EVALUATING A STATEWIDE PARTNERSHIP FOR REDUCING RISKS FOR CHRONIC DISEASES

Adrienne Paine-Andrews, PhD; Kari Jo Harris, MS; Stephen B. Fawcett, PhD; Kimber P. Richter, MPH; Rhonda K. Lewis, PhD; Vincent T. Francisco, PhD; Judy Johnston, MS, RD/LD; and Steve Coen, JD

ABSTRACT: We describe a case study evaluation of Kansas LEAN, a statewide partnership with the mission of reducing risks for chronic diseases through dietary and exercise modification. We used a case study design to examine five primary questions related to process and outcome: (a) were the goals of the partnership important to constituents? (process), (b) were constituents satisfied with the partnership (process), (c) were community or systems changes (new or modified programs, policies, or practices) facilitated by partnership efforts (outcome)?, (d) were these changes important to the partnership’s mission (outcome)?, and (e) what critical events helped facilitate community changes (outcome)? Several measurement instruments—a monitoring and feedback system, constituent surveys, and semistructured interviews—were used to address key evaluation questions. Kansas LEAN is a strong statewide partnership with involvement from key representatives throughout Kansas. It is an ongoing, comprehensive health promotion program that plans and implements multiple components, in a variety of settings, to create awareness, behavior change, and a supportive environment. Kansas LEAN has facilitated several important community or systems changes related to its mission. We conclude with a discussion of the challenges of evaluating partnerships that seek to reduce risks for chronic diseases.

Adrienne Paine-Andrews is Associate Director, Kari Jo Harris is Research Associate, Stephen B. Fawcett is Director, Kimber P. Richter is Research Associate, Vincent T. Francisco is Associate Director, all of the Work Group on Health Promotion and Community Development at the University of Kansas, Lawrence, KS. Judy Johnston is Director, Kansas LEAN, Wichita, KS. Steve Coen is Senior Program Officer, Kansas Health Foundation, Wichita, KS.

Requests for reprints should be addressed to: Adrienne Paine-Andrews, Ph.D., Work Group on Health Promotion and Community Development, 4086 Dole Human Development Center, University of Kansas, Lawrence, KS 66045.

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INTRODUCTION

Heart disease is the leading cause of death in the United States.\(^1\) Approximately $60\ billion per year are spent on health care costs and losses due to reduced productivity resulting from heart disease.\(^2\) High fat intake, high blood cholesterol, and lack of exercise are among the modifiable risk factors for heart disease.\(^3\) Accordingly, reducing fat intake, reducing serum cholesterol levels, and increasing physical activity are among the health objectives for the nation.\(^4\)

Community efforts to reduce risks for heart disease have most recently used a coalition or community partnership strategy to reduce risk factors, such as intake of dietary fat. In 1987, the Henry J. Kaiser Family Foundation initiated a campaign, Project LEAN (Low-fat Eating for America Now), which formed coalitions throughout the nation with the mission of reducing risks for chronic diseases through dietary change.\(^5\) In 1990, the Kaiser Family Foundation and Kansas Health Foundation, a philanthropic organization whose mission is to improve the quality of health in Kansas, formed a partnership to create Kansas LEAN, the object of this evaluation.

Partnerships for reducing risks for chronic diseases coordinate efforts among a variety of community sectors, such as supermarkets and schools, to make systems change such as increasing availability of low-fat foods or promoting dietary changes in school lunches. Partnerships integrate the perspectives of health promotion and community development by involving members of the community in identifying local concerns, setting priorities, addressing concerns, and assessing progress.\(^6\) Frequently, community partnerships employ professionals to help develop and evaluate the coalition.\(^7,8\)

This article describes a case study of Kansas LEAN\(^9\) using qualitative and quantitative data to evaluate the process and outcomes of the partnership. First, we describe the context of the partnership and the framework used to guide its development and evaluation. Second, we describe the evaluation questions that were of interest to key stakeholders and the data used to address each question about the process and outcome. Lastly, we discuss the challenges of evaluating a partnership for the prevention of chronic diseases.
THE PARTNERSHIP: ITS CONTEXT AND FRAMEWORK

This section describes the context in which the statewide partnership, Kansas LEAN, functioned. We outline the relationships formed and the framework used for evaluation.

