Evaluating Community-based Child Health Promotion Programs: A Snapshot of Strategies and Methods

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Nemours Health & Prevention Services
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By

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We would also like to thank the Delaware partners who attended the meeting and contributed to the discussion. A list of Delaware participants is included in Appendix C.
EXECUTIVE SUMMARY

Program evaluation of community-based initiatives that address children’s health issues is necessary not only to document program effectiveness but also to note areas for possible improvement and to disseminate promising practices and add knowledge to improve children’s health. However, despite many efforts to evaluate community-based programs, only a modest amount of information on the effectiveness of these initiatives exists.

As the field of evaluation has grown and matured there has been an increased interest and dedication on the part of many evaluators to partner with program administrators and community members to incorporate evaluation into new or existing programs. There has also been an increased interest in and commitment by funders and states to the evaluation of community-based initiatives in order to ensure accountability for grants.

The lack of information about how to effectively evaluate community-based child health promotion projects led Nemours Health and Prevention Services (NHPS) and the National Academy for State Health Policy to convene a meeting to identify and share methods used around the country to evaluate community-based initiatives and to work together on this project.

The meeting focused on the very practical issues involved in evaluating community-based programs from the perspectives of program administrators at the state and local levels, researchers, and evaluators. Representatives of Arizona, California, Kentucky, Maine, North Carolina, Washington, and the Centers for Disease Control and Prevention’s Prevention Research Centers Program attended the meeting.

This report provides practical information that states and community groups can use to develop evaluation components of community-based projects that focus on child health promotion. It is a snapshot of seven projects nationwide. The report provides themes and examples that emerged from the meeting in relation to evaluation design, process and partnerships, outcomes, and dissemination. Meeting participants agreed that for best results the evaluation needs to be built into the program from the start, and evaluators need to work in partnership with program administrators, community members, and funders in designing, conducting, and disseminating evaluation results.

Programs may need to address underlying tensions that may exist between program administrators and evaluators when trying to determine the balance between the community’s interest in evaluation and the evaluator and funders’ concerns with rigorous evaluation methodologies. Being clear about the purpose of the evaluation, listening to stakeholder needs, and designing well constructed evaluations can alleviate some of these concerns. Meeting participants also emphasized the importance of determining roles and responsibilities of various partners in the evaluation process and the need for interim indicators when attempting to achieve long-term behavior change.
Finally, meeting participants stressed the need for adequate funding for evaluation and for dissemination of results in a timely and user-friendly way tailored to the needs of various audiences.
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INTRODUCTION

Evaluation of Community-based Child Health Promotion Programs

Evaluation of community-based programs is important for a variety of reasons. Evaluation allows one to obtain a better understanding of a community, obtain and/or increase funding to address identified community needs, and provide support for policy and system changes.

Despite many efforts to evaluate community-based programs, “only modest information on the effectiveness of community-based initiatives exists.”¹ Many community-based programs that seek to improve children’s health are not evidence-based (proven effective by controlled trial) or successful (proven effective by regional or national dissemination). Most programs seek to make long-term changes in health behaviors, and these outcomes are difficult to measure.²

The question of how much emphasis to place on evaluation of community-based programs is debated within the field. Evaluators come from a wide range of academic and professional disciplines and have their individual views, perspectives, philosophies, methods, and motivations regarding evaluation. Program administrators also come from various backgrounds. The field consists of practitioners with diverse skills, outlooks, and ideologies, all of whom view community-based evaluation from their individual perspectives.

While some emphasize the need for evidence-based practices, others note the lack of funding that is often available for evaluation, the difficulty in evaluating long-term behavior change from short-term projects, and the need to tailor programs to fit diverse communities in order to be successful and to build trust within communities. For instance, the Centers for Disease Control and Prevention’s Guide to Community Prevention Services³ provides evidence on programs that have been effective. However, the Guide stresses that the evidence needs to be complemented by local knowledge about the community, including what might be feasible and acceptable in diverse settings, and the needs of the population. According to the Guide, for example, there is strong evidence of the effectiveness of school-based physical education to reduce obesity in children, but there is insufficient evidence to determine the effectiveness of multi-component school-based nutrition programs. This may be because these interventions are

¹ Community Tool Box:http://ctb.ku.edu
³ Centers for Disease Control and Prevention, Community Guide to Preventive Services First and only broad-based systematic review of the efficacy, feasibility, and cost-effectiveness of community-based programs that aim to prevent disease or promote health. www.thecommunityguide.org. accessed 1-13-06.
not effective. However, it may also be because they have not been rigorously evaluated or tested.\textsuperscript{4}

As the field of evaluation has grown and matured there has been an increased interest and dedication on the part of many evaluators to partner with program administrators and community members to incorporate evaluation into new or existing programs. Program evaluation is necessary not only to document the effectiveness of the program but also to note areas for improvement.\textsuperscript{5} Community leaders and funders may request evaluation results before offering their support to sustain community activity. There has also been an increased interest and commitment by funders and states to the evaluation of community-based initiatives in order to ensure accountability for grants. In reviewing grant applications, funders may look for logic models to determine whether the proposal makes sense and may look for good evidence for the proposed intervention. They are also often looking at evaluation and logic models to determine whether a project will be replicable in other locations.\textsuperscript{6}

The shift in emphasis on evaluation has caused evaluators and program administrators to view evaluation through a lens that considers the need for partnership, includes additional perspectives in the evaluation design and process, and considers how results will be disseminated, in addition to the success of the intervention.

The Centers for Disease Control and Prevention (CDC) Framework for Program Evaluation\textsuperscript{7} suggests using the following steps and standards to ensure an appropriate and useful evaluation scheme:

1) Engage stakeholders
2) Describe the program
3) Focus the evaluation design
4) Gather credible evidence
5) Justify Conclusions, and
6) Ensure use and share findings

Project Overview

The lack of information about how to effectively evaluate community-based child health promotion projects led Nemours Health and Prevention Services (NHPS) to contract with the National Academy for State Health Policy to work together on this project to convene a meeting to identify and share evaluation methods.

The purpose of this meeting was to bring together community-based program administrators along with evaluators and researchers to share their knowledge and experience regarding what works and what does not work when evaluating community-based initiatives. The meeting focused on the very practical issues involved in evaluating community-based programs from the perspectives of program administrators at the state and local levels, researchers, and evaluators. NHPS intends to incorporate any promising evaluation practices into its developing projects and initiatives in order to evaluate the impact of its programs on the lives of children it touches, its community partner organizations, and the broader communities it reaches. NHPS is also committed to adding to the body of knowledge on child health promotion and disease prevention.

At the start of the project, NASHP, with guidance from NHPS, identified state and community-based initiatives that incorporated evaluation as an integral component of their projects. NASHP conducted phone interviews to gather more information about the programs. Based on the interviews, NASHP and NHPS selected representatives from seven states (Arizona, California, Kentucky, Massachusetts, Maine, North Carolina, and Washington) to participate in the meeting. In order to solicit various perspectives about evaluation, NASHP and NHPS invited a program administrator and an evaluator from each program to attend (See Appendices A, B, and C for complete lists of participants and project descriptions)

The participants represented the following programs and agencies:

- **Arizona**: Blowing Smoke Project: Rural Health Office, University of Arizona Mel & Enid Zuckerman College of Public Health
- **California**: The Healthy Eating, Active Communities Initiative: The California Endowment
- **Kentucky**: Kentucky Center for Smoke-Free Policy and ALERT/Pathways, Inc. Regional Prevention Center
- **Massachusetts**: Peace Games, Inc.; located in Boston, MA and Los Angeles, CA
- **Maine**: Healthy Maine Partnership: Maine Bureau of Health
- **North Carolina**: Color Me Healthy Project: North Carolina Cooperative Extension Service; NAP SACC: Nutrition and Physical Activity Self-Assessment for Child Care: Department of Nutrition, University of North Carolina at Chapel Hill

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8 The Center for Evaluation and Research at NHPS supports the development of programs that are grounded in the best available evidence and evaluates programs to continuously refine, improve and measure the impact on child health status over time.

9 Not able to attend due to weather.
NHPS convened the meeting at its headquarters in Newark, Delaware, in June of 2005. In addition to the programs described above, nine stakeholders from the State of Delaware attended and observed the meeting.

**Overview of the Report**

This report is intended to provide practical information that community groups and states can use to develop evaluation components of community-based projects that focus on children’s health promotion. It provides a snapshot of seven projects nationwide. It is not intended to provide a theoretical discussion of evaluation methods or to serve as a comprehensive review of evaluation programs.

The report is divided into four sections. Each provides a general overview; elaborates on key themes related to the topics that were discussed in the meeting, including relevant examples from the participating projects; and provides information about tools that are available for use by interested parties. The report is organized into the following sections:

- Evaluation Design;
- Evaluation Process and Partnerships;
- Evaluation Outcomes; and
- Evaluation Dissemination.
EVALUATION DESIGN

Evaluation designs can be simple or complex. However, regardless of the complexity, they are generally designed around three points: the questions the evaluation will answer, the methods and procedures used to answer the questions, and the relationship between the evaluators, program administrators, and program participants or community members in the case of community-based projects. Conducting community-based evaluations with community evaluators can present very significant challenges if these factors are not taken into account.

According to some experts, community programs can be difficult to evaluate because they often have broad and multiple goals. Evaluations must: be flexible and responsive to changing local needs and conditions; can take many years to produce results; and require multiple ways of thinking about data and analysis over the long-term. Therefore, it is important to use an evaluation design and methods that will enhance the quality of the project without being too complex.

Key Themes and Examples

In order to improve evaluation outcomes, community-based initiatives consider evaluation an integral part of a partnership among funders, grantees, and participants. They start with evaluation in mind and involve the evaluators early in the program.

Meeting participants agreed that for best results the evaluation needs to be built into the program from the start, and evaluators need to work in partnership with program administrators and community members. Bringing evaluators in at the end of a project to review collected data estranges them from the process and prevents a feedback loop that could improve data collection and program and evaluation design. Partnership promotes efficient focused data collection for both groups.

When evaluating community-based programs it may be necessary to address underlying tensions that can exist between program administrators and evaluators. Tensions can emerge when trying to determine the balance between what the community may perceive as evaluation for the “sake” of evaluation and the evaluator’s perspective on the value of the data. Projects that build in evaluation from the start and integrate evaluators into the day-to-day project obtain better data because evaluators and project staff have similar understandings of the problem/project and can discuss the best data to collect from both perspectives.

The Arizona Blowing Smoke project, a media literacy-based tobacco prevention curriculum for middle school youth that helps them analyze tobacco use promotion messages in movies popular with youth, found it important to have evaluators who are willing to be involved with the program, not just the evaluation. From their experiences, they suggest working only with evaluators who will get involved with the program as well as conduct the evaluation. They take this approach because the evaluator can assist with the evaluation design from the beginning of the project.

The California Endowment’s Healthy Eating, Active Communities initiative is a strategic initiative to reduce disparities in obesity and diabetes by improving food and physical activity environments for school-age children. The most prominent feature of the program is a community demonstration component that provides grants. The primary goals of the demonstration component are to implement and evaluate strategies to improve environments for healthy eating and physical activity and to create momentum for widespread changes in policy and practice. In order to accelerate sharing of lessons and resources and to build momentum for the project, the project’s team, which includes Program Staff, Program Consultants and Evaluators, meets prior to project start to review the literature and recommend an implementation strategy. The project team then recommends an implementation strategy and a defined set of outcomes for the project to the foundation. The evaluation design is based on the expected outcomes related to the project.

The Maine Bureau of Health created the Healthy Maine Partnerships (HMPs) initiative as a partnership of state and local health promotion efforts addressing tobacco control, physical inactivity and poor nutrition in communities and schools. The HMP initiative design was also extended to the evaluation design, creating a comprehensive approach to evaluation. While previously, evaluations for state programs and their associated local level interventions, were conducted separately for each categorical program, within the HMP initiative, the evaluation funding is now leveraged across programs. In this approach, as evaluations are conducted, all risk factors can be addressed in single data collection efforts and tracking systems.

Community-based evaluation requires well constructed tools.

The Centers for Disease Control and Prevention (CDC) network of Prevention Research Centers brings academic researchers, community members, and public health agencies together to collaborate on developing effective evaluation strategies. Several participants mentioned that regardless of the intervention they use the CDC’s Framework for Program Evaluation to remind them of the key components needed to have successful evaluations. Some

meeting participants have used the CDC’s framework to train community members on the importance of evaluation.

- **The Healthy Maine Partnerships** learned the importance of well-constructed evaluation tools when the local partnerships were required to implement an outcome reporting system. The first tools elicited narrative responses that were not consistently reported across local sites. Evaluators and program administrators learned that this approach produced too much variability in the data to be useful for evaluation purposes. To address this data collection design issue, tracking tools were redesigned to elicit short and succinct answers, response rates improved and data patterns were more easily tracked.

**Program administrators and evaluators listen, negotiate, and involve the community. They try to carefully balance scientific rigor with community input in designing evaluations.**

Large institutions such as universities may be more prepared to write and present a comprehensive grant application, including evaluation design, to a funder, but they often have weaker ties to the community than a locally organized community project. One common barrier, community mistrust, arises from a long history of university-led research that does not benefit, and sometimes harms, community members. 12 Community organizers may have a better idea of community wants and needs, but may not be as sophisticated in evaluation design and therefore may not be as successful at being awarded grants to pursue project goals that are closer to the local area interests.

