5197

RESEARCH TRIANGLE INSTITUTE

Contract Number 200-88-0643
Task Order Number 0643-01
September 28, 1990

FINAL REPORT

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROCESS EVALUATION MODEL

Submitted to

Office of Program Planning and Evaluation
and
Center for Chronic Disease Prevention
and Health Promotion

Centers for Disease Control
1600 Clifton Road, NE
Atlanta, Georgia 30333

Project Officers: Wilma Johnson, OPPE
Mary Ellen Bloodworth, OPPE
Chuck Nelson, CCDPHP
Diane Orenstein, CCDPHP

POST OFFICE BOX 12194 RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709-2194

3171

Contract Number 200-88-0643
Task Order Number 0643-01

September 28, 1990

Evaluation Design Studies
Final Report

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROCESS EVALUATION MODEL

Submitted to:

Office of Program Planning and Evaluation
and
Center for Chronic Disease Prevention and Health Promotion

Centers for Disease Control
1600 Clifton Road, NE
Atlanta, Georgia 30333

Project Officers

Wilma Johnson, OPPE
Mary Ellen Bloodworth, OPPE
Chuck Nelson, CCDPHP
Diane Orenstein, CCDPHP

Prepared by:

Barri A. Braddy
Thomas J. Cook
Debra J. Holden
Deborah A. Gibbs
Lisa Rist
Irene Tessaro

ACKNOWLEDGEMENTS

The RTI Research Team would like to express our sincere thanks to our CDC technical project officers, Mr. Chuck Nelson and Dr. Diane Orenstein, for their invaluable assistance and support throughout this project. We also want to thank the other CCDPHP staff who shared with us their time and their knowledge during the evaluation. We would also like to thank Dr. Marshall Kreuter for the important role he played in the study. In addition, we extend our thanks to Ms. Wilma Johnson and Ms. Mary Ellen Bloodworth of the Office of Program Planning and Evaluation for their guidance and ongoing support over the last two years.

We also would like to thank Dr. Allan Steckler of the University of North Carolina-Chapel Hill's School of Public Health, Department of Health Behavior and Health Education, for his expert advice and ongoing support throughout the course of the project. Ms. Kate Orville, formerly of UNC-CH, also provided us with important assistance and background information.

The Research Team also extends our deep appreciation to each of the states and sites we visited for their assistance. We thank them for contributing their time and efforts to providing the information on which the results of the study are based. Additionally, we want to thank each of them for their hospitality during our visits. Their kindness and warmth made this project a fun one, in addition to the professional stimulation and satisfaction it has provided for us.

Finally, we would like to express our sincere appreciation to Ms. Nancy Beasley of RTI for her professionalism and patience over the course of the study, and, in particular, in preparation of this final report.

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROGRAM PROCESS TO MODEL

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY v

CHAPTER 1: INTRODUCTION . . . , , ... , , ... 1-1

Evaluation Questions 1-1
Methodology 1-2
Phase I i-6
Phase II 1-7
Phase III 1-9
Critique of the Approach 1-10
Evaluation Team 1-12
Overview of the Remainder of the Report I-12

CHAPTER 2: RESULTS. 2-1

QUESTION 1: Does participation in PATCH affect the practice of public health or public health education? Describe at the State Health Department and community levels 2-2

Major Themes 2-2
Discussion of Results 2-2
Conclusions and Implications 2-6
Recommendations 2-6

QUESTION 2: Does participation in PATCH influence changes in the structure of participating health agencies? if yes, describe at the State Health Department and community levels. How has the relationship been affected? 2-9

Major Themes 2-9
Discussion of Results 2-9
Conclusions and Implications 2-14
Recommendations 2-15

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROGRAM PROCESS TO MODEL

TABLE OF CONTENTS

Paae

QUESTION 3: Does the collection of common data elements (e.g., morbidity and mortality, Behavioral Risk Factor Survey, community opinion information) influence the health risks that are targeted and the types of interventions that are implemented? 2-19