Context

Begun in 1990, Kansas LEAN is a statewide partnership with the mission of reducing risks for chronic diseases among Kansans through dietary and exercise change. With support from the Kansas Department of Health and Environment and planning and implementation grants from the Kansas Health Foundation, Kansas LEAN established a collaborative approach to prevention. Kansas LEAN is composed of approximately 60 organizations and 100 individuals, such as supermarket executives and food producers, with a commitment to reducing chronic diseases through modification in dietary intake and exercise. Kansas LEAN started as a county-wide coalition and soon expanded to encompass the state.

Researchers with the Work Group on Health Promotion and Community Development at the University of Kansas also received funding from Kansas Health Foundation to provide technical assistance and evaluation in support of Kansas LEAN. Primary stakeholders for the evaluation included leadership of Kansas LEAN and senior program officer of the Kansas Health Foundation who was actively involved in the partnership.

Framework for the Evaluation

The framework used for the evaluation was developed by the Work Group drawing on models of community health and development and community empowerment. The framework describes an interactive and iterative process of evaluation. First, community concerns and resources are assessed to identify potential focus areas for partnership efforts. Second, members of the partnership participate in a process of collaborative planning whereby a mission statement, objectives, strategies, and detailed action plans are developed. Third, process and outcome measures are tracked using a monitoring system and other measurement instruments. The measurement system documents the implementation of action plans and the community or systems changes that result from unfolding opportunities. Fourth, data on process and outcome are communicated to relevant audiences. Lastly, as the partnership develops and responds to community concerns, the partnership adapts to changing community con-
ditions and promotes renewal and institutionalization of efforts. The evaluation process then begins again with assessing community concerns and resources in anticipation of a new round of collaborative planning.

This framework for evaluation acknowledges the role of the partnership as a catalyst for change. Partnership members collaborate with community members and statewide activists to launch a multitude of programs, policies, and practices designed to reduce risks for chronic diseases. The monitoring and feedback system is intended to help capture community or systems change: new or modified programs, policies, or practices. These intermediate outcomes may be related to positive changes in more distal health outcomes such as the percentage of people eating lower fat diets. Feedback on intermediate outcomes—the pattern of community or systems change—helps bridge the long delay between setting goals for the partnership and producing more distal positive health outcomes.

**THE EVALUATION SYSTEM**

The purpose of the evaluation is to promote understanding of the functioning of the partnership and support its development and impact on community health. Information on process, outcome, and impact can be reported back to partnerships throughout their development and implementation. Feedback on measures of process, such as the number of services provided and actions taken to bring about community or systems changes can help bridge the long delay between the formation of the partnership and its ultimate effects on risks for disease. Similarly, the system provides feedback on the number of community or systems changes (e.g., new or modified programs, policies, and practices related to the mission) that result from partnership efforts. This intermediate outcome may serve as an early marker of progress.

The evaluation system for Kansas LEAN collected several process and outcome measures using three main measurement instruments: (a) a monitoring and feedback system, (b) constituent surveys about goals, process, and outcome, and (c) semi-structured interviews based on the Work Group's evaluation system. Each is described briefly in the sections that follow.

**Monitoring and Feedback System**

As described elsewhere, the monitoring and feedback system consists of three main components: (a) process and outcome measures,
(b) data collection procedures, and (c) a protocol for providing regular feedback to coalition staff and leadership, funding agents, and other interested parties. The director of the partnership collected information about the partnership and the evaluators clarified and analyzed it providing regular feedback to the director.

Process and Outcome Measures. The monitoring system was used to collect several process (e.g., products of planning) and intermediate outcome measures (e.g., changes produced in the community). Since community or systems changes may be most sensitive to the functioning of the partnership, it is the focus of this report. Community or systems change is defined as new or modified programs (e.g., a worksite health and wellness program), policies (e.g., adoption of a nutrition education curriculum), or practices (e.g., rinsing cooked ground beef to lower the fat content of school lunches) consistent with the partnership’s mission. The measure of community change may be most sensitive to the functioning of the partnership. Table 1 displays illustrative community or systems changes facilitated by the partnership and their average importance rating.