Cooperation and partnership between these groups can promote an effective design that balances the use of validated tools to meet a certain level of rigor while allowing the community to develop an evaluation design and adapting tools to their needs and assets. Every project may not need to go for the “gold-standard” quasi-experimental design. There are ways to be creative and still meet the needed level of scientific rigor.

- **The Arizona Blowing Smoke Project** found listening to youth and community members involved in the project was important. To assist these partners with improving the success of the project they:
  - Made sure the evaluator and evaluation design met the needs of the target group.
  - Pilot tested the curriculum and the evaluation materials with their target group.
  - Kept questions simple.
  - Learned to listen and negotiate with the youth and community.

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Used feedback to revise the curriculum and evaluation questions and ensure that the intervention and what is being evaluated fits their logic model.

- **The California Endowment’s Healthy Eating, Active Communities project (HEAC)** developed partnerships with various interest groups in order to work with a wider group of interested parties. The evaluators are considered part of the project team and are expected to establish workable and productive relationships with the grantees. As a result, the evaluation team is expected to share findings with both the foundation and the grantees in a useful format. The evaluation team takes the opportunity to meet with grantees, explain upcoming data collection processes and get feedback regarding specific interests. These relationships are built with an understanding that the evaluation is initiative-wide and led by the foundation. This compares with other types of evaluation that are community-driven.

- **The Kentucky Center for Smoke-Free Policy and ALERT/Pathways, Inc. PRC** works to provide Kentucky communities with science-based strategies for advancing smoke-free policies. The center designs the evaluation by using a top down/bottom-up process that is negotiated with the community. Part of this process involves providing community members with an understanding of the need for evaluation and emphasizing that evaluation is not a pass/fail grade. By using this approach, they have found the community better understands and supports the value and need for evaluation.

- The purpose of **North Carolina’s Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) project** is to evaluate the effectiveness of a nutrition and physical activity intervention at improving the environment of child care centers. In order to design the evaluation, the evaluators first determine how they can be of service to the project without being a distraction or imposing a burden on program people. They listen to the voices of current participants, potential participants and other stakeholders.

- The **Washington State Steps to a Healthier Washington project**, part of the U.S. Department of Health and Human Services (HHS) initiative to help Americans live longer, better, and healthier lives, uses a participatory evaluation model, coordinating decisions made among local partners. They chose this approach because they discovered a lack of clarity among roles and responsibilities. They have found that this approach allows individuals to have a clear understanding of their role on the project. It also opens communication between stakeholders and allows for the design of the intervention and evaluation to be easily negotiated. They think through the roles of each person involved in the project, negotiate how the intervention happens between groups, poll the community, have the state evaluator design the tool, and have the evaluator provide input that is shared with program administrators.
Evaluators and program administrators identify what constitutes success for a program and try to develop meaningful measures to gauge success.

Programs can attempt to identify a feasible, clearly defined community benefit with a timeline for achieving that benefit.

- The California Endowment’s Healthy Eating, Active Communities Initiative emphasizes evaluation as a learning opportunity. They focus on policy changes that can lead to reduced environmental risk factors for obesity as opposed to focusing on changes in individual health outcomes. They are making this shift because they realize that even a major funder, such as The Endowment, faces challenges in attempting to demonstrate changes in health outcomes at a population level in a short time period. However, they realize grantees can make movement toward and/or accomplish changes in systems and policy that can affect health outcomes.

- The North Carolina NAP SACC project is shifting the thought process for evaluation from a grading system where ‘A’ equals pass (there was an apparent change as the result of the intervention) and ‘F’ equals failure (there was no change) to having the evaluation tell a story that illustrates successes and places needing improvement.

Logic models can help discern whether results are attributable to interventions.

Logic models help to clarify the expected results of a project, including the short, intermediate, and long-term outcomes, and identify how the project’s activities will contribute to achieving those outcomes. Evaluators often develop them with input from program administrators and community members. Logic models help to identify key information that will help to determine if a project is on track.

- Arizona’s Blowing Smoke Project has found a logic model can assist with identifying roles and keeping the program on track. They found this process has helped with relationship building and increasing stakeholders’ interest in the final product and the evaluation.

- The California Endowment’s Healthy Eating, Active Communities Initiative developed an initiative-wide logic model to guide the initiative’s work in each of five sectors - schools, after school programs, neighborhoods, media and advertising, and health care - to engage youth, families, community leaders, health professionals, and others in targeted communities in efforts to reduce

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obesity toward specified outcomes. Based on the initiative logic model, grantees developed their own logic model which is adapted to their unique community circumstances during a six-month planning period to set the stage for discovery about how factors in social, economic, and physical environments can be changed to reduce disparities in health status.

- The logic model for Washington State Steps to a Healthier Washington project explains how the project’s activities can lead to policy change, which ultimately can change behavior and reduce disease (see appendix for logic model).

Community-based initiatives stay focused and only collect the information to be used in the evaluation of the project.

- The California Endowment’s Healthy Eating, Active Communities Initiative ensures that the evaluation work is focused on the expected outcomes for the entire initiative by including the evaluators in the project team. To keep the evaluation focused they answer key questions such as: Where are we going with the program? Are we staying focused on our outcomes? What are challenges and/or opportunities within the initiative? Foundation staff has found this process keeps the project focused on program outcomes.

- The Healthy Maine Partnerships has evaluators focused on creating evaluation tools that are consistent across the state, to show statewide impact of the health promotion initiative. Local intervention sites can then use that information to report on their individual work in the context of the larger state-local partnership initiative. To obtain the desired information for the evaluation design and not burden local intervention sites or individual projects with unnecessary data collection, evaluators determine the highest level of rigor that can be used within the confines and limitations in time, budget, skills and funding requirements. Local Partnership Directors are asked for input and feedback on data collection tools.

- The ALERT/Pathways, Inc. RPC. started their project with 150 questions in their evaluation materials, which took participants two class periods to complete. To refine the evaluation tools they assessed the value of each question, identified what would be done with the data collected, and determined if the information was going to be used in their dissemination strategy. If a question served no practical purpose it was eliminated.

- North Carolina’s Color Me Healthy Program, which is designed to provide limited resource children ages four and five with learning opportunities on physical activity and healthy eating, focused their evaluation on the program’s curriculum. By focusing on the curriculum they were able to determine critical questions for the evaluation and to eliminate nonessential questions; everything that remains goes back to the evaluation’s purpose.
• The Washington State Steps to a Healthier Washington project only collects information that is important to inform the project. The Steps project focuses its evaluation on intermediate-level outcomes – policy – and uses the data to change the way the state does business. They focus on creating surveillance systems at the State level with modest funding to influence policymakers, schools, communities, and other policymakers.
Evaluation Design

Tools

These tools are available on the NASHP website, www.nashp.org.
Go to the Evaluation Toolbox to access them.

Arizona Blowing Smoke project provides information on the methodology and forms that kids use to evaluate movies for tobacco placement:
http://www.blowingsmoke.arizona.edu/Movies/movies.html


Centers for Disease Control and Prevention- Tobacco Information and Prevention Source

The California Endowment provides grantees resources and a toolkit to support evaluation on their website, http://www.calendow.org/evaluation/evaluation_toolkit.stm

North Carolina’s NAP SACC Program’s outcome evaluation measurement tool, the Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) instrument, is available at http://www.napsacc.org/ (requires log-in)

Color Me Healthy

The Healthy Maine Partnerships report on Maine Cardiovascular Health Program Analysis of Youth Cardiovascular Health Questions discusses methodology issues:

The Maine Adult Tobacco Survey 2004: A Summary of Findings includes the survey instrument, methodology, and findings:

The Maine Inventory of Environmental Indicators for Tobacco, Physical Activity and Nutrition explains the indicators and how to use them:
http://www.surveymaine.com/HMPSH/HMP/resources/ei_t1.pdf

A Coalition Tool allows participating coalitions to enter data including workplans and reports:
http://www.surveymaine.com/HMPSH/HMP/documentation/index.html (requires log-in, instructions on this site)
Evaluation Design

Tools (Continued)

The W.K. Kellogg Foundation Evaluation Handbook Battle Creek (MI) WK Kellogg Foundation. 1998. provides a practical guide to constructing logic models, which are matrices that match program goals with specific, measurable activities and outcomes: www.wkkf.org/pubs/Tools/Evaluation/Pub770.pdf

Thinking about Healthy Communities Evaluation. This is a tool that helps outline the decisions and clarifications that need to be made in order to conduct useful evaluation of the Washington state Healthy Communities work, so that the Department of Health, the University of Washington, and the Moses Lake/Mount Vernon leadership teams can make the best use of their limited resources to meet evaluation goals. It addresses evaluation design, process and partnerships, and dissemination issues. http://www.nashp.org/Files/WA_state--_Thinking_about_HC_evaluation.pdf

Research Tested Intervention Programs (RTIPS), a planning, implementation and evaluation model developed for comprehensive cancer control is available at: http://cancercontrol.cancer.gov/rtips/

State and Local Area Integrated Telephone Surveys provides validated and publicly available health behavior surveys managed by the CDC. Questions can be used for community-based evaluation: www.cdc.gov/nchs/slaits.htm
**EVALUATION PROCESS AND PARTNERSHIPS**

Evaluations are created by multiple stakeholders, including program administrators, community members, funders and program participants. Meeting participants noted that, to whatever extent possible, it is important for current or potential stakeholders to be involved in the evaluation process and to be active partners with identifiable roles and responsibilities in the project. This means the evaluator, program administrator, and community members need to be equal participants in the evaluation process.

### Key Themes and Examples

**Evaluator seek to identify processes that work for program administrators in order to collect valid data.**

- The Arizona Blowing Smoke Project found the consent process for their evaluation to be somewhat problematic for teachers due to the some difficulties they experienced collecting signed parental consent forms from students. They also found that the language required by the University Institutional Review Board is intimidating to some parents and could potentially reduce project participation in communities with low literacy levels.

- The California Endowment previously had grantees hire their own evaluators but no longer uses this approach. They found the capacity of evaluators across the state varied significantly. Now, a liaison from the grantee organization serves as a point person and works with the Endowment’s evaluation team. To build partnerships, they identify the stakeholders, engage the community, and assess their expectations for the program and the evaluation. This keeps the evaluation relevant to the needs of the community.

  On another project The Endowment discovered that evaluators and technical assistance providers who were responsive to and understood the communities helped to increase data collection. They found the project’s outcomes largely depend on having culturally competent evaluators, which encourages wider community participation in the project. This was first discovered after they found low Hmong participation in a project in a community with a large Hmong ethnic population. To address the problem, the Endowment hired an evaluator with experience in South Asian communities and hired an experienced Hmong subcontractor to conduct the evaluation. This resulted in improved Hmong participation in the project.

- The Healthy Maine Partnerships uses a model similar to California’s. The state contracts with evaluators who are then responsible for completing the evaluation statewide. The evaluators are responsible for setting up valid data collection.
methods on health behaviors, attitudes, and practices as well as policy and environmental change. In addition, the evaluators work with the state to provide guidance on the local intervention reporting tools, both web-based and paper-based. Individual local Partnerships can then use this information to conduct their own, local-level evaluation. This state-local approach to evaluation leverages resources for survey administration and data collection and yet recognizes the local Partner’s need to evaluate and report progress to their local partners using their knowledge of local context. The state-level evaluators provide technical assistance and training at state and regional meetings.

- **Kentucky’s Center for Smoke-Free Policy** suggests evaluators make forms short, quick, and easy since people typically dislike filling out forms, surveys, and reports. For example, the tobacco control program had a 65 percent response rate using an online 7-page report that took 10 minutes to complete. Willing program staff participation is crucial to obtaining high response rates. They also suggest projects build the rationale behind the evaluation into program staff training.

- **North Carolina’s Color Me Healthy Project** has implemented a 3-tier evaluation model: participants attending the projects’ training sessions complete a training evaluation, there is an in-depth evaluation based upon the program objectives, and there are in-depth interviews. Project evaluators learned early that community partners want evaluation results; however, many do not want to go through the evaluation process. To assist with data collection, the evaluators inform participants about how the data collected will be used and provide reassurance that they are evaluating the program, not the individual. They found participants were more comfortable with evaluations by phone than in person. To enhance the quality of data collected, the evaluators shifted from in-person interviews to phone interviews.

**Evaluators explain and reinforce evaluation goals and processes so that program administrators can play an active role and buy into the evaluation process.**

A key indicator of project success is whether the staff think the project is important. If completing surveys and interviews is perceived as tedious, time consuming, or inconvenient, participants will not produce reliable or valid data to evaluate the program. Program staff need to be engaged with the project before attempting to influence communities.

- Prior to the Blowing Smoke Project, the **Arizona Media Literacy Program** conducted a project in which the project evaluators were not integrally involved in the development of the goals, objectives and activities of the project. The evaluators did not observe the intervention taking place and they did not administer the evaluation instruments. The project staff were given the evaluation instruments to disseminate and collect, and completed instruments were picked up.
by the evaluation staff and “disappeared” with little to no communication between
the evaluators and the project staff until the evaluation results were entered and
analyzed. This method of evaluation meant that data analysis took place in a
vacuum without adequate reference to the program goals and activities.

