The Kaiser Permanente Community Health Initiative: Overview and Evaluation Design

Allen Cheadle, PhD, Pamela M. Schwartz, MPH, Suzanne Rauzon, MPH, William L. Beery, MPH, Scott Gee, MD, and Loel Solomon, PhD

We provide an overview of the Kaiser Permanente Community Health Initiative—created in 2003 to promote obesity-prevention policy and environmental change in communities served by Kaiser Permanente—and describe the design for evaluating the initiative. The Initiative focuses on 3 ethnically diverse northern California communities that range in size from 37,000 to 52,000 residents. The evaluation assesses impact by measuring intermediate outcomes and conducting pre- and posttracking of population-level measures of physical activity, nutrition, and overweight. (Am J Public Health. 2010;100:2111–2113. doi:10.2105/AJPH.2010.300001)

The focus of public health practitioners on policy and environmental change in obesity-prevention efforts has led to the development of comprehensive community initiatives designed to produce a sustained effort by a broad range of community stakeholders. However, there are few credible studies demonstrating that comprehensive community initiatives are effective in lowering obesity rates, and therefore, evaluation of these initiatives is critical. This article gives an overview and describes the evaluation design of one such initiative—Kaiser Permanente’s Community Health Initiative (CHI), created in 2003 to promote obesity-prevention policy and environmental change in communities served by Kaiser Permanente.

The core CHI principles encompass a place-based focus; an emphasis on interventions involving policy and environmental change; collaboratives with representatives of sectors such as health care, neighborhoods, schools, and work sites; community engagement and ownership; and systematic evaluation.

Kaiser Permanente is sponsoring initiatives containing these elements in 30 sites. In this article, we concentrate on 3 northern California communities whose initiatives were implemented between 2005 and 2010.

METHODS

The northern California initiative (Healthy Eating, Active Living–Community Health Initiative or HEAL-CHI) is taking place in 3 largely ethnic minority communities with populations of between 37,000 and 52,000. The HEAL-CHI collaboratives convened a community-wide planning process that led to the adoption of community action plans providing a roadmap for interventions, such as implementing California’s physical education and nutrition standards, constructing walking trails, increasing the availability of fresh produce, and working with city planning departments to incorporate health considerations (e.g., increasing walking) into general plans (Table 1).

The CHI evaluation uses a logic model approach to assessing impact that combines indicators of intermediate outcomes (e.g., environmental and policy changes) with more conventional pre- and posttracking of population-level measures of physical activity, nutrition, and overweight (e.g., via surveys). In assessing impact, the evaluators track intervention strategies using the Documentation of Community Change, a database that includes implementation status and the number or people reached by each strategy.

Two types of “reach” are being tracked for each intervention strategy: (1) the number exposed, which required estimating the number of people who potentially might encounter an environmental change on a regular basis, such as the number of people who live in a neighborhood being redeveloped to be more walkable, and (2) the number affected, i.e., an estimate of the number of people affected in a “significant” way by a program or environmental change. “Significant” is an approximation to “clinical significance” used in the medical literature, i.e., an effect large enough to see clinically measureable changes in health.

Population-level change for adults is tracked through an automated telephone survey and, for youths, through a school-based survey and a statewide fitness test. The phone survey is being conducted among a random sample of adults identified through reverse telephone directories; the youth survey is being administered in a sample of schools within the target neighborhoods. Survey questions for both surveys are drawn from standard instruments whenever possible; for example the Behavioral Risk Factor Surveillance System. The evaluation uses Kaiser Permanente clinical data to provide additional information, particularly for overweight and outcomes such as diabetes and hypertension. The results from the CHI communities will be compared with trends from state and national surveys, and, for the youth surveys and KP member data, with control communities.