Observational System. Data were collected using event logs and semi-structured interviews. The partnership director provided detailed information about events and intermediate outcomes facilitated by the partnership. Upon receipt of the logs from the director, the evaluators clarified the information, checked for completeness, and then coded and graphed the data.

Reliability, or interobserver agreement, was assessed by having two observers score the event logs. Observed percent agreement (agreements divided by total number of agreements plus disagreements, multiplied by 100) was used to estimate reliability. The average observed percent agreement for the process and intermediate outcome measures collected using the event logs was 78% (range 69%–91%) in 1991 and 86% (range 79%–94%) in 1993.

Providing Regular Feedback. Continuous graphing of the measures allowed periodic updates on progress. Initially feedback was provided monthly, then quarterly, and then more sporadically. Discussions about the data enabled the director and key partners to identify and celebrate early accomplishments, such as a new worksite health and wellness program that offered health screening for employees. Such community changes may have required many actions by staff and partnership members. These data provided evidence of the development, functioning, and intermediate outcomes of the partnership.
### TABLE 1

Illustrative Community or Systems Changes Facilitated by Kansas LEAN

<table>
<thead>
<tr>
<th>Community or Systems Changes</th>
<th>Average Rating</th>
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<tbody>
<tr>
<td>1. In cooperation with the communities of Salina and Dighton and the Kansas Health Foundation, began a two year elementary school intervention involving changes in school lunch, addition of “Changing the Course” nutrition curriculum, enhancement of the physical education curriculum, and community events focusing on healthy diet and exercise.</td>
<td>4.39</td>
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<tr>
<td>2. Along with the Wichita Public Schools and American Cancer Society, conducted a one-year school intervention with second-graders in six low-income schools that involved changes in school lunch menus (decreasing fat content; increasing fiber content; maintaining calories, participation, and costs) and the addition of “Changing the Course” nutrition curriculum to influence dietary knowledge, attitudes, and behaviors.</td>
<td>4.32</td>
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<tr>
<td>3. In cooperation with the Kansas Wheat Commission and other food professional task force members, developed “Check Your 6” nutrition education activity kits focusing on the Food Guide Pyramid and the Bread, Cereal, Rice, and Pasta Group. These kits were provided to over 3,800 teachers and school food service providers and over 8,000 child care providers in Kansas.</td>
<td>4.38</td>
</tr>
<tr>
<td>4. The “Take the Challenge . . . Be a Leaner Eater” worksite program for reduction of dietary fat intake was pilot tested at the USD #259 school service center, then adopted system wide by USD #259, Hallmark Corporation, Metropolitan Life Insurance Data Processing Corporation in Wichita, Kansas, and McBiz Corporation.</td>
<td>4.25</td>
</tr>
<tr>
<td>5. In cooperation with the Wichita-Sedgwick County Child Care Association, developed and tested the first module of nutrition education and meal-planning curriculum for Family Child Care Providers to assist them in adoption of the U.S. Dietary Guidelines for their own families and for the children in their care. In addition, developed and tested remaining modules.</td>
<td>4.22</td>
</tr>
<tr>
<td>Community or Systems Changes</td>
<td>Average Rating</td>
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<tr>
<td>---------------------------------------------------------------------------------------------</td>
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<tr>
<td>6. In cooperation with Kansas Wheat Commission and Kansas State Board of Education, provided 35 back-to-school workshops in 8 locations on “Check Your 6” and “Five-A-Day” nutrition education and awareness materials to over 2000 food service providers and teachers.</td>
<td>4.17</td>
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<tr>
<td>7. Kansas LEAN provided display, featuring food models and test tubes of fat to visibly show the public how much fat is in commonly eaten foods, to over 100 schools and public health fairs attended by over 12,000 Kansans.</td>
<td>4.09</td>
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<tr>
<td>8a. In cooperation with Dillons supermarket, price reduction, shelf prompts and posters were introduced to encourage purchases of lower-fat food products.</td>
<td>4.07</td>
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<tr>
<td>8b. In cooperation with Tabernacle Baptist Church and women’s Group and the KDHE Cardiovascular Risk Reduction Program, sponsored a “Fat Bucks Buffet” for 250 members of the African American Churches in Wichita to introduce them to concepts of fat budgeting and to offer them the opportunity to become facilitators for the “Take the Challenge . . . Be a Leaner Eater!” program through their church groups.</td>
<td>4.07</td>
</tr>
<tr>
<td>9a. In cooperation with Kansas LEAN Partners, sponsored two annual “Fat Bucks Buffet” breakfasts for Kansas Legislators and their staff members to heighten awareness of the relationship between diet and chronic disease, showcase Kansas LEAN Partners’ contributions in this area, and highlight the public-private partnerships within Kansas LEAN.</td>
<td>4.04</td>
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<tr>
<td>9b. In cooperation with the Kansas Health Foundation and Gardner + Greteman, developed, tested, and printed and distributed the “Jack Sprat’s Table” board game to teach the Food Guide Pyramid and fat budgeting concepts to youth and adults in a fun, non-threatening manner. In addition, developed a marketing brochure for districts within the state of Kansas.</td>
<td>4.04</td>
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TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Community or Systems Changes</th>
<th>Average Rating</th>
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<tr>
<td>10. In cooperation with Kansas State University Department of Foods and Nutrition, assisted in the defining of competencies needed by future foods and nutrition professionals so that community nutrition will be maintained as a focus.</td>
<td>4.02</td>
</tr>
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</table>

