect of health education on dietary behavior: The Stanford Three Community Study. *American Journal of Clinical Nutrition*, 34, 2030-2038.
- Francisco, V. T., Paine, A. L., & Fawcett, S. B. (1993). A methodology for monitoring and evaluating community coalitions. *Health Education Research: Theory and Practice*, 8(3).
- Green, L. W. (1986). The theory of participation: A qualitative analysis of its expression in national and international health policies. *Advances in Health Education and Promotion*, 1, 211-236.
- Green, L. W., Kreuter, M. W., Deeds, S. G., & Partridge, K. B. (1980). *Health education planning: A diagnostic approach*. Mountain View, CA: Mayfield.
- Green, L. W. & Raeburn, J. M. (1988). Health promotion: What is it? What will it become? *Health Promotion*, 3, 151-159.
- Green, L. W., & Kreuter, M. W. (1991). *Health promotion planning: An educational and environmental approach*. (2nd ed.). Mountain View, CA: Mayfield.
- Hunt, M. K., Lefebvre, R. C., Hixson, M. L., Banspach, S. W., Assaf, A. R., & Carleton, R. A. (1990). Pawtucket Heart Health Program point-of-purchase nutrition education program in supermarkets. *American Journal of Public Health*, 80, 730-732.
- Lasater, T., Abrams, D., Artz, L., Beaudin, P., Babrera, L., Elder, J., Ferreira, A., Snow, R., & Charleton, R. (1984). Lay volunteer delivery of a community-based cardiovascular risk factor change program: The Pawtucket experiment. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, & S. M. Weiss (Eds.), *Behavioral health: A handbook of health enhancement and disease prevention* (pp. 1166-1170). New York: John Wiley.
- Minkler, M. (1989). Health education, health promotion, and the open society: An historical perspective. *Health Education Quarterly*, 16, 17-30.
- O'Donnell, M. (1986). Definition of health promotion. *American Journal of Health Promotion*, 1, 4-5.

- Paine, A. L., Francisco, V. I., & Fawcett, S. B. (in press). Implementing a health-action microgrants program. *American Journal of Public Health*.
- Perry, C. L., Klepp, K., & Sillers, C. (1989). Communitywide strategies for cardiovascular health: The Minnesota Heart Health Program youth program. *Health Education Research: Theory & Practice*, 4, 87-101.
- Puska, P. (1984). Community-based prevention of cardiovascular disease: The North Karelia Project. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, & S. M. Weiss, *Behavioral health: A handbook of health enhancement and disease prevention* (pp. 1140-1153). New York: John Wiley.
- Puska, P., Nissinen, A., Tuomilehto, J., Salonen, J. T., Koskela, K., McAlister, A., Kottke, T. E., Maccoby, N., & Farquhar, J. W. (1985). The community-based strategy to prevent coronary heart disease: Conclusions from the ten years of the North Karelia Project. *Annual Review of Public Health*, 6, 147-193.
- Research Triangle Institute. (1990). *Development of a planned approach to community health (PATCH) process evaluation model*. Atlanta: Centers for Disease Control.
- Rothman, J., & Tropman, J. E. (1987). Models of community organization and macro practice perspectives: Their mixing and phasing. In F. M. Cox, J. L. Erlich, J. Rothman, & J. E. Tropman (Eds.), *Strategies of community organization: Macro practice* (pp. 3-25). Itasca, IL: Peacock.
- Samuels, S. E. (1990). Project LEAN: A national campaign to reduce dietary fat consumption. *American Journal of Health Promotion*, 4, 435-440.
- United States Department of Health and Human Services. (1989). *United States health profile*. Washington, DC: U.S. Government Printing Office.
- United States Department of Health and Human Services. (1991). *Healthy people 2000: National health promotion and disease prevention objectives* (DHHS Publication No. PHS 91-50213). Washington, DC: U.S. Government Printing Office.
- Williams, R. M. (1989). Rx: Social reconnaissance. *Foundation News*, 24-29.
- Wolff, T., & Huppert, M. E. (1987). Community coalition development: Community empowerment in areas of high unemployment. *Massachusetts Area Health Education Center Coalition Sampler*.
- World Health Organization. (1978) *Alma Alta 1978: Primary health care*. Geneva: Author.
- World Health Organization. (1986). The Ottawa charter for health promotion. *Health Promotion*, 1, iii-v.
- World Health Organization. (1988). *WHO Healthy Cities Project: An update*. Geneva: Author.