RESULTS

Figure 1 provides illustrative data on exposed reach: the percentage of neighborhood residents and school children potentially affected if 3 kinds of interventions were implemented successfully. In the school sector, for example, each community is working to implement districtwide healthy eating policies around vending machines and cafeteria food. The potential number of children exposed is significant: 85% across all 3 communities. In the neighborhood sector, the highest exposed reach is in the physical activity environment, where changes in the built environment—including street improvements to encourage walking, new parks, and bike trails—have the potential to reach 34% of the population.

DISCUSSION

Our principal evaluation challenge has been the same one faced by other evaluators of comprehensive community initiatives: assessing the longer-term, population-level impact of the initiative. Population-level surveys, which are typically used to measure healthy eating and active living outcomes, are expensive and it is difficult to obtain response rates representative of an entire community. Moreover, measuring impact is challenging...
because interventions are typically small in relation to the array of factors that shape physical activity and diet. Our use of intermediate outcomes is in response to these challenges.

Despite the challenges, we believe that our multimethod approach to evaluating CHI is meeting the evaluation goals. The Documentation of Community Change system is providing rich qualitative and quantitative information and should provide a reasonably complete picture of the community changes brought about by CHI.

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### TABLE 1—Examples of Community Health Initiative Interventions: HEAL-CHI, Northern California, 2005–2010

<table>
<thead>
<tr>
<th>Category (Total No. of Strategies)</th>
<th>Intervention Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs (n = 21)</td>
<td>Promote physical activities in after-school programs</td>
</tr>
<tr>
<td>Organizational change (n = 23)</td>
<td>Implement body mass index as a vital sign into well-visits and offer routine obesity counseling and referral</td>
</tr>
<tr>
<td>Organizational change (n = 23)</td>
<td>Promote parents’ and students’ community awareness regarding healthy eating and active living at the targeted schools</td>
</tr>
<tr>
<td>Environmental change (n = 10)</td>
<td>Implement California standards-based physical activity curriculum during school hours in local elementary schools</td>
</tr>
<tr>
<td>Environmental change (n = 10)</td>
<td>Implement breastfeeding policy in local clinics and educate patients and employees on the value of breastfeeding</td>
</tr>
<tr>
<td>Environmental change (n = 10)</td>
<td>Work with employers to adopt and implement worksite wellness policies to promote physical activity among employees</td>
</tr>
<tr>
<td>Environmental change (n = 10)</td>
<td>Install a lighted walking trail along canal banks to provide access to safe physical activity</td>
</tr>
<tr>
<td>Environmental change (n = 10)</td>
<td>Participate in Safe Routes to School Project to increase physical activity options in their neighborhoods</td>
</tr>
<tr>
<td>Public policy (n = 2)</td>
<td>Increase purchase or distribution points for fresh fruits and vegetables in the community</td>
</tr>
<tr>
<td>Public policy (n = 2)</td>
<td>Work with city and county code enforcement to enforce existing laws and ordinances that govern the sale of alcohol to decrease the public nuisance associated with liquor stores</td>
</tr>
<tr>
<td>Community capacity building (n = 15)</td>
<td>Affect the urban planning via the city general plans and explore other smart growth opportunities</td>
</tr>
<tr>
<td>Community capacity building (n = 15)</td>
<td>Mobilize residents to create an ongoing grassroots effort to advocate for healthy eating and physical activity options in their neighborhoods</td>
</tr>
<tr>
<td>Community capacity building (n = 15)</td>
<td>Build worksite sector leadership and infrastructure</td>
</tr>
<tr>
<td>Community capacity building (n = 15)</td>
<td>Recruit faith-based communities into the HEAL collaborative</td>
</tr>
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**Note.** HEAL-CHI = Healthy Eating, Active Living–Community Health Initiative.

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**Contributors**

A. Cheadle, P. Schwartz, S. Rauzon, W. L. Beery, S. Gee, and L. Solomon participated in the conceptualization and refinement of the Community Health Initiative evaluation methodology reported in the article and the writing of the article.

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**Human Participant Protection**

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