Constituent Ratings of Goals, Process, and Outcome

Surveys were used to examine constituent satisfaction with partnership goals, process, and outcome.\textsuperscript{13,17,18} Ratings from partnership members, funders, and experts on the importance of the goals of the partnership, satisfaction with the process of partnership building, and the significance of the outcomes facilitated by the partnership were shared with partnership leaders and members.

Survey of Potential Goals. To help with planning for prevention of chronic diseases, we used a survey process to build consensus on proposed community changes to be sought by the partnership.\textsuperscript{19} The membership generated the proposed changes (or goals) using a strategic planning process provided by the evaluators.\textsuperscript{19} The list included changes at the county and state levels. Using a 5-point scale (1 = "very unimportant"; 5 = "very important"), ratings of importance and feasibility were collected from partnership members, representatives of the funding agency, and experts in the prevention of chronic diseases.

Survey of Satisfaction with Partnership Process. Toward the end of the third year, we used a survey to examine satisfaction with the functioning of Kansas LEAN from the perspective of the membership. Using a 5-point scale (1, "very dissatisfied"; 5, "very satisfied"), survey questions assessed planning and implementation, leadership, services, community involvement, and progress and outcome.

Survey of Significance of Partnership Outcomes. We used an outcome survey to examine the significance of community changes facilitated by Kansas LEAN. Using a 5-point scale (1 = "very unimportant" and 5 = "very important") the survey questions invited respondents to rate the importance of each of the community change to reducing risks for chronic diseases.
Interviews with Key Participants

After more than three years into the implementation of Kansas LEAN, the evaluators conducted semi-structured interviews with Kansas LEAN leadership and the most active members to secure qualitative information about the process, intermediate outcomes, and more distal outcomes of Kansas LEAN. The interviews were designed to identify and examine the events most critical during the development and implementation of Kansas LEAN. The following dimensions of each event were explored: why it was important, the context for the event, key actions and actors and other resources, barriers and resistance, and the consequences of the event for the partnership and the community. In this qualitative research, the interviewees were also invited to comment on overall lessons and future directions for Kansas LEAN.

RESULTS OF THE PROCESS AND OUTCOME EVALUATION

Data for several questions important to the partnership’s stakeholders were provided by the evaluation system. The key questions were: were the goals of the partnership important to constituents (process), were constituents satisfied with the partnership (process), were community or systems changes facilitated by partnership efforts (outcome)?, were these changes important to the partnership’s mission (outcome)?, and what critical events helped facilitate community changes (outcome)? Data for each of the key questions are provided in the sections that follow.

Were the Goals of the Partnership Important to Constituents?