The Blowing Smoke Project took a different approach and integrated the
evaluators more closely with the program staff. Nevertheless, they found school-

based data collection challenges in designing the evaluation so the students and
teachers took the evaluation seriously. Evaluators found that if teachers approach
the surveys “lightly” the students may not take the project’s evaluation seriously.
This can potentially skew the results of a project. Another issue arose when they
discovered many students approached completing surveys the same way they
would school exams; as if there were right and wrong answers. When teachers
were assigned to participate by the principal those teachers often resisted
implementing the program. The project worked with existing tobacco prevention
liaison teachers and other facilitators to identify teachers more willing to
participate in the project. They explain to participants that the only way to get
information about the program to the funders and the CDC is by completing the
evaluation process. They have found promoting understanding of the purpose of
the evaluation improves outcomes. They also have found that teachers are often
too busy to be contacted during school time, so identifying ways to contact them
at home in the evenings and/or on the weekends has promoted increased
communication.

• The California Endowment and Kentucky Center for Smoke-Free Policy
emphasized the importance of evaluators and program administrators working
together from the project’s inception. Evaluators may discover changes needed to
the program in order to be able to successfully evaluate it. Program participants
may recommend changes to the evaluation tools to ensure a successful evaluation
process. To work efficiently, they suggest forming collaborative relationships
with stakeholders and planning for a feedback loop.

• Washington State’s Steps to a Healthier Washington Project found a survey
was not needed for the community’s evaluation interests. The time and effort
spent collecting information the community did not understand harmed
relationships with partners and community members. They also discovered that
program staff must think the program is important in order to convey the value to
service delivery staff. Now, they try to create a partnership to design an
evaluation process that satisfies everyone. They use a participatory evaluation
model where decisions are coordinated among local partners. To accomplish this,
they hire evaluators who are knowledgeable about the community. The Steps
program is now looking to see what it takes to engage WIC staff in WIC clinics
before they engage communities.
Evaluators gauge community partnerships as well as project objectives

Public health practitioners often evaluate community-based projects by measuring whether a project meets its objectives and goals. However, the ways that members interact and the manner in which the work of the project gets accomplished is equally important but perhaps more difficult to evaluate. Understanding characteristics of a community partnership provides insight into the effect of the partnership on project implementation. Public health practitioners need to understand these aspects of community partnerships in order to provide guidance for setting goals and objectives, and give appropriate technical assistance.

- **Washington State** found its initial evaluation tools did not adequately explain its Moses Lake pilot project’s experiences. As a result, the evaluation team searched for a theoretical framework that would include constructs that describe factors observed as barriers or enhancers of the success of Healthy Communities Moses Lake. The evaluation team identified the Community Health Governance (CHG) model\textsuperscript{14} as a best fit for existing data from Moses Lake. The CHG model served as the basis for an evaluation tool that was applied from the beginning to the Mount Vernon community health partnership. Rather than focusing only on behavior change and long-term health outcomes, the CHG model provides a framework for examining intermediate processes of the partnership. They found that the use of the CHG model to organize information aided in assessing the process in which individuals and organizations work together to identify and deal with health problems at the community level, and helped to guide public health workers in project management. Well-designed process evaluation guides the use of limited resources of staff time and project funding and thus can improve efficiency and effectiveness.

**Evaluation Process and Partnerships**

**Tools**

These tools are available on the NASHP website, www.nashp.org.

Go to the Evaluation Toolbox to access them.


Kentucky’s Center for Smoke-Free Policy and the ALERT/Pathways, Inc. PRC jointly developed a "Guide to Smoke-free Policy" toolkit which was designed to help communities advance through the various stages of smoke-free policy. It is meant to help local coalitions identify key stakeholders and build capacity for policy advancement. The toolkit is designed as a comprehensive teaching tool that is sent to community partners and is not available to the general public. Various survey reports are, however, available to the public. See: http://chfs.ky.gov/dph/ach/tobaccodata.htm. Growing People: Building and Maintaining Coalitions for Tobacco Use Prevention and Cessation is a guidebook produced through a contract between The Kentucky Cabinet for Health Services and The University of Kentucky College of Nursing. It is available by going to the website at http://www.mc.uky.edu/tobaccopolicy/ResearchProduct/Tobcont_Coalition_Guidebook_2002.pdf


Thinking about Healthy Communities Evaluation. This is a tool that helps outline the decisions and clarifications that need to be made in order to conduct useful evaluation of the Washington state Healthy Communities work, so that the Department of Health, the University of Washington, and the Moses Lake/Mount Vernon leadership teams can make the best use of their limited resources to meet evaluation goals. It addresses evaluation design, process and partnerships, and dissemination issues. http://www.nashp.org/Files/WA_state--Thinking_about_HC_evaluation.pdf

WA state phone survey used to measure constructs from the CHG model: http://www.nashp.org/Files/WA_state--_phone_survey.pdf

Steps to a Healthier Washington: Evaluation and assessment website provides information on the evaluation model including links to a guide for developing effective coalitions and additional tools:

http://www.doh.wa.gov/cfh/steps/eval_assess.htm

Community/Campus Partnerships for Health provides information on community-based participatory research

http://depts.washington.edu/ccph/commbas.htm

Ann Zukoski, Mia Luluquisen. Participatory Evaluation: What is it? Why do it? What are the challenges? –Community-based Public Health and Practice Issue #5, April 2002 this brief lays out a framework for understanding the special nature of participatory evaluation, comparing and contrasting it with more traditional forms of evaluation; gives a rationale for its use; provides a short, step-by-step set of instructions on how to implement this approach; and then offers real-world examples of the challenges and rewards in applying the principles of participatory evaluation. Developed by the Partnership for the Public’s Health.


EVALUATION OUTCOMES

Evaluation outcomes are essential to determining the impact, influence, and success of a project, and to determining a pilot project’s possibility for expansion. Outcomes have great potential impact on communities, individuals and institutions, but outcomes are also elusive and sometimes difficult to measure. Good outcomes also rely on clearly and narrowly defined evaluation and project goals, or data accumulation will overwhelm collectors, evaluators and potentially the program itself. Evaluation and outcome analysis are most productive when built in from the project’s inception with program and participant buy-in of the evaluation.

It may take longer than the project’s funded duration to show an effect on the preferred outcome, so some progress may best be shown via interim indicators. For example, many obesity prevention projects are funded for anywhere from 1-5 years of a grant cycle, while it may take 20 years to show a reduction in overall obesity levels. In cases such as these it may be important to educate funders, program participants, and legislators that interim outcomes such as a reduced rate of growth of obesity indicators are a better indicator of the success of the project when the preferred outcome is not achievable in that timeframe.

Key Themes and Examples

Valid indicators help document outcomes.

Evaluations rely on indicators to illustrate how interventions change outcomes, so it is vital for evaluators to identify the best indicators that will clearly and quickly show the success of an intervention. Evaluators working closely in partnership with community members and program administrators will have the best opportunity to select valid indicators of change that are meaningful to the local community. Valid indicators should be easily measurable items that clearly show change over the time period for the intervention.

- The Arizona Blowing Smoke Project focuses on the influence of tobacco use in movies popular with youth. The funding agency supported only a short-term evaluation, while a long-term evaluation would have produced more definitive results. As a result they could only do pre-and immediate post-intervention analysis on the three measures studied: 1) Increased knowledge of tobacco product placement in film; 2) Increased awareness of the portrayal of tobacco use in film; and 3) Increased negative attitudes toward the use of tobacco in film. They could not do longitudinal or long term evaluation of the students who took part in the project. However, they showed their intervention produced a small increase in understanding and awareness of product placement in movies. They compared implementation schools to comparison schools not utilizing the
program, and found the curriculum was effective in changing youth knowledge, awareness, and attitudes regarding tobacco use in the movies.

- The California Endowment’s California Asthma Among the School-Aged Project (CAASA),\(^\text{15}\) the first cycle of a 3-part project was originally funded as clinically oriented projects focused on individual outcomes such as encouraging kids to take their medication and stay out of emergency rooms. In the second round, after reviewing the original data, evaluators asked that the existing tool not be used, but that the program staff instead use measures of policy change. As a result, the second and third cycles focused on environmental and community change by measuring heath outcomes in schools and kids. Grantees’ perception of evaluators improved when they discovered the tool produces data they can use. Similarly, The Endowment realized it did not have the resources to change individual health outcomes on a large scale such as the entire state. As a result, rather than focusing on directly eradicating individual disease states, they now educate boards and communities involved in their projects to focus on policy and community change that will ultimately affect individual outcomes.

- Healthy Maine Partnerships initially asked newly established partnership sites to gather community information on 6 indicators. This included asking municipalities about their tobacco policies, asking schools if they opened their gyms for community exercise, asking if communities held farmers markets and asking if they developed bikable communities. After evaluating the initial data collected, they found that tracking the incidence of farmers markets was problematic due to the transient nature of the markets and the difficulty in defining what was considered a farmers market. The evaluation was reorganized to eliminate this transient indicator and now focuses on other more durable indicators.

- The Kentucky Center for Smoke-Free Policy has in the past broken multi-variable or multiple outcome projects into single-variable/outcome phases to reduce the number of indicators that can be influenced by efforts outside the project. Each phase addresses a separate element or behavior, so outcomes can be more clearly determined than if the program had addressed multiple behaviors at the same time. As a side effect, they discovered that single-variable phases enabled them to break their funding sources into smaller units that can be used to fund the larger overall project over a longer time-frame. The project found a

\(^{15}\) The California Asthma Among the School-Aged Project (CAASA) aims to improve knowledge and awareness among health care providers and improve the delivery of asthma care in seven California clinics. The Integrating Medicine and Public Health Program (IMAP), in partnership with the California Department of Health Services (DHS) and the University of California, San Francisco (UCSF), will implement the model program to improve clinical diagnosis, treatment and management of asthma for children between the ages of 5 to 18. Health care providers will also improve consumer education and coordination of care to reduce asthma triggers. http://www.calendow.org/news/press_releases/2001/08/080601imap.stm
statistical decline in alcohol, tobacco and marijuana use in target populations\(^{16}\) after intervention:

- In just one year, the percent of smoke-free food establishments increased significantly from 39.6\% in 2002 to 44.5\% in 2003.
- On July 1, 2003, Lexington-Fayette County enacted the first smoke-free ordinance in the state. After a 7-month legal challenge, the ordinance was implemented on April 27, 2004.
- Participation in cessation programs jumped dramatically since 1999, with an average participation rate of 56.3 per 10,000 adult smokers in 2003.
- In 2003, there was a significant increase in schools providing smoking cessation services for students and employees, although less than 1 in 3 schools provided these services.
- Most Kentucky schools (72.7\%) had at least one evidence-based substance abuse prevention program in 2003.
- Illegal tobacco sales to minors decreased approximately 60\% from 1998-99 to 2002-03. In 2002-03, there was 94.3\% compliance with the youth access purchase law, although there was a decline in the actual number of compliance checks.

This data allows the program to demonstrate how the project funds are being used and to show outcomes from the program. Outcome data allowed the program to meet with local policymakers, health organizations, and state officials to garner additional financial support to continue the project.

- **North Carolina’s NAP SACC Program** used self-report from the centers (the Nutrition and Physical Activity Self-Assessment for Child Care program) to evaluate the success of the 2002 pilot project. The self-assessment instrument (used in the pilot as the main outcome, and used in the subsequent project as part of the intervention) was developed using the University of North Carolina Chapel Hill (UNC-CH) Frank Porter Graham Child Development Center’s Early Childhood Environmental Rating System (ECERS) and Infant/Toddler Environmental Rating System (ITERS) child care center environmental assessment tools and the CDC’s School Health Index as models. The pilot project compared 6 intervention counties (15 child care centers) to 2 comparison counties (4 child care centers) before and after a six-month intervention. At the end of the project, intervention centers had increased an average of 13 points (out of 132 possible points) on the self-assessment instrument (a statistically significant change from baseline), while comparison centers increased an average of 8 points. Interviews were conducted with center directors at the end of the project and directors from comparison centers stated that completing the self-assessment instrument provided ideas and guidance that encouraged them to make environmental improvements on their own.

\(^{16}\) Outcome reports available on website: http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/
The current NAP SACC project employs a more objective outcome to evaluate the effectiveness of the larger scale evaluation for the follow-up project. The project developed an objective outcome evaluation measurement tool, the Environment and Policy Assessment and Observation (EPAO) for child care. This was designed to evaluate the effectiveness of an intervention to improve the nutrition and physical activity environment in child care centers. It is currently being used to evaluate program effectiveness in 102 child care centers across North Carolina. In addition, further measures are being employed to assess the type and amount of food served and consumed, as well as the type, duration, and context of physical activity participation in a subset of these centers (20).

- **North Carolina’s Color Me Healthy Project** has since program inception used surveys and interviews to self-report behavior change on the part of participating teachers and children. Evaluators considered one measure of success to be 91.2% of childcare providers using the Program.\(^{17}\) Child care providers indicated that using Color Me Healthy increased children’s physical activity and knowledge about healthy eating. Teachers also indicated they changed their own diet with increased consumption of fruits and vegetables.

**Programs develop interim indicators in order to measure progress in a relatively short time period.**

- **Arizona’s Blowing Smoke Project** discovered that the students taking the curriculum already knew a fair amount about tobacco and had negative attitudes toward tobacco due to other state tobacco education initiatives. What the students did not know about was the media literacy concept of product placement. While the Blowing Smoke curriculum increased students’ knowledge about product placement through developing their media literacy skills, there were no resources to measure any continuing increase in media literacy skills which is expected through practice over time.