- Major Themes 2-19
- Discussion of Results 2-19
- Conclusions and Implications 2-23
- Recommendations 2-23

QUESTION 4: Is there evidence that participation in the PATCH process results in the implementation of intervention activities that would not otherwise have been untaken? 2-25

- Major Themes 2-25
- Discussion of Results 2-25
- Conclusions and Implications 2-39
- Recommendations 2-41

QUESTION 5: Is there evidence PATCH has become institutionalized? . 2-43

- Major Themes 2-43
- Discussion of Results 2-43
- Conclusions and Implications 2-51
- Recommendations 2-51

QUESTION 6: Describe how people in the field define or measure success? 2-54

- Major Themes 2-54
- Discussion of Results 2-54
- Conclusions and Implications 2-56
- Recommendations 2-56

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROGRAM PROCESS TO MODEL

TABLE OF CONTENTS

Page

QUESTION 7: What factors predict the level of participation in PATCH? 2-58

- Major Themes 2-58
- Discussion of Results 2-58
- Conclusions and Implications 2-66
- Recommendations 2-67

QUESTION 8: Are there qualitative differences between the initial PATCH sites (those with CDC staff conducting the workshops) and the replication sites (those with minimal. CDC staff involvement)? If so, describe. 2-71

- Major Themes 2-71
- Discussion of Results 2-71
- Conclusions and Implications 2-74
- Recommendations 2-75

QUESTION 9: Does it make a difference in the success of PATCH whether the initial interest for a given site comes from the State Health Department or from the community level? 2-78

- Major Themes 2-78
- Discussion of Results 2-78
- Conclusions and Implications 2-81
- Recommendations 2-82

QUESTION' 10: What should CDC's role be? 2-84

- Major Themes 2-84
- Discussion of Results 2-84
- Conclusions and Implications 2-87
- Recommendations 2-88

DEVELOPMENT OF A PLANNED APPROACH TO COMMUNITY HEALTH (PATCH) PROGRAM PROCESS TO MODEL

TABLE OF CONTENTS

Paae

CHAPTER3 3-1

The "New" PATCH 3-1
Initiation of New PATCH sites 3-2
Maintaining PATCH in the Local Community 3-8
Maximizing PATCH 3-11
Evaluating PATCH 3-13
PATCH as a National Program 3-16
Summary 3-16
Conclusions 3-17

REFERENCES

APPENDIX A
APPENDIX B

EXECUTIVE SUMMARY

Background

A process evaluation of the health promotion and chronic disease prevention program, Planned Approach to Community Health (PATCH), was conducted by the Research Triangle Institute in cooperation with the Centers for Disease Control (CDC), Center for Chronic Disease Prevention and Health Promotion (Division of Chronic Disease Control and Community Intervention). PATCH is a voluntary program designed to help communities plan, implement and evaluate health promotion and health education interventions. The purpose of the evaluation study was to collect information that could be used to improve the effectiveness and dissemination of PATCH, thereby facilitating the improvement of the program.

Method

To complete the evaluation, 10 states were selected for site visitation. Within each state, the original PATCH site and at least one replication site (if existent) were visited with a total of 20 sites visited. A comparative case study design was used to collect data at the sample sites through the use of four techniques:

- focus group discussions with diverse program participants;
- semi-structured interviews with state and local administrators, program staff, program participants (e.g., volunteers), program clients and other community members;
- review and abstraction of local program records and files; and
- direct observation of program organization and operations.

Eight questions, contained in the original Statement of Work, as well as two others that emerged through discussions with CDC staff, guided the evaluation. These questions are:

1. Does participation in PATCH affect the practice of public health or public health education? Describe at the State Health Department and community levels.

2. Does participation in PATCH influence changes in the structure or function of participating health agencies? If yes, describe at the State Health Department and community levels. How has the relationship been affected?

3. Does the collection of common data elements (e.g., mortality, Behavior Risk Factor Survey, and opinion information) influence the health risks that are targeted and the types of interventions that are implemented?