A survey of goals was used to build consensus on proposed community or systems changes to be sought by the partnership. Approximately 40 partnership members responded to the survey and rated the importance of the proposed changes. Those with the highest ratings included mandating state standards for comprehensive outcome-based health education programs in schools (4.7 on a 5-point scale with 5 the highest), reducing the fat content of school lunch menus (4.6), and modifying child care center menus (4.5). The lowest ratings were for developing a low-fat cookbook (3.2), developing a program to promote low-fat toppings on cereal grain products (3.2), and increasing supermarket advertising of low-fat products (2.8). Partnership membership and leadership selected proposed changes of relatively high importance and feasibility primarily using data from members. Feedback from representatives of the funding agency was
used to identify potential availability of funding for some of the proposed community or systems changes such as updating nutrition curricula. Ratings from outside experts such as the director of a national effort to reduce risks for chronic diseases helped facilitate the development of a state and national audience for the efforts of the partnership. These data contributed to the planning process by helping identify proposed community changes most likely to reduce risks for chronic diseases.

Were Constituents Satisfied with the Partnership?

A survey of process was used to gather information about the satisfaction of partnership members with several dimensions of partnership functioning, such as planning and implementation. Approximately 30 partnership members responded to the survey (30% response rate). The highest ratings were for the strength and competence of staff (4.4 on a 5-point scale, with 5 the highest), strength and competence of leadership (4.4), success in generating resources for the partnership (4.2), and progress in meeting the partnership’s objectives (4.2). The lowest ratings were for participation of people of color (3.4), training and technical assistance (3.6), and use of media to promote awareness of the partnership’s goals, actions, and accomplishments (3.6). Further, all of the respondents indicated that the community was better off today because of Kansas LEAN. These data were shared with partnership staff and leadership and used in discussions of how to improve partnership functioning.

Were Community or Systems Changes Facilitated by Partnership Efforts?

Figure 1 displays the cumulative number of community or systems changes (new or modified programs, policies, or practices) facilitated by the partnership. Each community change, such as those illustrated in Table 1, was considered a distinct event. The following are examples of separate community changes facilitated by Kansas LEAN: (a) modified school lunch menus to reduce fat and maintain calories in six schools from a large urban area, (b) developed and implemented a statewide nutrition assessment with 5th grade students, and (c) several supermarkets used price reductions and shelf prompts to encourage purchases of lower-fat foods.

To show the additive impact of the partnership, the data are plotted cumulatively. A flat line represents no activity or outcome. The steeper the line, the more activity or intermediate outcomes produced. As shown in Figure 1, after the initial formation of the partnership and during planning, low levels of community changes were found. Sharp, steady increases
FIGURE 1

The cumulative number of community or systems changes (e.g., new programs, policies, or practices). The arrows indicate the timing of critical events reported by the partnership and associated with discontinuities in the data.

in community changes are noted after the completion of action planning with the sharpest increases after the hiring of staff. These data show a steady level of community change that lasted almost three years at which time data collection was discontinued.

Were the Community Changes Important to the Partnership’s Mission?

Not all community or systems changes are equally important to reducing risks for chronic diseases. We used a survey of outcomes to examine the importance of the community changes facilitated by Kansas LEAN to the mission of reducing risks for chronic diseases through dietary and exercise modification. Approximately 47 (47% response rate) partnership members responded to the survey. Taken together, respondents rated the contribution of all the community changes to the mission of Kansas LEAN as 4.4 (with 5 the highest, “very important”).

Table 1 displays average ratings of importance for illustrative community changes facilitated by Kansas LEAN. The items with the highest importance ratings tended to be system changes with the greatest likeli-
hood of long-term impact. Among the items with the highest importance ratings were: a 2-year elementary school intervention involving school lunch changes, nutrition education, enhanced physical education, and community events (4.4), dissemination of “Check Your Six” nutrition education materials to assist teachers, school food service workers and child care providers in teaching the current dietary guidelines (4.4), and the adoption of a worksite program for reduction of dietary fat intake by major employers in Kansas (4.3). The lowest rated community change was a sandwich contest to promote awareness and practical application of the US Dietary Guidelines (3.4). Overall, respondents rated more favorably those changes that were comprehensive and implemented system-wide when compared to awareness activities. These data were used by the members and leadership of the partnership to maintain focus on facilitating changes most important to reducing risks for chronic diseases.