- **The California Endowment’s** Central Valley Nursing Work Force Diversity Initiative\(^{18}\) was developed to increase underrepresented groups in the nursing profession in California. At the end of program they discovered they had little usable data. Program organizers discovered a system-level obstacle: the demand for nursing education is so high it can take two years for an individual to get into a program. This finding indicated a need to either use interim indicators or create a longer term project.

- **Steps to a Healthier Washington** focused their evaluation on intermediate-level policy change outcomes. They concentrated on creating state level surveillance

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\(^{17}\) See Color Me Healthy Program materials in Appendix or on website; http://www.eatsmartmovemorenc.com/colormehealthy/

systems, using modest funding, to influence policy makers, schools, and communities. Evaluators found state obesity rates continued to increase as the project progressed. However, they noticed interim indicators, such as reduced TV watching, showed some behaviors were changing. After only 6 months of implementation they saw some movement on the percentage of families following the American Academy of Pediatrics guidelines on television viewing.

They also discovered tobacco use and exposure prevalence decreased for pregnant women, but women who stopped smoking during pregnancy often started again after delivery. In addition, a state cigarette tax increase concurrent with the initiative affected tobacco use indicators and outcomes. These external influences could then be accounted for in evaluating the outcomes of the initiative.

Appropriate budgeting for evaluation helps projects meet funders’ high expectations for evaluation outcomes.

For projects to appropriately budget evaluation costs it is essential a clear definition of evaluation is established and communicated between funder and funded. A tension can exist between a funder’s emphasis on evaluation outcomes, and programs perception of the funder’s unwillingness to adequately fund evaluation activities. A variant of this tension arises when a funder requires outcomes but considers evaluation to be “research” and disallows funding as a result. Good communication helps communities and funders understand why evaluation funding is needed and what programs will do with funding, such as acquire further financial support (grants, policymakers, etc.) or create and sustain change after the program ends.

- **The California Endowment** often recommends spending 5-10% of the project budget on evaluation. The more resources dedicated upfront on defining the focus, goals, and methods, the less needed to retrofit the results into a usable form. However, The Endowment understands that the percentage of funds allocated for evaluation really depends on the project. Therefore, there may be some instances when the evaluation budget is less than 5% or greater than 10%.

- **North Carolina’s Color Me Healthy Program** noted the need for program administrators to educate the funder about the expenses entailed in addressing certain questions. Also, they suggested programs combine funding streams when research grants and dissemination grants are in separate streams. For example, a legislature’s request to see a change in prevalence in obesity within 3 years of

19 According to a previous report, funding levels and funders’ emphasis on accountability can be an obstacle to evaluating community capacity-building approaches to changing social norms, given the long-term goals and lack of short-term outcomes for many of these projects. It may be unrealistic to expect consistency in evaluation methods if communities receive paltry funding and little or no training on how to conduct an evaluation. From Jill Rosenthal, Enhancing State and Local Capacity to Promote Healthy Weight in Children: Addressing Disparities in the Real World, (Portland, ME: National Academy for State Health Policy, June 2005).
an electoral cycle is unrealistic. Therefore, educating policy-makers on interim measures and other options is essential on the part of funded organizations.

- **North Carolina’s NAP SACC project** considers that the right proportion of budget dedicated to evaluation will vary depending on the project. Processing data can be a demanding component, so programs should consider the survey method and volume of questions needed. Measuring behavior is the most expensive method; so programs need to consider the level of rigor needed to measure useful outcomes.
**Evaluation Outcomes**

**Tools**

These tools are available on the NASHP website, www.nashp.org. Go to the Evaluation Toolbox to access them.

The Arizona Blowing Smoke project includes movie evaluation results on its website: [http://www.blowingsmoke.arizona.edu/Blowing_Smoke_Info/evaluationresults-july.htm](http://www.blowingsmoke.arizona.edu/Blowing_Smoke_Info/evaluationresults-july.htm)

A project evaluation final report is also available: [http://www.blowingsmoke.arizona.edu/finalresults2.pdf](http://www.blowingsmoke.arizona.edu/finalresults2.pdf)


The Kentucky Center for Smoke-Free Policy found a statistical decline in alcohol, tobacco and marijuana use in target populations after intervention. Outcome reports available on website: [http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/](http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/) Links to reports and data collection forms (require participant log-in): [http://www.mc.uky.edu/tobaccopolicy/ProjectTeam/KCSP.HTM](http://www.mc.uky.edu/tobaccopolicy/ProjectTeam/KCSP.HTM)


North Carolina’s NAPSACC environment rating scales help assess group programs and care programs for young children: [http://www.fpg.unc.edu/~ecers/](http://www.fpg.unc.edu/~ecers/)

The National Registry of Effective Programs lists cost-effective programs, subject to annual peer review. It is funded by the U.S. Department of Health and Human Services and addresses mainly adolescent health behaviors: [http://modelprograms.samhsa.gov](http://modelprograms.samhsa.gov)
Evaluation dissemination is essential for replicating successful projects or expanding programs on a national scale, but funders and grantees often disagree on what exactly constitutes dissemination unless it is clearly defined at the start of a project. One cause of the disagreement is that dissemination and communication often take entirely different forms. Community planners are often primarily concerned with the vital job of communicating the outcomes or successes of their project to the local community through press releases, newsletters, conferences, or trainings. Funders, on the other hand, consider dissemination to take the form of distributing or replicating a best practice such as a curriculum or model program, nationally through journal articles, national meetings or trainings, websites, or national initiatives. A clearly stated definition of dissemination, early agreement between funders and projects on that definition, and clear lines of responsibility for both dissemination and communication, reduces disagreement between funders and grantees on this subject. Ensuring that all these avenues of communication and dissemination are used can assist with promoting the widest dispersal of project outcomes.

Key Themes and Examples

“Dissemination” and “communication” of results are clearly defined.

- **The CDC’s- Prevention Research Centers Program** seeks to develop model programs that can be replicated, adopted, institutionalized and/or promoted to others. To ensure this, the CDC requires model programs to demonstrate outcomes that meet stringent documentation guidelines prior to dissemination nationally\(^{20}\). In part, they design programs and grants for dissemination as well as for evaluation. The research question or funded evaluation must produce solid evidence, data and results that demonstrate an effect on the intended behavioral change as well as an effect on policy change.

- **The California Endowment** concentrates on disseminating lessons learned and best practices to key stakeholders. This dissemination strategy supports the use of evaluation findings both internally and externally. For example, findings can be used to support future Endowment work in terms of program strategies. Additionally, the sharing of best practices allows other funders and grantees to learn from The Endowment’s work. The Endowment doesn’t rely on only one strategy to disseminate or communicate outcomes. Time is taken to understand the audience and use multiple systems to extend the effect of an intervention.

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Evaluators communicate results to program participants in a timely and user-friendly manner.

Communicating outcomes back to program participants and local communities in a timely and accessible fashion is essential to continued community support of ongoing projects, as well as future support of new initiatives.

- **The Arizona Blowing Smoke Project** found that local programs can become frustrated when data disappears into journals and does not return to the community. When this happens, the community asks for more control over the evaluation and evaluation data. To address this concern, the project created a colorful final report\(^{21}\) that includes all the data and an analysis of how the curriculum can be used best by teachers working with youth on tobacco prevention.

- **Kentucky’s Center for Smoke-Free Policy** officially began in 2004. However, key groups began working together in 1999 and the community started to see benefits from the program in 2003. To sustain interest in the program, organizers regularly disseminate small amounts of information in the form of community partner e-mails, newsletters full of visual information that is of interest to the community, and reports directly to communities. For example, communities interested in tobacco usage rates want to know what indicators are decreasing, so this information is included in the newsletter. For legislative reports, they create a two-page report with all the data on the front so readers don’t have to turn it over – called a PushCard. They also recommend using basic visual aids such as maps and charts in these communications. They have also found face-to-face meetings with stakeholders to explain data is more helpful than simply disseminating a report.

- **Healthy Maine Partnerships** found that getting review and approval for release of formal evaluation reports takes a considerable amount of time. Many of the evaluation data collection, analysis, and formal reporting cycles last longer than one-year. Therefore, to reduce the time lag for release of formal reports, evaluators present findings in statewide meetings in summary and bullet format, prior to the release of the formal reports. Partnership evaluators also found that occasionally community partners found data books useful\(^{22}\), as well as PowerPoint charts and graphs of evaluation findings.

To provide user friendly information from statewide local Partnership data collection efforts, the Partnership’s state evaluators prepare individual reports of each local Partner’s findings and send them to local partners so they can see their own outcomes within the context of the overall statewide Partnership. The local Partners can also use these individual reports to communicate outcomes locally.

\(^{21}\) Blowing Smoke Project Evaluation Final Report; http://www.blowingsmoke.arizona.edu/

\(^{22}\) Healthy Maine Partnerships website; http://www.maine.gov/dhhs/boh/hmp/
In addition, the media contractors for the state have provided local Partnership sites with press release briefs and summaries of statewide findings and sent these to the local partners for use with local media. The local Partners have found this approach especially effective for communicating youth-oriented topics in the local media.

- **Steps to a Healthier Washington** empowers grantees to disseminate findings among themselves as well as outside the local community. They found community members are better able to summarize results and interpret data within the context of the community’s values. Working together with grantees they have formatted data into research posters. The posters are presented to other groups and interested parties at conferences and meetings. Participants have shown enthusiasm about the posters and perceive them as a reward for doing the work.

**Develop strategies to disseminate program and evaluation information more broadly.**

Local communities often concentrate on local dissemination of outcomes, but the information and processes a program uses to change program outcomes are useful to other communities as well.

- **Arizona’s Blowing Smoke Project** developed the curriculum to meet state education standards and disseminated the curriculum to schools. Project staff found that teachers want to know specifically how each new lesson meets their state’s requirements, not just that the whole curriculum meets state standards. Due to the lack of national curriculum standards and the variety of state and local standards, this can become an obstacle for national dissemination.

- **The CDC** representative noted that while information on effective interventions is valuable, information on ineffective interventions can promote better program design. To encourage evaluators to identify and disseminate results even when interventions do not produce the desired effect, CDC created *Preventing Chronic Disease (PCD)*. The PCD is a peer-reviewed electronic journal that documents reports of community research that do not meet the rigid standards of randomized control trials and may not get published in the scientific literature. The CDC believes this journal provides a forum for public health researchers and practitioners to share study results and practical experiences. The journal publishes notes from the field as well as standard peer-reviewed articles.

- **The California Endowment’s Healthy Eating, Active Communities Program (HEAC)** shares data with organizations conducting policy and advocacy

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23 Blowing Smoke Curriculum available at http://www.blowingsmoke.arizona.edu/
campaigns. Strategies developed from the community demonstration sites to affect policy efforts are linked to those of the Strategic Alliance, California Center for Public Health Advocacy, and California Pan Ethnic Health Network, among others. The Endowment expects HEAC grantees to work towards changes in their community environment. This includes work in five sectors: schools, after school, neighborhoods, healthcare, and media and marketing. The local collaboratives will work to change the their community environments to decrease access to unhealthy food, increase opportunities for physical activity, decrease local marketing of unhealthy products, develop and encourage health providers to advocate for local community changes supporting healthy behaviors. The goal is for the collaboratives to create a momentum toward supporting a healthy community.

- **The Kentucky Center for Smoke-Free Policy** finds the key to communication is consistently providing information to all constituencies. With numerous audiences to share results with, they publish some results as well as communicate outcomes locally. Organizers look to identify techniques or even sound bites to help community members understand the value of the program.

- **North Carolina’s NAP SACC Project** was developed in partnership with the state health department, which facilitated communication of findings back to the state. Since this project was developed using state funds, program materials cannot be sold for profit. Materials are provided at cost to those interested in obtaining NAP SACC tool kits. Statewide dissemination will begin at the end of 2006. Project staff will determine natural points of dissemination within the state. Currently, nine states are using components of the NAP SACC intervention, but widespread distribution of the project will not occur until final evaluation measures have been completed.

Program administrators, evaluators, and funders collaborate to clarify responsibility for communication and dissemination.

- **Arizona’s Blowing Smoke Project** found that funders may request that dissemination wait for funder approval of the product, be it a report or a curriculum. They also found that grantees may assume funders can establish media and dissemination contacts to distribute information, but often grantees need to develop their own avenues for dissemination and communication. Clarifying this process early assists in timely dissemination.

- **The CDC’s Prevention Research Center researchers often** aggressively search for organizations to implement the model programs they develop. For example,

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25 Kentucky Center for Smoke-Free Policy website; http://www.mc.uky.edu/tobaccopolicy/ProjectTeam/KCSP.HTM
26 NAP SACC website: http://www.napsacc.org/
they identify organizations with a vested interest in a project so they have a lasting interest. Then they present them with valid reasons to use a product.

- **The California Endowment’s Healthy Eating, Active Communities** grantees are expected to participate in active diffusion of the promising models they develop and/or lessons they learn. They are also expected to demonstrate leadership in local, state, and national venues to advance understanding about community-based approaches to build healthier environments. Each grantee is required to develop a sustainability plan for their organization that identifies other opportunities for acquiring continued or new resources, to consider new applications for their environmental change work to create momentum toward supporting a healthy community, and to develop feasible program and policy activities that can lead to institutionalization of promising models that they create.