4. Is there evidence that participation in the PATCH process results in the implementation of intervention activities that would not otherwise have been untaken?

5. Is there evidence PATCH has become institutionalized?

6. Describe how people in the field define or measure success.

7. What factors predict the level of community member participation in PATCH?

8. Are there qualitative differences between the initial PATCH sites (those with CDC staff conducting the workshops) and the replication sites (those with minimal CDC staff involvement)? If so, describe.

9. Does it make a difference in the success of PATCH whether the initial interest for a given site comes from the State Health Department or from the community level?

10. What should CDC's role be?

Conclusions and recommendations are presented for each of the 10 questions in Chapter 2. A synthesis of this information, as well as its direct application and implications for PATCH is presented in Chapter 3. For the reader's expediency, we present an abbreviated version of this information below.

Implementing PATCH

Initiation of PATCH

<u>Conclusions</u>

- States and sites often do not know what to expect from CDC or understand what their role is in the PATCH process.

- PATCH sites and states are unclear about what the focus of PATCH is supposed to be. Sites tend to decide for themselves whether PATCH will be a broad-based health promotion program or focus solely on health promotion and chronic disease interventions in their community.

- Funding is an issue for most sites, particularly at the initiation of PATCH, and many feel their community cannot generate funds on its own.

Recommendations

- CDC needs to state clearly to the states and sites, perhaps by way of an administrative agreement, exactly what can be expected from their participation.

- In addition to defining their own role in PATCH, it would be helpful if CDC could clearly define the roles of the coordinators, particularly at the local level, and the expectations for core group members. This definition is particularly needed at the local level since there is wide variation across sites as to what a local coordinator is supposed to do.

- CDC should specifically state whether PATCH is limited to chronic disease or can include a broader range of health issues.

- Minimal funding from CDC, with perhaps a matching fund from the state, generally needs to be provided at the initiation of PATCH.

- CDC can support sites' fund raising activities by providing information about strategies which have been used successfully in other communities, upcoming funding opportunities, and resources to assist sites that wish to prepare grant applications.

Selection of Sites

Conclusions

- The availability of a local coordinator and a program champion in an influential position, motivation on the part of the site to take PATCH, and the existence of state support are important criteria to consider in the selection of new PATCH sites.

- PATCH is most readily implemented and maintained in communities that have some resources available, such as pre-existing health services and an adequate supply of health professionals to become involved, along with a moderate level of both funding and staff time.

- Although PATCH may be more difficult to implement in communities with few resources, PATCH can be an effective mechanism for enhancing health promotion in these communities.

- Sites that initiate involvement in PATCH are often highly motivated to have this type of intervention program available in their community.

Recommendations

- CDC should specify criteria for helping states select sites that are most appropriate for PATCH.

- PATCH's development phase could include state-wide publicizing of the PATCH concept and the opportunities it offers to enhance community interest.

Selection of Program Participants

Conclusions

- The role of the local coordinator is a key factor in the success of PATCH, especially in disseminating the programs and advocating for PATCH.

- While professionals are vital resources for the core group, exclusive reliance on health professionals for core group membership ultimately handicaps the program.

Recommendations

- Providing training to local coordinators about their role in the PATCH process would enhance their capabilities in producing successful programs. Local coordinators would benefit from training in leadership, management, and public relations.

- Sites need to encourage the development of strong support from the sponsoring agency as well as other lead health agencies, in addition to fostering good representation from the lay community.

Training

Conclusions

Workshop sessions:

- Differences in the PATCH process exist between the original and replication sites, particularly in the coverage of materials in the workshops.

- The content of training materials is very difficult for some core group members to comprehend while others find the materials redundant with the information and skills they already possess.

- Sites need assistance in recognizing the importance of program evaluation and in developing the skills necessary to conduct their own evaluations.

- The PATCH model, as typically implemented, does not incorporate a plan for continuing activity beyond the first intervention. Many sites find that the enthusiasm and momentum of the core group falters at this point; therefore the program slowly dies out.