What Critical Events Helped Facilitate Community Changes?

Semistructured interviews with partnership leaders, members, and other key players identified several events that may have affected the functioning of Kansas LEAN. Table 2 outlines several of these events. The critical events included: the initial grant from the Kansas Health Foundation, the hiring of the director and staff, the development of task forces, and institutionalization within the Kansas Department of Health and Environment. These events may have enabled the partnership to facilitate new programs, policies, and practices in the community. Overlaying the identified critical events on the monitoring data permitted an analysis of a possible relationship between patterns of community change and key events in the development and implementation of the partnership. Sharp increases in the rate of community change were noted after: (a) the hiring of staff (June 1990, November 1992, and April 1993), (b) the grant award (June 1990), (c) onset of monitoring and feedback and action planning (August 1990), and the completion of action planning (Fall 1991). The analysis of critical events also provided a description of the history and accomplishments of Kansas LEAN.

DISCUSSION

This article described a collaborative effort to evaluate a statewide partnership for reducing risks for chronic diseases. The evaluation system provided qualitative and quantitative data to examine questions related to constituent satisfaction with partnership functioning, community
### TABLE 2

Critical Events Identified by Key Partners

<table>
<thead>
<tr>
<th>Date of Occurrence</th>
<th>Critical Event</th>
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<tr>
<td>Fall 1989</td>
<td>Initial Formation of Kansas LEAN Coalition.</td>
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<tr>
<td>Fall 1989</td>
<td>Development of Partnerships.</td>
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<tr>
<td>Spring 1990</td>
<td>Finding a home for LEAN.</td>
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<tr>
<td>June 1990</td>
<td>Hiring of LEAN Director.</td>
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<tr>
<td>July 1990</td>
<td>Kansas Health Foundation grant.</td>
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<tr>
<td>August 1990</td>
<td>Press conference and intervention research with Dillon’s.</td>
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<tr>
<td>Fall 1990</td>
<td>Development of Task Forces.</td>
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<tr>
<td>May 1991</td>
<td>Kansas Wheat Foods Commission becomes a partner of Kansas LEAN.</td>
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<tr>
<td>Spring, Fall 1991</td>
<td>Kansas LEAN presentations at national conferences.</td>
</tr>
<tr>
<td>July 1991</td>
<td>KDHE provides 50% of Director’s Salary</td>
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<tr>
<td>November 1991</td>
<td>First annual Partners’ Meeting.</td>
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<tr>
<td>March 1992</td>
<td>Kansas LEAN awarded School Intervention Project grant.</td>
</tr>
<tr>
<td>Spring 1992</td>
<td>First Annual Legislative Fat Bucks Buffet.</td>
</tr>
<tr>
<td>Spring 1992</td>
<td>LEAN awarded American Cancer Society grant.</td>
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<tr>
<td>Summer 1993</td>
<td>LEAN awarded USDA technical assistance grant to conduct the CDC Dietary Intake Survey.</td>
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<tr>
<td>July 1993</td>
<td>Kansas LEAN awarded Prevention Block Grant</td>
</tr>
<tr>
<td>October 1993</td>
<td>Development of Youth Foods and Nutrition Curriculum (pilot testing)</td>
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</table>
changes facilitated by the partnership and their importance, and the critical events that helped facilitate community change. Findings from survey data suggest that partnership members were satisfied with Kansas LEAN on many dimensions including the strength and competence of staff and leadership and progress in meeting the partnership’s objectives. Data from monthly logs and surveys show that Kansas LEAN facilitated the development of a variety of new programs, practices, and policies important to reducing risks for chronic diseases. Future research with multiple partnerships is needed to determine whether the community changes produced by Kansas LEAN produce improvements in more distal community-level measures.

There are many challenges to evaluating community health partnerships. First, improvements in the ultimate health outcome of interest, deaths due to chronic diseases, will not occur for many years. Since, the effects of the partnership on more distal health outcomes are delayed, the evaluation system examined its impact on community or systems changes. Measures of new or modified programs, policies, practices (community or systems changes) may serve as an early marker of reduced risks and enhanced protection for chronic diseases.