**Funders and program administrators encourage building sustainability into the program to continue dissemination when funding ends.**

- **Arizona’s Blowing Smoke Project** found that developing funding to support intensive program management after the original funding ended can be quite challenging. At the end of the project many more teachers wanted to utilize the curriculum, and were disappointed the project could not continue to support and update the curriculum.

- To create a self-sustaining environment for programs **The California Endowment** encourages grantees to seek continuing funding. For example, The Endowment funded a community clinic for a clinical program and then the grantee received additional funding from another source for an environmental and policy component. The new funder then provided training for the staff for these new parts of the project.

- **The Kentucky ALERT/Pathways, Inc. PRC** received a grant that funded an epidemiology advisory group. They assembled a data warehouse from the advisory group and created a database program administrators can use and add data to in a consistent manner. Community members can download data by community or other groupings.

- **The State-level Healthy Maine Partnership** provides training and technical assistance to the local Partners to help them plan for sustainability. The evaluation findings and other information can be used by the local Partners to demonstrate the value of and need for their work to address the three leading health behavioral risk factors. The local Partners can use the evaluation data to make the case for additional funding to sustain and strengthen their health promotion work.


Evaluation Dissemination

Tools

These tools are available on the NASHP website, www.nashp.org. Go to the Evaluation Toolbox to access them.


Blowing Smoke Curriculum handouts available: http://www.blowingsmoke.arizona.edu/materials.html

National Center for Chronic Disease Prevention and Health Promotion: Chronic Disease Prevention e-journal; http://www.cdc.gov/pcd

California Endowment Grantee Toolkits are available at: http://www.calendow.org/reference/index.htm

The Kentucky Center for Smoke-Free Policy and the University of Kentucky collaborate on news and press releases: http://www.mc.uky.edu/tobaccopolicy/NewReleases/


NAPSACC is in the process of developing tools to add to their website: http://www.napsacc.org/

Thinking about Healthy Communities Evaluation. This is a tool that helps outline the decisions and clarifications that need to be made in order to conduct useful evaluation of the Washington state Healthy Communities work, so that the Department of Health, the University of Washington, and the Moses Lake/Mount Vernon leadership teams can make the best use of their limited resources to meet evaluation goals. It addresses evaluation design, process and partnerships, and dissemination issues. http://www.nashp.org/Files/WA_state--_Thinking_about_HC_evaluation.pdf
CONCLUSION

Evaluation is critical to promoting, sustaining, and expanding successful community-based health promotion programs. However, building costly research-based evaluation designs and dissemination processes into limited community-based project budgets has been problematic for many reasons.

Many community-based programs use a participatory research model, which promotes collaboration and sharing of decision-making among program administrators, evaluators, and community members throughout the process, from refining evaluation questions and undertaking the intervention to interpreting the data and jointly disseminating the results.

These programs seek to balance a community-driven approach, which involves the community and addresses their stated needs (bottom-up), with a research-driven approach, which is more directive and encourages the use of tested tools and methodologies (top-down). Programs are attempting to create a synergy between these two approaches in their evaluations in order to build trust, recognize community wisdom, and get valid and reliable data.

Programs find that including evaluation as an integral part of program development enables them to determine critical success factors that need to be measured and avoids unnecessary measurement that may not be useful or critical.
APPENDICES

Appendix A: Project Participants
Appendix B: Project Summaries
Appendix C: List of Delaware Participants
APPENDIX A  PROJECT PARTICIPANTS AND WEBSITES

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Nemours Health and Prevention Services

Nemours is a non-profit organization dedicated to children's health and health care with a pediatric hospital in Delaware and outpatient facilities in Delaware, New Jersey, Pennsylvania and Florida. Nemours Health and Prevention Services (NHPS), based in Newark, DE, is the newest operating division of Nemours and complements its treatment services, research and training programs with child health promotion and disease prevention. Its mission is to improve children’s health over time through an integrated model that includes: developing effective programs, building upon the community’s current resources; evaluating the programs, while also contributing to the national landscape on children’s health and prevention research; and providing business support services and technical assistance to non-profit and health-related organizations. While the primary focus will be in Delaware initially, the division’s goal is to eventually become a national resource and model in the area of child health promotion.

NHPS was established to catalyze and pioneer new approaches to children’s wellness as a long-term endeavor for Nemours. While many U.S. children’s hospitals and health systems have an advocacy component to their mission, Nemours is the only one in the country making this kind of expansive and sustained investment in children’s health promotion.

One of the goals of the organization is to bring about a cultural change in which people place a high value on health and wellness. NHPS will use its resources strategically to identify current unmet needs, identify and build on community strengths to address those needs, and to assist community organizations in innovative ways. The division will serve as a catalyst and resource in Delaware, ultimately increasing the state’s collective capacity to improve children’s health.

Childhood healthy eating, physical activity and emotional/behavioral health are the division’s initial focus areas. NHPS is seeking out the most promising practices in these areas and, where they do not exist, working to develop programs that can be put into practice in Delaware. Using a holistic approach to the child’s world in order to have the greatest impact, NHPS considers the many different places where children and families spend their time: schools, day care facilities, neighborhoods and communities, and health care settings. The goal is to help children make healthy food and lifestyle choices and stay active by reinforcing consistent, positive messages in each setting. NHPS also recognizes the importance of helping adults support and nurture the children whose lives they touch.
**Arizona Blowing Smoke Project**

Lynda Bergsma, Mel & Enid Zuckerman Arizona College of Public Health, University of Arizona, Rural Health Office

Over a period of two years (1999-2000), the Blowing Smoke Project resulted in the creation and evaluation of a grade 6-8 curriculum for analyzing messages about tobacco use in movies. Blowing Smoke is a media literacy based curriculum for tobacco use prevention that addresses the influence of tobacco use in movies popular with youth. It was developed with adult supervision by a community-based team of 30 youth aged 11-17, who were paid for their time to create a curriculum that would appeal to kids like themselves. It was a statewide tobacco use prevention project funded by the Arizona Department of Health Services Tobacco Education and Prevention Program.

The final evaluation research phase of the Blowing Smoke Project took place from August through December 2000. Eight Arizona middle schools from urban and rural settings in the vicinities of Tucson and Phoenix took part in the evaluation - five implementation schools and three comparison schools. Subject areas of the teachers implementing the curriculum included social studies, language arts, life skills, and health. Fifteen-question pre/post-tests were administered four weeks apart to 295 7th grade students in the implementation schools and 294 7th grade students in the comparison schools, for a total of 589 students. In implementation schools the tests were administered three weeks prior to curriculum implementation and immediately following completion of the curriculum.

The pre/post-test sought to establish the effectiveness of the curriculum on three measures:

1. Increased knowledge of tobacco product placement in film.
2. Increased awareness of the portrayal of tobacco use in film.
3. Increased negative attitudes toward the use of tobacco in film.

The evaluation demonstrated that the Blowing Smoke curriculum was effective in changing youth knowledge, awareness, and attitudes regarding tobacco use in the movies. Small but significant increases on all three measures were demonstrated by the implementation group, while there was no change in the comparison group. Based upon five-point scales for each measure, the level of change was .5 in both knowledge and awareness (p<.001) and .1 in attitudes (p<.05).

The results documented through this research established the efficacy of Blowing Smoke as a media literacy and tobacco prevention curriculum, and media literacy education as a prevention strategy. They also clarified a number of strategies that would intensify the benefits of this curriculum, including the need to provide training and technical assistance in media literacy and curriculum use in order to enhance the ability of teachers to deliver the curriculum effectively.
Analysis of the students' baseline levels regarding the three evaluation measures revealed a demonstrated need for more extensive media literacy education. Media literacy is a critical thinking life skill that requires significant learning and practice time in order to achieve mastery. The Blowing Smoke core curriculum is five lessons (maximum five hours) in length with an optional videotaping lesson and numerous suggested learning and practice activities that can be done throughout the school year. The post-test measures used in this evaluation did not reflect the increased skills that would result from these additional learning and practice opportunities. An additional measurement six months after the completion of the core curriculum would have been helpful to determine any increase in media literacy skills attributable to practice over time. Ongoing qualitative and quantitative evaluation of the curriculum and its delivery was recommended to elucidate and expand upon the findings. Although additional distribution and teacher training funding was made available, additional evaluation funding was not.

The Healthy Eating, Active Communities Initiative of The California Endowment

Healthy Eating, Active Communities (HEAC), is The California Endowment’s four-year strategic initiative to reduce disparities in obesity and diabetes by improving food and physical activity environments for school-age children. The most prominent feature of HEAC is a community demonstration component that provides grants to highly-motivated schools, community organizations, and local public health departments in six communities across the state.

The primary goals of the community demonstration component of HEAC are to implement and evaluate strategies to improve environments for healthy eating and physical activity and to create momentum for widespread changes in policy and practice that will ultimately lead to preventing obesity. A logic model was developed to guide the grantees’ collaborative work in each of five sectors — schools, after school programs, neighborhoods, media and advertising, and health care — to engage youth, families, community leaders, health professionals, and others in targeted communities in efforts to reduce obesity. The logic model will be refined and adapted to unique community circumstances during a six-month planning period to set the stage for discovery about how factors in social, economic, and physical environments can be changed to reduce disparities in health status.

The implementation phase of the community demonstration project started in March 2005. The Partnership for the Public’s Health (PPH) serves as project manager and coordinator, and Samuels and Associates is the project evaluator. The core group of technical assistance providers include: Policy Link, Project LEAN, CanFit, and Kaiser Permanente.

To accelerate sharing of lessons and resources, and to build momentum for policy advocacy, the HEAC initiative will support the formation of a network of programs that
are engaged in efforts similar to those of the community demonstration project. Other components of HEAC focus on local, state and national policy and advocacy, media and industry accountability, youth leadership, research and evaluation, strategic and integrated communications and public affairs. Additional components involve developing, implementing, and sustaining local, state, and national policy and advocacy strategies for reducing environmental risk factors for obesity and its consequences such as diabetes. A host of communication and public affairs components will be employed to advance the work of the community demonstration project and of the overall HEAC initiative.

Kentucky: Kentucky Center for Smoke-Free Policy and ALERT/Pathways, Inc. Regional Prevention Center

The Kentucky Center for Smoke-free Policy, located in Lexington, Kentucky within the University of Kentucky College of Nursing Tobacco Prevention Research Program, exists to help communities advance smoke-free policy. Very few Kentucky communities have enacted smoke-free laws; yet many of these residents are disproportionately affected by smoking and secondhand smoke. KCSP determines a community’s stage of readiness for policy advancement, works to translate and disseminate scientific, evidence-based research, often local data, which is used to promote local smoke-free policies in a rural, tobacco-growing state. A community readiness model was developed and evaluated which is used to guide coalitions as they proceed to support policy change. Local data collected often include policymaker assessments, air quality data, and public opinion polling. KCSP also provides direct technical assistance to communities and seed money for campaigns via a competitive RFP process. KCSP is directed by Ellen J. Hahn, DNS, RN and managed by Heather Robertson, MPA.

ALERT/Pathways, Inc. Regional Prevention Center is located in Ashland, Kentucky. Alert stands for: Alcohol, tobacco and other drug Lifestyle Education and Resource Team. The Region Ten site focuses on environmental tobacco issues, and provides consultation services on this issue throughout the Commonwealth of Kentucky. The Regional Prevention Center provides an array of services aimed at preventing alcohol and other drug problems. Services for children and youth emphasize the development of healthy foundations for decisions regarding alcohol/ drug use. Consultation and training are provided for schools, agencies, and organizations that support healthy environments. The contact for ALERT/Pathways, Inc RPC is Ronne Nunley.

Healthy Maine Partnership

Measuring Statewide Progress of Local Tobacco Policy Programs addressing Prevention, Cessation and Elimination of Exposure to Secondhand Smoke

Patricia Hart, Hart Consulting
For the Maine Bureau of Health, Augusta, ME
Problem/Objective: The Maine Bureau of Health created the Healthy Maine Partnership’s (HMP) initiative in 2001 as a partnership of state and local health promotion efforts addressing tobacco control, physical inactivity and poor nutrition in communities and schools. To measure progress, community-level environmental indicators were tracked statewide to show outcomes on a few measures for communities. The six original indicators were selected in 2001 through a collaborative effort to collect a baseline measure of local environments. The approach relied on in-person interviews by local HMP Directors with municipal officials prior to local-program implementation. The data collection process was validated through a process survey. In 2004, the state-level HMP partners had an opportunity to revise and expand the data collection process to update the indicators.

Methods: Based on the lessons learned, a review of the relevant literature and program goals, a collaborative work group expanded the data collection areas to collect indicators from municipalities, hospitals and schools. These indicators were collected through telephone interviews with representatives of each of the organizations. The schools were asked to provide a paper copy of their tobacco policy for validation.

Results: Data were collected from all of the hospitals and almost all of the schools and municipalities in Maine. Progress was shown from the original indicators collected in 2001.

Conclusions: The expanded set of indicators provides a valuable reference for strengthening tobacco control at the local level. The validity checks show areas of opportunity for state support of strengthening local tobacco policy adoption and enforcement.

North Carolina: Color Me Healthy Project, Preschoolers moving and eating healthy: North Carolina Cooperative Extension Service

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Goal and Objectives: Color Me Healthy is a program developed to reach limited resource children ages four and five. It provides fun, innovative, interactive learning opportunities on physical activity and healthy eating. The program is designed to
stimulate all of the senses of young children: touch, smell, sight, sound, and of course, taste. Color Me Healthy uses color, music, and exploration of the senses to teach children that healthy food and physical activity are fun!