Ongoing Training:

- Components of the PATCH process are often overlooked due to the turnover of key staff members, both at the state and local levels.

- State and local coordinators often lack important knowledge to maintain PATCH (e.g., managing key personnel, facilitating networking, and obtaining media coverage).

Recommendations

Workshop sessions:

- CDC should offer a variety of workshop modules to sites to ensure that vital components of the PATCH process are not eliminated.

- These modules should vary by degree of difficulty and offer components for home study so that volunteers can obtain individual training if they are less experienced.

- CDC should place stronger emphasis on training sites in evaluation. Through evaluations, sites can not only develop a sense of accomplishment but also demonstrate the value of PATCH in their community.

- CDC should assist sites in planning beyond the completion of the first intervention, possibly through the provision of an awards banquet or a workshop to outline the next steps to be taken.

Ongoing Training:

- A mechanism for providing training to new state and local coordinators should be developed by CDC.

- Since the state-level PATCH staff are primarily responsible for providing technical assistance to the local staff, they should understand every component of PATCH at the local level. Training for strategies in providing leadership and technical assistance is needed at the state level.

- Teaching PATCH sites to utilize the media effectively would increase community awareness of PATCH.

- Examples of other types of information that should be provided at the local level include:

  - techniques for maintaining and extending community interest in and awareness of PATCH;

  - preventing burnout of volunteers;

  - intervention strategies;

  - techniques for planning additional interventions after the initial ones have been completed;

  - techniques for institutionalizing PATCH in the community; and

  - evaluation methods.

Maintaining PATCH

Data Collection and the Selection of Interventions

Conclusions

- The BRFS is an extremely time consuming component of the PATCH process that often contributes to burn-out among PATCH volunteers.

- Collection of at least one source of data is important in establishing local ownership in both the community's problems and in the PATCH process. The Community Opinion Survey is probably the most widely used of these data elements.

- The selection of targeted health risk factors and interventions is likely to be affected by a variety of factors not related to the collection of data, including the individual interests of core group members and existence of related health services already available in the community.

Recommendations

- CDC needs to recognize the burden of the BRFS, make a decision regarding its use and recommend other appropriate measures for decision making.

- CDC should clarify and communicate to the sites how interventions and targeted health risk behaviors are to be selected.

- Providing an intervention model and packets that describe how to design and implement interventions would assist sites in choosing appropriate interventions. In addition, the provision of resource materials (such as low fat recipes, etc.) would also be helpful.

Maximizing PATCH

Conclusions

- PATCH increases the level of communication among the CDC, state and local levels. However, this enhanced communication varies a great deal across sites.

- Both professionals and volunteers experience burnout and could benefit from recognition for time and effort spent on PATCH.

- Networking across sites seems to be a valuable method for enhancing the outreach of PATCH.

- Core group members are a valuable component of the PATCH program that should be nurtured and utilized to the fullest potential.

Recommendations

- Promoting state-level networking of health promotion/risk reduction groups will enhance state-wide networking and facilitate the further development of PATCH. This increased networking would enhance site involvement by providing a mechanism for sharing information about successful interventions.

- Developing strategies to strengthen the continued involvement of lay and professional core group members would help to alleviate burnout. This may include frequently issuing certificates, awards, and letters of commendation to further enhance the efforts of the PATCH teams.

- Ways for encouraging core group members to be community role models should be explored.

In summary, one of the primary roles CDC can serve in enhancing PATCH is by further developing their techniques of communication. This enhanced communication should be done throughout the PATCH process. First, CDC should specify to states and sites what the goals of PATCH are believed to be and what can be expected from CDC involvement. By continuously providing sites with training and information that is readily available at CDC, there will be a great enhancement of the capabilities of each site to maintain PATCH. In addition, by using CDC influence to enhance networking among states and sites, CDC will be providing sites with a mechanism for sharing their resources. This increased networking could reduce the amount of funding necessary for sites to initiate interventions, because they will be able to share packaged interventions or materials necessary to implementing a particular type of program. Finally, by continuing CDC involvement throughout the PATCH process, through the availability of staff time and funding, sites will be better able to capitalize on the PATCH process and feel supported in their efforts at making it a successful program.