Second, community changes facilitated by partnership efforts are not always of equal significance to the partnership’s mission. For example, the adoption of a worksite program for reducing dietary fat intake received higher ratings of importance to the mission than an in-school sandwich contest to increase awareness. The public health significance of community or system changes should be affirmed through surveys and structured interviews with key players and outside experts.

Third, community partnerships produce many types of interventions, including changing school lunches or promoting lower-fat food items in supermarkets and use a variety of strategies, such as providing information or making policy changes. Partnerships focus on multiple targets, such as school children or parents of children in day care, and agents of change, such as teachers or day care providers. They operate in a number of different community sectors, including grocery stores and worksites. The complexity with which partnerships produce community change to reduce risks and enhance protection poses a particular challenge to clearly identifying the independent variable, its dimensions, such as its introduction, removal, and dosage, and its relationship to outcomes of interest, such as reduced consumption of fat. Small-scale intervention research projects can be used to help examine the effects of particularly promising interventions.20,21,22,23

Finally, sensitive and accurate community-level measures necessary
to detect changes in more distal health outcomes related to chronic diseases are unavailable. Although data on deaths due to cardiovascular diseases are available, deaths frequently occur after individual risk factors have been in place for several years. Community-level measures of risk such as the percent of calories from fat consumed by the population or the level of sales of higher-fat dairy products over time are necessary to detect community-wide changes in risks for chronic diseases. Continuing to track deaths due to chronic diseases will indicate whether reduction in community-wide risk over many years actually reduces the incidence of such deaths. To learn more about the ultimate impact of the partnership, community-level measures, such as sales of high-fat dairy products or population-wide percent calories consumed from fat, should be tracked over several years. Further, continuing to monitor community or systems changes facilitated by the partnership will help establish whether changes in the environment produced over several years are related to improvements in community-level measures of risk and the incidence and prevalence of disease.

The monitoring system allows us to track community or systems changes designed to reduce risks and enhance protection, but also has some methodological challenges. First, self-reporting of partnership activities presents questions about the accuracy and completeness of information provided on logs. To address this concern, we follow-up with partnership staff and leadership to review for completeness and check a small sample of reported events against meeting minutes or corroboration with other sources. Second, monthly reporting of partnership activity may increase staff attention to the importance of creating community change and, subsequently, may influence the likelihood that related partnership activities occur. Consequently, the level of community or systems change produced by Kansas LEAN, may be, in part, facilitated by the monitoring system. We recognize that the findings reported in this case study may be limited to partnership staff and leadership that self-monitor their activities. Third, changes in monitoring procedures may also affect the quality of the data. We attempted to control for this by using a standard protocol for coding log entries and securing high levels of observer agreement in scoring. Finally, the monitoring system only tracks the onset of community changes produced by the partnership such as the adoption of a nutrition curriculum, and does not track the offset of such programs, policies, or practices. Future research is needed to clarify the actual dose of the intervention available over time.

Collaborative study of community health partnerships provides unique opportunities for learning about the process and outcome of such
efforts. This system for evaluating partnerships has been adapted and used with a variety of community-based initiatives including those for preventing substance abuse\(^{24}\) and adolescent pregnancy\(^{25}\) and promoting child and community health and development. This broadly based inquiry may contribute to our understanding of the conditions under which collaborative partnerships are most likely to create community change and community-wide impact on more distal health outcomes.

So What?

Collaborative partnerships are a prominent strategy for addressing community health concerns such as prevention of chronic diseases. Yet, few comprehensive evaluations of partnership process and outcome have been conducted. This case study suggests a method for documenting partnership process and outcome. The metric of community or systems change, may provide evidence of community capacity to address identified health concerns. Once community-level measures for chronic diseases and other health concerns are better established, relationships between community changes produced by partnership efforts and community-level impact can be explored. This and other evaluation systems may enable us to better understand collaborative partnerships and enhance community capacity to promote health and prevent disease.

REFERENCES