**Behavioral Objectives**

1. 85% of child care providers attending Color Me Healthy training will increase the amount of nutrition education and physical activity in their classroom.
2. 50% of children 4 – 5 participating in Color Me Healthy will be more willing to try new foods.
3. 50% of children 4 – 5 participating in Color Me Healthy will improve fruit and vegetable recognition.

**Program Management Objectives**

1. To develop a nutrition and physical activity education program to be used in child care centers, family care homes, Head Start and kindergarten classrooms across North Carolina.
2. To train caregivers and teachers in the use of the program.
3. To educate parents and caregivers about the importance of good nutrition and physical activity for their preschool child.
4. To have the Color Me Healthy program implemented in child care centers and family day care homes serving limited resource audiences across the state.

**Project Description:** Color Me Healthy is a program designed to reach children ages four and five. It provides fun, innovative, interactive learning opportunities on physical activity and healthy eating. It uses color, music, and exploration of the senses to teach children that healthy food and physical activity are fun. Color Me Healthy is designed to be used in family day-care homes, Head Start classrooms and child-care centers. Color Me Healthy uses the Train the Trainer Model. Agents with NC Cooperative Extension and their county partners (health department personnel, WIC personnel, 4-H Agents etc.) are trained annually on how to disseminate Color Me Healthy to childcare providers in their county. Agents and their county partners provide a comprehensive training for childcare providers that teaches creative and effective ways to use the program. After attending a training, childcare providers receive a Color Me Healthy kit for use in their setting at no cost.

Trainings are held at night or on weekends to accommodate the child care providers and can last anywhere from 4 hours to two days depending on the material covered. In 2002-2003 eighty-four counties (including the Cherokee Reservation) participated in Color Me Healthy. Over 122 trainings were conducted with over 2,462 trained. Color Me Healthy was developed by staff from NC Cooperative Extension Service at NC State University and the Physical Activity and Nutrition Unit, NC Division of Public Health. The two lead agencies also partner with the NC Nutrition Network; USDA; WIC and the NC Healthy Weight Initiative.
Color Me Healthy was created based on the understanding that health promotion should employ multiple strategies including education, advocacy, organizational change, policy change, and changes to the environment. This perspective highlights the importance of approaching the problem of inactivity and poor eating habits of preschool children using a variety of methods. The Color Me Healthy team used the social-ecological model as a guide during the development of the program. Below are examples of how Color Me Healthy approaches each level of influence.

**Individual:** Motivating change in individual behavior by increasing knowledge and influencing attitudes. Color Me Healthy educates children, parents, and childcare providers.

**Interpersonal:** Recognizing that groups provide social identity and support, interpersonal interventions target groups, such as family members. Color Me Healthy targets parents through two Parent Posters and Color Me Healthy NEWS. Teachers are the role models for children in their class. Everyday they look to them as role models for eating and moving. Thus, Color Me Healthy provides childcare providers with nutrition and physical activity information for their own lives. The Color You Healthy section of the Color Me Healthy Teacher’s Guide is designed to help the childcare provider improve his or her own healthy eating and physical activity habits.

**Organizational:** Changing the policies, practices and physical environment of an organization to support behavior change. Color Me Healthy training provides childcare providers the skills and resources to offer nutrition as well as physical activity education. Color Me Healthy influences the amount and quality of nutrition education and physical activity opportunities the children receive. Color Me Healthy provides the childcare provider with the tools to make their classroom a colorful, inviting environment, which is an important part of the learning process.

**Community:** Coordinating the efforts of all members of a community to bring about change. Color Me Healthy encourages parents to take a look at their environment and assess the availability of physical activity options. This concept is also discussed in the childcare provider trainings. Raising the awareness about the importance of bike lanes, sidewalks, and parks is critical to building and supporting active community environments.

**Society:** Developing and enforcing state policies and laws that can increase beneficial health behaviors. Color Me Healthy is part of a larger statewide initiative that is working to influence policies and environments in support of healthy eating and physical activity. Eat Smart, Move More North Carolina is a statewide initiative that promotes increased opportunities for healthy eating and physical activity through policy and environmental change (www.eatsmartmovemorenc.com).
**Target Audience:** Color Me Healthy targets childcare centers, family day care homes, Head Start centers, and public pre-kindergarten and kindergarten facilities serving limited resource children ages 4 and 5.

**Reach:** The geographic area served is almost all of North Carolina; Color Me Healthy reaches children in the following 84 counties presented in Table 1 as of September 30, 2003.

**Materials:** A Color Me Healthy kit includes a Teacher’s Guide, 4 sets of Picture Cards, 3 Classroom Posters, 2 Parent Posters, CD and Cassette Tape with 7 Original Songs, Hand Stamp, and 14 Reproducible Parent Newsletters. Classroom posters, parent posters, picture cards, and parent newsletters are available in Spanish. The provision of Spanish materials is a year 03 modification that has enhanced the program greatly by broadening the reach to include the Latino population, whom are statistically at a greater risk of childhood overweight.

The Color Me Healthy Teachers Guide contains 12 lessons designed to be used during Circle Time. The lessons provide caregivers with quick and easy ideas that can be taught in a variety of ways. Also included in the Teacher’s Guide are six imaginary trips that allow the children to use their imagination to travel to different places and events. The Color Your Classroom section of the guide provides teachers with suggestions to make their classrooms come alive. Because teachers are role models for children, the Teacher’s Guide includes a section on how the teacher can eat healthy and stay active. Resources for the childcare provider are also included in the Teacher’s Guide.

Four sets of picture cards are included in the Color Me Healthy kit. They are used in many of the Circle Time activities. The sets include dairy foods, colors of foods, where foods grow and places to be active. Classroom posters bring color to the classroom and are used as educational tools in many of the Circle Time activities. A CD and Cassette Tape with seven original songs enhance the lessons in Color Me Healthy. Children and teachers enjoy the upbeat tunes and lyrics as they sing and dance-a-long. A hand stamp is included with the program and can be used as a fun way to reward participation in Color Me Healthy.

The program reaches out to families with a series of 14 reproducible newsletters that reinforce messages the children are learning in the classroom. Color Me Healthy NEWS is designed to provide families information on healthy eating and physical activity such as how their family can be active together or how to encourage more fruit and vegetable consumption. Each issue contains an after work healthy food idea and a “Kids Kitchen” segment that encourages the parent to involve their little one in food preparation. Parent posters convey a basic message about healthy eating and physical activity. They can be used in the childcare facility where parents gather.

In 2002-2003, three of the posters, picture cards, and parent newsletters were translated into Spanish.
Results/Evaluation:

Methods

Evaluation is imperative from the beginning throughout a program or/and intervention. Therefore, Color Me Healthy has implemented a 3-tier evaluation model. Participants initially attending a Color Me Healthy training complete a training evaluation to provide feedback about the training and whether or not they plan to use the program components. These evaluation forms are anonymous and there is also a sheet on the back of this form asking if participants are willing to participate in an eight-week follow-up evaluation. If they indicate that they are, they complete their mailing information and then their contact information is entered into a database. After 8 weeks, they are mailed another evaluation form with more in-depth questions about what program components they liked, used or plan to use in the future. They are provided a self-addressed envelope to mail back their completed evaluation with no self-identifying information. However, we do use an identification number on all of the 8-week evaluations to enhance tracking. And finally, an in-depth evaluation was implemented in collaboration with UNC-Chapel Hill, Department of Nutrition.

Behavioral Objectives

Behavioral objectives were measured by two means; eight-week follow up evaluations and strategies employed in the in-depth evaluation.

Eight-Week Follow Up Evaluations

Eight-week follow up data were collected via mailed surveys from participants in the first 52 trainings (n=1102). Survey results indicated that 91.2% of childcare providers are using Color Me Healthy in their classroom. Many providers indicated that using Color Me Healthy increased the physical activity of their children and increased the children’s knowledge about healthful eating (97.4% and 98.7%, respectively). Most childcare providers (96.6%) gave Color Me Healthy an excellent or very good overall rating and 99.8% indicated they would use Color Me Healthy in the future. A composite variable was created to compare center type and use of Color Me Healthy. Family Day Care Homes use Color Me Healthy at a greater rate (i.e. more components of the curriculum) than Child Care Centers. Family Day Care Homes also indicated they would continue to use Color Me Healthy at a greater rate than Child Care Centers.

In-Depth Evaluation

Based on the program objectives, an evaluation plan was developed in collaboration with UNC-Chapel Hill, Department of Nutrition. The evaluation plan consisted of the following:
1. **Observation of Statewide Training**: October 2002
2. **Local Training Observation**: Observation of nine local trainings, three in each of three different geographic regions - February to June 2003
3. **Exit Survey Administration**: Collection of exit surveys from all participants at observed trainings - February to June 2003
4. **In-depth Interviews**: Interviews with a convenience sample of 40-50 volunteers who participated in the observed local trainings - May to September 2003

The trainings and the Color Me Healthy materials received high ratings overall. The lowest rating given to both the training and the Color Me Healthy materials was a “Good”. Table 1 displays this information. In addition, nearly all of the teachers were confident to very confident in their ability to use the Color Me Healthy materials (99%) and many of the teachers reported learning new knowledge to help them eat healthy and stay active (95%).

### Table 1. Training Participants’ Perception of the Color Me Healthy Program

<table>
<thead>
<tr>
<th>Score</th>
<th>Training</th>
<th>Color Me Healthy materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>68%</td>
<td>78%</td>
</tr>
<tr>
<td>Very good</td>
<td>27%</td>
<td>19%</td>
</tr>
<tr>
<td>Good</td>
<td>5%</td>
<td>3</td>
</tr>
<tr>
<td>Fair or Poor</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Most of the teachers planned to increase the time spent teaching nutrition and physical activity in class (91%) using the Color Me Healthy materials. Most planned to incorporate Color Me Healthy lessons into their curriculum 1-2 times per week (68%), 1-2 times per day (29%) and 1-2 times per month (7%).

The majority of teachers planned to use the materials weekly except for the parent newsletters, which would be distributed monthly. The teachers anticipated using Circle Time activities and the music most frequently. Table 2 displays the anticipated use of each of the Color Me Healthy kit components.

### Table 2. Survey Response of Participants at Select Local Trainings

<table>
<thead>
<tr>
<th>Kit Components</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Not at all</th>
<th>Not sure</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle time lessons</td>
<td>27%</td>
<td>62%</td>
<td>7%</td>
<td>0%</td>
<td>4%</td>
<td>11</td>
</tr>
<tr>
<td>Music</td>
<td>40%</td>
<td>54%</td>
<td>44%</td>
<td>0%</td>
<td>1%</td>
<td>10</td>
</tr>
<tr>
<td>Activity</td>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>--------------------------------------</td>
<td>--------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display classroom posters</td>
<td>Yes = 91%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No = 1%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Maybe = 8%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>NR = 9</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Use picture cards</td>
<td>Daily = 32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly = 59%</td>
<td></td>
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<tr>
<td></td>
<td>Monthly = 7%</td>
<td></td>
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<tr>
<td></td>
<td>Not at all = 0</td>
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<td></td>
<td>Not sure = 1%</td>
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<tr>
<td></td>
<td>NR = 10</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Use hand stamp</td>
<td>Daily = 38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly = 53%</td>
<td></td>
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<tr>
<td></td>
<td>Monthly = 5%</td>
<td></td>
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<tr>
<td></td>
<td>Not at all = 0</td>
<td></td>
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<tr>
<td></td>
<td>Not sure = 3%</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>NR = 9</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Distribute parent newsletters</td>
<td>Daily = 9%</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Weekly = 38%</td>
<td></td>
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<tr>
<td></td>
<td>Monthly = 47%</td>
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<td></td>
<td>Not at all = 0</td>
<td></td>
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<tr>
<td></td>
<td>Not sure = 6%</td>
<td></td>
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<tr>
<td></td>
<td>NR = 15</td>
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<td></td>
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<tr>
<td>Display parent posters</td>
<td>Yes = 85%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>No = 0</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maybe = 15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Few teachers reported that they expected that they would have problems using the Color Me Healthy materials.

**In-Depth Interviews**

All Child Care Providers were familiar with Color Me Healthy Kits, 100%. Most of those interviewed had kits in their classrooms. About 1/3 shared kits with other teachers. All but one (99%) of those interviewed had used the Color Me Healthy materials and this person was not a teacher. Table 3 shows that nearly one-half of the teachers used the Color Me Healthy materials between 1-3 hours per week, 39% of those interviewed used the materials between 15 and 55 minutes per week, while 6% used the materials 5-8 hours per week. (6% provided no response.)