Conclusion

Results of our evaluation suggests that PATCH is an effective mechanism for encouraging health promotion and chronic disease prevention activities at the state and local levels. However, for PATCH to reach its full potential, CDC must facilitate the process through provision of resources in the forms of technical assistance and funding. Maintaining CDC's presence in PATCH is critical. In return, PATCH can offer to CDC an effective mechanism for working with the states and local communities as the three partners strive to achieve the health promotion/chronic disease reduction objectives for the Year 2000.

CHAPTER 1

Introduction

The Planned Approach to Community Health (PATCH) is a voluntary program designed to help communities plan, implement, and evaluate health promotion and health education interventions. Citizens and local health personnel work with state and local health departments to design and install interventions to meet priority health needs.

PATCH was developed by staff from the Centers for Disease Control (CDC), Center for Chronic Disease Prevention and Health Promotion. The first PATCH site was established in November 1984. The program now operates in 17 states and 50 communities. Its stated objectives are:

- To establish a methodology for planning, implementing, and evaluating community-based health promotion programs; and
- To reduce the prevalence of modifiable risk factors for the leading causes of preventable morbidity, mortality, disability, and injury.

This report presents the results of an evaluation of the PATCH program completed by staff from the Research Triangle Institute (RTI). The main evaluation goal was to collect information that could be used by CDC staff, PATCH Program staff, and community participants to improve the operation and effectiveness of the program. In the terminology of evaluation research, this was a formative evaluation aimed at strengthening program performance.

The discussion in this chapter identifies the priority evaluation questions and describes the methodology used to answer them. Chapter 2 then presents and discusses the findings for each question, and reveals the policy and program implications that can be drawn from the research. Chapter 3 synthesizes the results and their application to the PATCH model.

Evaluation Questions

The findings reported here extend those obtained by Dr. Allan Steckler of the University of North Carolina (UNC) School of Public Health and his colleagues in an

earlier analysis of PATCH (Steckler et al., 1989). Several conversations with Dr. Steckler and Ms. Kate Orville of UNC School of Public Health helped to further shape this evaluation both in terms of the questions we would address and the methodological approach that would be the most valid and cost-effective.

Figure 1 presents the Presumptive PATCH Model from the Steckler study. The model provides a useful summary of the major steps in the PATCH process and reflects the range of activities an observer is likely to encounter at different sites. Of course, as will be pointed out in the discussion of the findings, PATCH will differ to some degree across sites since it tends to be modified to fit local conditions.

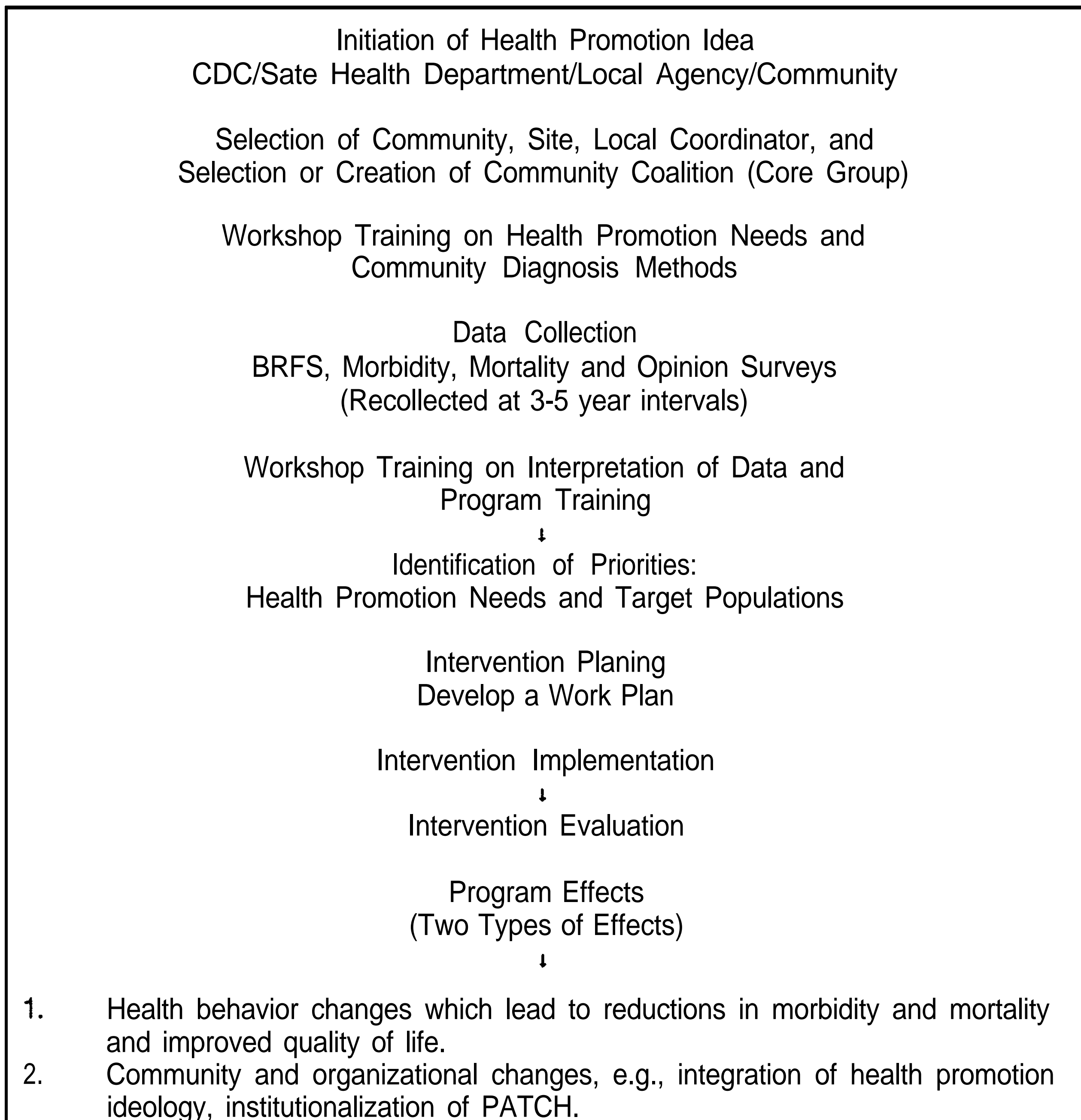
The model also presents issues of interest for this evaluation. That is, we present information relevant to all levels of the model. Our results expand upon some of the findings of the Steckler, et al., report in the areas of program design and implementation. Most of our analyses, however, address new issues in concentrating on the PATCH interventions and questions of program effectiveness.

The Statement of Work (SOW) for this task provided the evaluation questions we used as the starting point for designing the evaluation. The questions were refined through several discussions among RTI and CDC staff directly involved in the evaluation. The final set of questions is displayed in Figure 2.

Methodology

To answer these questions we used a multimethod approach sensitive to the variety of activities and interrelationships at the federal, state, and local levels that potentially could affect PATCH implementation. Some of these activities and inter-relationships were anticipated in the original PATCH program design (e.g., Planned Approach to Community Health Workshop manuals), while others could be traced to the re-invention over time of the program over time as it has been adapted by states and communities to the realities of their particular environments. Since PATCH is a dynamic process, our evaluation had to be both flexible and comprehensive. We implemented a comparative case study design embracing extensive data collection at a sample of state and local sites. The approach was implemented in three phases.