**Table 3. Frequency of Color Me Healthy Material Use**

<table>
<thead>
<tr>
<th>Amount of time spent on materials per week</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 min or less</td>
<td>15</td>
</tr>
<tr>
<td>1-3 hrs</td>
<td>24</td>
</tr>
<tr>
<td>&gt; 3 hrs (range 5-8 hr)</td>
<td>3</td>
</tr>
</tbody>
</table>

Non-response = 6%
Table 4. Use of Color Me Healthy Activities and Materials

<table>
<thead>
<tr>
<th>Activity</th>
<th>Used</th>
<th>%</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle Time</td>
<td>Yes=28 No=11</td>
<td>72%</td>
<td>&lt; 1X week= 9 1-2 X week= 11 2-5X week= 5 NR= 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imaginary Trips</td>
<td>Yes=26 No =13</td>
<td>67%</td>
<td>&lt; 1X week = 5 1-2X week= 5 2-3X week = 8 NR=8</td>
</tr>
<tr>
<td>Picture cards</td>
<td>Yes=38 No =1</td>
<td>97%</td>
<td>&lt; 1X week = 4 1X week = 7 2-5X week = 22 NR= 5</td>
</tr>
<tr>
<td>Music</td>
<td>Yes=37 No=2</td>
<td>95%</td>
<td>&lt;1X week = 3 1-2X week= 12 3-5X week = 18 NR= 4</td>
</tr>
<tr>
<td>Posters</td>
<td>Yes=31 No=8</td>
<td>79%</td>
<td></td>
</tr>
<tr>
<td>Parent Newsletters</td>
<td>Yes=16 No=23</td>
<td>41%</td>
<td>Ever distributed= 12 1-2X month = 2 1X week = 1 NR= 1</td>
</tr>
</tbody>
</table>

NR=non-response

A large number of those interviewed (80% ) liked Color Me Healthy materials, with 20% noting comments relative to older children, younger children, special needs, cassette (used CD instead), and hand stamp. However, it was clear that the parent materials received less use and/or preference. An even greater percentage of children, as perceived by the teachers, like the Color Me Healthy materials (96%).

Use of Parent Materials

The parent materials were used to a lesser extent than were the classroom materials. See Table 5 for these results.

Table 5. Use of Parent Materials

<table>
<thead>
<tr>
<th>Used parent materials</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used parent posters</td>
<td>31%</td>
</tr>
<tr>
<td>Distributed newsletters</td>
<td>43%</td>
</tr>
<tr>
<td>Noted parent response</td>
<td>69%</td>
</tr>
</tbody>
</table>
Physical Activity

Teacher use of Color Me Healthy to increase physical activity at the childcare center was assessed as use of Imaginary Trips and Circle Time. See Table 6 for these results.

Table 6. Circle Time and Imaginary Trip Use.

<table>
<thead>
<tr>
<th>Used the Imaginary Trip or Circle Time activities during Physical Activity</th>
<th>63%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher liked using the Imaginary Trips and Circle Time activities</td>
<td>70%</td>
</tr>
<tr>
<td>Children liked using the Imaginary Trips and Circle Time activities</td>
<td>68%</td>
</tr>
</tbody>
</table>

Nutrition

Color Me Healthy increased children’s fruit and vegetable recognition (90%). They thought the picture cards primarily were responsible for this increased recognition. Children’s awareness of fruits and vegetables as noted by increased talk about them was high and their willingness to try new fruits and vegetables was high at 78%. Teachers spend more time talking about fruit and vegetables and nutrition in general was 87%. No one component of the Color Me Healthy curriculum or training appeared to be more helpful, but teacher talk about fruits and vegetables increased.

Policy Change

There was a noticeable change in thoughts and feelings of physical activity and nutrition (84%). 86% are interested in dietary change. Dietary change in teachers was primarily in eating more fruits and vegetables. <50% of teachers perceived problems/barriers to improving physical activity and nutrition. Even fewer problems were noted (<30%) at the child care centers.
Overall Findings

Overall Effectiveness of Color Me Healthy. Articulated goals of the program and how well these were met are as follows.

<table>
<thead>
<tr>
<th>Proposed Goal</th>
<th>Program Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% of child care providers attending Color Me Healthy training will increase the amount of nutrition education and physical activity in their classroom</td>
<td>87% of child care providers attending the Color Me Healthy training indicated that they spent more time talking about fruit and vegetables and nutrition in general; only 20% of centers and daycare homes increased physical activity time</td>
</tr>
<tr>
<td>50% of children 4-5 participating in Color Me Healthy will be more willing to try new foods.</td>
<td>78% of teachers perceived that the children were willing to try new fruits and vegetables</td>
</tr>
<tr>
<td>50% of children 4-5 participating in Color Me Healthy will improve fruit and vegetable recognition.</td>
<td>90% of the children, as perceived by their teachers, improved their recognition of fruits and vegetables</td>
</tr>
</tbody>
</table>

Behavioral objectives for Color Me Healthy exceeded the goals in all objectives except for increasing the amount of physical activity time in the classroom. However, the percentage for increase is likely higher than reported due to underreporting and perceptions of what constitutes physical activity. Some childcare providers may only recognize structured activity as “physical activity”.

Below are the program management objectives and accomplishments for Color Me Healthy in 2002-2003.

Program Management Objectives

1. To develop a nutrition and physical activity education program to be used in child care centers, family care homes, Head Start and kindergarten classrooms across North Carolina.

Professionals in the area of nutrition education and physical activity developed the Color Me Healthy curriculum in 2001. Materials were peer reviewed and edited. A Color Me Healthy kit was created and includes the following kit components: Teacher’s Guide, 4 Sets of Picture Cards, 3 Colorful Classroom Posters, CD and Cassette Tape with 7 Original Songs, Hand Stamp, 14 Reproducible Parent Newsletters, and 2 Colorful Parent Posters. Re-printing of Color Me Healthy curriculum and assembly of the kits was done in October 2002 and agents received a set Color Me Healthy Spanish materials and training materials at the “Train the Trainer” workshop on October 29, 2002.

2. To train caregivers and teachers in the use of the program.

This was the second year the Color Me Healthy program was distributed. Eighty-four 84 counties including the Cherokee reservation in North Carolina have been trained in using the program. Each agent and county partner attended a day long Train the
Trainer on October 29, 2002 where they received additional information on nutrition and physical activity for children ages 4-5 and Color Me Healthy materials to distribute in their county.

3. To educate parents and caregivers about the importance of good nutrition and physical activity for their preschool child.

From October 1, 2002 to September 30, 2003, 2,462 child care providers were trained in using the Color Me Healthy program. Child care providers attending the trainings are provided with a Color Me Healthy kit. Information about the importance of incorporating nutrition education and physical activity into the lives of children to help foster the development of life long habits for good health is also discussed. Caregivers with the need for Spanish materials were provided the posters, picture cards and parent newsletters in Spanish.

4. To have the Color Me Healthy program implemented in child care centers and family care homes serving limited resource audiences across the state.

From October 1, 2002 to September 30, 2003, over 122 trainings were held for HeadStart teachers, childcare providers and family day care homes. Implementation data are presented under behavioral objectives.

**Systems and Environmental Change:** The in-depth evaluation revealed some impressive changes. There was a noticeable change in thoughts and feelings of physical activity and nutrition (84%). Of the sample, 86% are interested in dietary change. Dietary change in teachers was primarily in eating more fruits and vegetables. Less than 50% of teachers perceived problems/barriers to improving physical activity and nutrition. At the center, even fewer problems were noted (<30%).

**NAP SACC: Nutrition and Physical Activity Self-Assessment for Child Care**

Dianne Ward, Sara Benjamin, Sarah Ball, Janice Sommers, and Alice Ammerman
Department of Nutrition and the Center for Health Promotion and Disease Prevention, University of North Carolina at Chapel Hill

The purpose of the current NAP SACC evaluation project is to assess the effectiveness of a nutrition and physical activity intervention in 102 child care centers (60 intervention, 12 minimal intervention, and 30 control centers) at improving the environment of the center including specific nutrition and physical activity policies and practices of the center. Nutrition and physical activity environmental changes in the center will be measured in two ways. A comprehensive environmental assessment of the child care center will be conducted at the child care center. This assessment will include interviews with the center directors, questionnaires completed by staff, as well as on-site observation by trained field data collectors. Additionally, social-cognitive questionnaires will be administered to parents and caregivers to assess factors thought to mediate behavior that supports
healthy eating and physical activity in young children. An intensive dietary intake and physical activity assessment will take place in a sub-sample of centers (10 intervention and 10 control) to examine specific nutrition and physical activity patterns of the children.

The NAP SACC evaluation model is based on the Centers for Disease and Prevention (CDC) Framework for Program Evaluation (CDC, 1999).

**Figure 1**

Components of the Framework include Steps and Standards to assure an appropriate and useful evaluation scheme. The recommended steps of the evaluation process are:

1) Engage Stakeholders,
2) Describe the Program,
3) Focus the Evaluation Design,
4) Gather Credible Evidence,
5) Justify Conclusions, and
6) Ensure Use and Share Findings.

The Standards include Utility, Feasibility, Propriety, and Accuracy. These standards are applied at each step of the evaluation process. Figure 1 illustrates the how the steps of the Program Evaluation Framework are achieved in each of the three phases of the project.
**Primary Aim:** To assess the ability of the NAP-SACC intervention to improve the nutrition and physical activity environment of the child care center.

**Hypothesis 1:** The NAP-SACC intervention will result in a positive change in the nutrition environment at intervention child care centers compared to those in control (no treatment) centers as measured by the nutrition and physical activity Environmental and Policy Assessment and Observation Instrument (EPAO).

**Hypothesis 2:** The NAP-SACC intervention will result in a positive change in the physical activity at intervention child care centers compared to those in control centers as measured by the nutrition and physical activity Environmental and Policy Assessment and Observation Instrument (EPAO).

**Secondary Aim 1.** Children who attend NAP-SACC intervention centers will receive greater amounts of physical activity while at child care centers than children who attend control centers.

**Secondary Aim 2.** Children who attend NAP-SACC intervention centers will be offered and consume foods that are lower in fat (including low-fat milk) and include greater amounts of fruits (excluding juice) and vegetables than children who attend control centers.

**Secondary Aim 3.** At the end of the 6-month intervention, staff who participate in the NAP-SACC intervention will have higher scores on the social-cognitive questionnaire measuring factors associated with provision of healthy eating and appropriate physical activity than staff from control centers.

**Secondary Aim 4.** At the end of the intervention period, parents or primary caregivers whose children attend NAP-SACC intervention centers will have higher scores on the social-cognitive questionnaire that measures factors associated with provision of healthy eating and appropriate physical activity than parents in control centers.

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**Peace Games**

**Research, Evaluation and Learning at Peace Games**

**Why do we measure change?**

Peace Games devotes significant time to help our partners understand, measure, and communicate the results of our partnerships – because reliable and useful data is important for program planning at the school level, program improvement among our network partners, and public awareness at the local and national levels. Our research and evaluation goals, tools and reports all seek to serve these three goals. Therefore, they must meet criteria related to evidence-based evaluation, while remaining accessible and useful for local partners. Working in collaboration with colleagues in Los Angeles and at the Harvard Graduate School of Education, we have developed an evaluation toolkit that integrates quantitative and qualitative measures designed to measure outcomes, implementation and attribution (see references at end).
**What kinds of change do we measure?**

Our evaluation and research asks four questions, designed to provide information about individual and systemic outcomes and implementation:

- How are students peacemakers?
- How do adults support students as peacemakers?
- How does the school’s climate and culture support students as peacemakers?
- How does Peace Games facilitate these changes?

We are especially interested in a set of outcomes that can be measured quantitatively and qualitatively, and that provide a holistic picture of school change:

- knowledge about peacemaking (conceptual, cultural, historical);
- peacemaking skills (communication, cooperation & conflict resolution);
- peacemaking relationships (especially reduction in fighting/bullying, and increased engagement with peers and the community through helping, inclusion and community service).

We measure these changes individually (with students, school staff, parents and volunteers) and systemically (when we measure changes in school climate).

We also measure implementation variables – especially “customer satisfaction” through surveys and interviews with students, school staff, families and volunteers.

**How do we measure change? What tools do we use?**

In order to integrate quantitative and qualitative approaches, we have developed a comprehensive evaluation toolkit that includes:

- **Peacemaker Surveys:** Written Likert-scale surveys that measure long-term changes in students (grades 3-8), staff, volunteers and school climate; these are given annually over the course of our three-year partnership (Guevremont, 2002).
- **Peacemaker Conversations:** Protocols for interviews and focus groups with students, staff and family members, to help us understand more deeply the direction and process of changes in peacemaking knowledge, skills and behavior; these are done annually with a sample of constituents.
- **Peacemaker Observations:** Peace Games uses behavioral measures (like attendance, grades and discipline referrals) as well as qualitative observations (what we call Peace Tales) in order to provide data on students’ actual behavior.
- **Curriculum Evaluations:** Written measures (multiple choice and open-ended) that focus on short-term outcomes related to the Peace Games curriculum and Peacemaker Projects (service-learning projects); these are given twice annually (mid-year and year-end) and can be supplemented by Peacemaker Conversations.
- **Peace Games Report Cards:** Twice annually, we ask questions that measure customer satisfaction among students, staff, families and volunteers; these are integrated into the Curriculum Evaluations and the Peacemaker Conversations.

**How do we use our data?**

Our first commitment is to our local partners; therefore, we use our data to create accessible reports that can be used by local partners – including the school-based
Leadership Teams, administrators and staff – to understand the scope and direction of change, appreciate and celebrate their accomplishments, and improve their school peacemaking programs. Our second commitment is to those who have supported and funded our work; therefore, we create regional and national reports that provide a broader perspective on our work, and help us improve our programs across our network. Our third commitment is to public awareness; therefore, we share our findings through presentations and publications, so that we can contribute to national discussions about policies, programs and evaluation efforts related to violence prevention and peacemaking.

References

Steps to a HealthierWA Project Summary

This document presents a summary of the Washington State Steps to a HealthierWA project as a series of statements about program theory, approach, activity, and evaluation. This information is only reflective of the Steps project in Washington State, and does not necessarily reflect the priorities of the CDC Steps program, other states, or the Seattle-King County Steps project.

The Washington State Department of Health received a five-year grant from the Centers for Disease Control as part of the Steps to a HealthierUS program. The grant requires that 75% of funds be passed through to communities, but is otherwise not specific about goals and how to achieve them. From the national Steps website (http://www.healthierus.gov/Steps/):

Steps to a HealthierUS is a bold new initiative from the U.S. Department of Health and Human Services (HHS) that advances President George W. Bush’s HealthierUS goal of helping Americans live longer, better, and healthier lives.

Washington State is funding four communities to participate in this program (September 2003-September 2008):

- **Chelan-Douglas-Okanogan Counties**: a three county partnership in a geographically large, rural, high Latino area; the recipient is a health district
- **Clark County**: an urban mostly white non-Hispanic Washington community that is sometimes considered a suburb of Portland, Oregon; the recipient is a community-based non-profit
- **Thurston County**: an urban county with growing diversity, home of the state capitol; the recipient is a health department
- **Colville Tribe**: a rural, geographically large, federally-recognized Native American tribe

We are using a participatory evaluation model, coordinating decisions made among our local partners. The geographic location and varied capacity of our partners makes this a challenging but also rich process.
1. Chronic disease is like a web – approaches to chronic disease prevention should be integrated
   - The six diseases and risk factors that are the priority of Steps are inter-related (see figure)
   - Each of these priorities is currently addressed with programs in Washington State that are funded to specifically address that disease/risk factor alone – Steps gives us the opportunity to integrate across programs
2. Steps focuses on policy, environment, and organizational change

- Individual-level interventions are well-suited to topical programs (tobacco, nutrition)
- In Washington, the Department of Health has a great deal of capacity to mobilize delivery of individual-level interventions
- Previous efforts to influence policy/organizations have been uncoordinated and potentially ineffective as there was not expertise in conducting interventions within specific systems (we were giving poor service to our organizational customers)
- The Steps grant is not expected to last beyond its five-year grant period (September 2003-September 2008), thus is it important to focus our efforts to create sustainable change (such as policy/organizational change) that will last beyond the term of the grant
- Our goal is to create environments where “the healthy choice is easy to make” – the individual interventions that will continue to be conducted for specific diseases will be catalyzed by these improved environmental cues (norms)
- We are attempting to weave elimination of health disparities into our project – changing environments affects all people who use those environments regardless of their demographic group

![Social-Ecological Model](image-url)

*Social-Ecological Model*
3. Steps approaches policy improvement within “domains” rather than by “disease”
   • Steps operationalizes integration by program planning across disease or risk factor states but within common “domains”
   • There are four key domains for achieving policy or systems change: schools, worksites, communities, and healthcare
   • Policy or procedural change activities tend to be similar across disease/risk factors, and the policymakers who must be educated tend to be the same
   • These organizations that operate within these domains potentially serve most Washington populations (most children attend school, many adults have a workplace, most people live in organized communities, and most people are served by healthcare systems at different times
   • We are working to change policy, organizations, environments to create healthy schools, healthy worksites, healthy communities and quality healthcare

<table>
<thead>
<tr>
<th>Domain/Disease- Risk Factor</th>
<th>Schools</th>
<th>Worksites</th>
<th>Communities</th>
<th>Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma Programs</td>
<td>Management of students with asthma, clean indoor/outdoor air practices</td>
<td>Clean indoor/outdoor air policies/practices</td>
<td>Clean indoor/outdoor air policies/practices</td>
<td>Asthma identification &amp; quality management</td>
</tr>
<tr>
<td>Diabetes Programs</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Diabetes identification &amp; quality management</td>
</tr>
<tr>
<td>Nutrition Programs</td>
<td>Healthy food choices &amp; education requirements</td>
<td>Healthy food choices, breastfeeding support</td>
<td>Access to healthy food choices</td>
<td>n/a</td>
</tr>
<tr>
<td>Obesity Programs</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Obesity identification &amp; quality intervention/treatment</td>
</tr>
<tr>
<td>Physical Activity Programs</td>
<td>Physical activity requirements &amp; options</td>
<td>Activity-friendly environments &amp; options</td>
<td>Activity-friendly codes, environments &amp; options</td>
<td>n/a</td>
</tr>
<tr>
<td>Tobacco Programs</td>
<td>Tobacco prevention instruction requirements/strong policies/procedures</td>
<td>Smokefree air policies, healthcare benefits for cessation</td>
<td>Smokefree places for air quality and prevention, ads &amp; sampling restricted</td>
<td>Tobacco use identification &amp; quality of treatment</td>
</tr>
</tbody>
</table>

n/a = not applicable as a priority within the domain (although approaches for other Steps factors may be related)
4. Steps partners have created logic models for this approach

Steps to a HealthierWA: Comprehensive Logic Model

“Policy” includes rules, practices, codes, laws and/or expectations for conduct in environments/systems/organizations

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PARTNERSHIP</th>
<th>CAPACITY</th>
<th>ACTIVITIES</th>
<th>KNOWLEDGE</th>
<th>POLICY</th>
<th>BEHAVIORS</th>
<th>DISEASE PREVALENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money</td>
<td>Schools, Educational Service Districts, Employers, Health Plans</td>
<td>Nurture partnership/integration</td>
<td>↑ knowledge among general population of need for policies, ↑ knowledge among policymakers about opportunities/models for change</td>
<td>Environment, Systems, Organizational change: Healthy Schools policy, procedures, instruction</td>
<td>↑ Physical activity</td>
<td>↓ Diabetes</td>
<td></td>
</tr>
<tr>
<td>Skilled Staff</td>
<td>Statewide, science-based, Steps-related programs (Tobacco, Obesity, Physical Activity, Nutrition, Diabetes, Asthma)</td>
<td>Assess need &amp; opportunities for policy change</td>
<td>↑ knowledge among general population of need for policies</td>
<td>Healthy Worksites policy, practices</td>
<td>↑ Nutritional status</td>
<td>↓ Obesity</td>
<td></td>
</tr>
<tr>
<td>Statewide, science-based, Steps-related programs (Tobacco, Obesity, Physical Activity, Nutrition, Diabetes, Asthma)</td>
<td>Local Governments, Citizens, Media, Community-based Organizations, Faith-Based Organizations</td>
<td>Prioritize policy goal areas</td>
<td>↑ knowledge among policymakers about opportunities/models for change</td>
<td>Healthy Worksites policy, practices</td>
<td>↑ Tobacco use and Exposure to secondhand smoke</td>
<td>↓ Asthma</td>
<td></td>
</tr>
<tr>
<td>Skilled Staff</td>
<td>Local health programs &amp; Stakeholders</td>
<td>Build support to address need</td>
<td>↑ support for policy adoption among community members and policy makers</td>
<td>Healthy Communities physical/social environment policy/codes</td>
<td>↑ Quality of life</td>
<td>↓ Adverse health outcomes w/ obesity, asthma, diabetes</td>
<td></td>
</tr>
<tr>
<td>Statewide, science-based, Steps-related programs (Tobacco, Obesity, Physical Activity, Nutrition, Diabetes, Asthma)</td>
<td>Best or promising practice interventions</td>
<td>Educate stakeholders about policy to address need</td>
<td>Healthy Communities physical/social environment policy/codes</td>
<td>Quality Healthcare disease screening, patient tracking, adoption of clinical best practices</td>
<td>↓ Heart Disease</td>
<td>↓ Cancer Incidence</td>
<td></td>
</tr>
<tr>
<td>Skilled Staff</td>
<td>Really GREAT communities</td>
<td>Promote model policies</td>
<td>↑ skills among policymakers to effectively implement policy</td>
<td>Healthcare costs</td>
<td>↓ Economic costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Because we have these resources... and these partners... we increase our collective ability... to do these activities... to achieve these outcomes for our communities... for these reasons.

Short Term Outcomes → Intermediate Outcomes → Long Term Outcomes

STEPS theory: PROGRESS ACCELERATED by Synergy from Partnership/Integration
5. Our evaluation focuses on intermediate outcomes

- CDC is requiring outcome-based evaluation for the Steps projects, and has performance measures based on long-term outcomes (disease or risk factor prevalence in communities)
- Given the five-year term of the grant, we are focusing our state evaluation design on intermediate outcomes (policy, systems change)
- We are working across programs to create or expand existing data collection systems with the intention of creating organizational surveillance in each domain, and also having individual measures to validate the environmental change from the perspective of the individual
- We are also measuring long-term outcomes and process measures in our evaluation

Sample indicators from Steps evaluation plan for Schools domain

<p>| Healthy Schools |
| Intermediate Outcome Measures |</p>
<table>
<thead>
<tr>
<th>Policy Outcome</th>
<th>Indicator (data source)</th>
<th>data level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive</td>
<td>Organizational</td>
<td>data level</td>
</tr>
<tr>
<td>- School Health Index</td>
<td>% schools among total that have completed SHI health improvement plans (using output reporting)</td>
<td>C</td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No indicators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Healthy Schools

### Intermediate Outcome Measures

<table>
<thead>
<tr>
<th>Policy Outcome</th>
<th>Indicator (data source)</th>
<th>Data level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asthma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Organizational</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No measures for idle zone, tools for schools, green cleaning – potentially add to SHEP?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• School policy requires Asthma Action Plan for all youth with asthma (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• School policy allows youth with asthma to self-carry inhalers (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % Schools that educate students with asthma about asthma management (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % Schools that provide intensive case management for students with asthma absent more than 10 days per year (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Individual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Youth with asthma in schools have Emergency care plans (School Nurse Corps) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Youth with asthma in schools have Health care plans (School Nurse Corps) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All youth with persistent asthma in schools are identified by school nurses (School Nurse Corps + HYS) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Organizational</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No measures</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Individual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Youth with diabetes in schools have Emergency care plans (School Nurse Corps) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Youth with diabetes in schools have Health care plans (School Nurse Corps) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All youth with persistent diabetes in schools are identified by school nurses (School Nurse Corps + HYS) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td><strong>Nutrition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Organizational</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % schools that allow more than 20 minutes for lunch (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % schools with policy to provide fruits &amp; vegetables at school meetings, concession stands (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % schools that have healthy vending (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % schools including nutrition instruction in required health education courses – including a variety of specific nutrition topics (SHEP) (^{S,R,C})</td>
<td></td>
</tr>
</tbody>
</table>
## Healthy Schools

### Intermediate Outcome Measures

<table>
<thead>
<tr>
<th>Policy Outcome</th>
<th>Indicator (data source) *data level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Indicators</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Organizational</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Physical Activity** | • Required PE  
• Opportunities outside class |
| **Physical Activity** | • % schools including PE in required health education courses, require PE for all students – including a variety of specific PE activities (SHEP) $^{S,R,C}$  
• % schools that require PE teachers to be certified (SHEP) $^{S,R,C}$  
• % schools that support outside physical activity w. bus service, facilities (SHEP) $^{S,R,C}$ |
| **Individual** | • % youth who report going to PE X days per week (HYS) $^{S,R,C}$  
• % youth who exercise at least 20 minutes during PE classes (HYS) $^{S,R,C}$ |
<table>
<thead>
<tr>
<th>Tobacco</th>
<th>Organizational</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Zero tolerance on school property</td>
<td>• % schools with zero tolerance policies – possession by anyone, anywhere, anytime, any type of tobacco, prohibition of marketing materials (SHEP) S,R,C</td>
</tr>
<tr>
<td>• Supportive consequences</td>
<td>• % schools that refer to a counselor, provide assistance for youth caught using tobacco (SHEP) S,R,C</td>
</tr>
<tr>
<td>• Required prevention instruction</td>
<td>• % schools including tobacco instruction in required health education courses – including a variety of tobacco prevention concepts (SHEP) S,R,C</td>
</tr>
</tbody>
</table>

| Individual       |
|------------------|------------------------------------------------------------------|
| • % youth who report receiving tobacco education during past year (HYS) S,R,C |
| • % youth who practiced refusal skills during past year (HYS) S,R,C |
| • % youth who say that rules about not using tobacco at school are usually enforced (HYS) S,R,C |
| • % youth tobacco users who report using tobacco on school property during past 30 days (HYS) S,R,C |

S= state-level data  
R= regional (Steps/non-Steps) level data  
C= county/community-level data
6. We will evaluate our approach in comparison to what would have been expected otherwise

- The specific aims of the Steps evaluation plan include:
  1. What changes in policy/organizational practices and capacity for chronic disease prevention occurred in Steps communities, in comparison to non-Steps communities statewide?
    a. Schools
    b. Worksites
    c. Communities
    d. Healthcare Settings
  2. What changes in state-level practices for chronic disease program planning and implementation integration occurred in conjunction with the Steps project, in comparison to prior to the Steps project?
  3. What happened (inputs, activities, outputs, experiences, partnerships) in Steps communities that were most successful or least successful in promoting policy/organizational change?

- We will examine Steps communities individually (relative to each other, to the state, and to comparison counties), and also grouped in comparison to non-participating areas in the state

Sample Steps outcome comparisons at baseline – no statistically significant differences
Diabetes among Adults


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