Figure 1
THE PRESUMPTIVE MODEL*


Initiation of Health Promotion Idea
CDC/Sate Health Department/Local Agency/Community

Selection of Community, Site, Local Coordinator, and
Selection or Creation of Community Coalition (Core Group)

Workshop Training on Health Promotion Needs and
Community Diagnosis Methods

Data Collection
BRFS, Morbidity, Mortality and Opinion Surveys
(Recollected at 3-5 year intervals)

Workshop Training on Interpretation of Data and
Program Training
↓
Identification of Priorities:
Health Promotion Needs and Target Populations

Intervention Planing
Develop a Work Plan

Intervention Implementation
↓
Intervention Evaluation

Program Effects
(Two Types of Effects)
↓

1. Health behavior changes which lead to reductions in morbidity and mortality and improved quality of life.
2. Community and organizational changes, e.g., integration of health promotion ideology, institutionalization of PATCH.

Figure 2

PATCH Evaluation Questions

Assessing the Effects of PATCH

1. Does participation in PATCH influence changes in the structure or function of participating health agencies? If yes, describe at the State Health Department and the community levels. How has the relationship been affected?

2. Does participation in PATCH affect the practice of public health or health education? If yes, describe at the State Health Department and at the community levels.

3. What interventions have been done?* Describe , indicating any evaluations that were conducted.* Is there evidence that participation in the PATCH process results in the implementation of intervention activities that would not otherwise have been undertaken?

4. Does the collection of common data elements (e.g., mortality, BRFS, and opinion information) influence the health risks that are targeted? How were the data collected?

5. To what degree has PATCH become "institutionalized" in the communities? Examples of institutionalization include, but are not limited to, the following:

   - How knowledgeable is the public about PATCH activities?
   - Have additional resources been generated to support PATCH activities?
   - How many persons have participated in PATCH interventions?
   - Have other local agencies adapted or expanded their "PATCH-like" activities?
   - How have programs or services grown and continued over time? Have they been evaluated, either formally or informally?
   - Who is perceived to own PATCH?
   - Has the PATCH community grown?

6. Define and describe how people in the field identify a successful PATCH program. *

Figure 2 (continued)

PATCH Evaluation Questions

Assessing the PATCH Process

7. What factors predict the level of participation in PATCH, both at the State Health Department and community levels?

8. Are there qualitative differences between the initial PATCH sites (those with CDC staff conducting the workshops) and the replication sites (those with minimal CDC staff involvement)? If so, describe.

9. Does it make a difference in the success of PATCH whether the initial interest for a given site comes from the State Health Department or from the community level?

10. What should CDC's role be?*

*Based on our Phase I conversations with CDC staff, these questions were added to the original questions specified in the Statement of Work.

Phase I involved preparation for field data collection. Phase II centered on state and local data collection. Phase III entailed data archiving, analysis, and report preparation. The highlights of each phase are discussed briefly below.

PHASE I

This phase required several discussions with CDC staff and others who have an investment in the program (stakeholders) to understand the PATCH organization and operating dynamics. Review of CDC program files provided additional useful information on program evolution. Finally, the Steckler evaluation provided current implementation experience that was useful in designing our data collection strategy and instrumentation.

Clarification of evaluation goals and evaluation questions was another important Phase I activity. Since the main goal of the evaluation was to facilitate program improvement, we had to ensure that it produced valid and practical advice. Frequent discussions among RTI and CDC staff throughout the study period reinsured that this happened.

We also used this time to construct the field data collection protocols. We collected information through four techniques:

- Direct observation of program organization and operations;
- Unstructured interviews with program staff, program participants (e.g., volunteers), program clients, and other community members;
- Review and abstraction of local program records and files; and
- Focus group discussions with diverse program participants.

The protocol (see Appendix A) “blueprint” identified data sources and specified how data were to be collected from each one.

A fortunate circumstance of timing was that we were able to field-test the focus group instruments at a Project LEAN meeting held in Atlanta, February 26-28, 1989, just prior to starting the site visits. Four focus groups were conducted at this meeting, based on four categories:

- States with established PATCH sites;
- Established original sites;
- Established replication sites; and
- New sites (original and replication).

Representatives from 13 states and 25 sites participated in these focus groups. Also, we field-tested the complete data collection plan in South Carolina. We made revisions based on both experiences. However, because these results did not differ significantly from those obtained in our data collection field visits, we have included them in our analysis when relevant to provide as broad a representation as possible.

PHASE II

The first major Phase II activity was to select the case study sites. We selected sites that had completed the 6 CDC Planned Approach to Community Health (PATCH) workshops and were at least 6 months past the final workshop. Some of the sites that met these criteria were excluded: (1) those that were more than 3 years old but had not implemented an intervention; and (2) those that were no longer in operation.

This selection process produced 10 states for the site visits: Alabama, Connecticut, Florida, Kansas, Maine, Nebraska, Ohio, South Carolina, Utah, and West Virginia. Kansas City, Missouri was added both because of its proximity to Kansas and because we wanted to collect information on the operation of PATCH in an urban area. In each state, site visit teams went to the original PATCH site and at least one replication site. Figure 3 shows the states and local sites visited.

Site visits typically began in each state at the state sponsoring agency for PATCH. We interviewed the state PATCH coordinator and other key people involved with PATCH at the state level. The interviews focused on state-local relations important to the initiation of the program in the state, key events in the history of the program and their effects on program implementation, and important program participants at the state and local levels and their roles. We also collected written program material at the state level (e.g., organizational charts for the state's health promotion programs).

Figure 3
STATES AND SITES VISITED

STATES	SITES (Counties)
Alabama	
	Chambers
	Greene
Connecticut	
	Middletown
Florida	
	Collier
	Sarasota
Kansas	
	Butler
	Reno
Maine	
	Mt. Desert Island
	Waterville
Nebraska	
	Gage
Ohii	
	Montgomery
	Muskingam
South Carolina	
	Abbeville
	Bloomingvale
Utah	
	Davis
	Summit
West Virginia	
	Kanawha
	Matooka
	Mercer
	Ohio

Community data collection included unstructured interviews with the local PATCH coordinator, program staff, and other local participants (e.g., volunteers, county health officials, program clients). We also conducted focus groups with selected groups. The instruments used in the interviews and focus groups are presented in Appendix B. These discussions were especially helpful in uncovering shared experiences of participants, such as those pertaining to the selection of the community interventions. The groups discussed issues such as:

- What were the interventions?
- How were they selected?
- Who implemented them and how?
- Were there any implementation problems, and if so, and how were they handled?

Extensive written program material was also collected during the site visits (e.g., Behavior Risk Factor Survey [BRFS] results, Community Public Opinion Surveys, workshop materials and participation figures, program-related advertising materials, PATCH meeting agendas and notes). These data were very useful in the analyses discussed below.

At the end of each site visit, interview and focus group tapes and notes were reviewed and transcripts prepared. All additional material was organized and cataloged.

PHASE III

In Phase III, we coded and analyzed in two stages, first by state and then by sites within each state. For each state, two people independently reviewed all state-level and site transcripts and other notes. The data were coded for the 10 evaluation questions. Next, each reviewer prepared a synthesis of the data for each question. The reviewers then met to discuss their responses for the questions and to resolve any areas of omission or disagreement. To enhance inter-coder reliability, several discussions were held prior to data coding to ensure that all team members shared an

understanding of the information sought in order to answer each of the evaluation questions.

In the second stage of the analysis, two team members were assigned to each of the evaluation questions. An important issue in Phase Ill was the reliability of our data coding procedures. To enhance the reliability of the data, we adapted the double-coding procedure recommended by Miles and Huberman, (1984). This is a procedure whereby two or more coders analyze the same material (e.g., interview notes) and produce independent assessments of the meaning of the material. They then gauge the degree of inter-coder agreement on the meaning, calculating the level of agreement by the formula: reliability = number of agreements/total number of agreements and disagreements.

In accordance with the Miles and Huberman approach, the team members independently and prepared a synthesis across sites for each of their particular evaluation questions. Team members were then asked to indicate independently what they considered to be the key themes for their questions. Next, team members met to discuss their themes and summaries for the questions. Themes were matched on both content and perceived order of importance. Initially, there was approximately 72 percent agreement for the 39 total themes that were suggested by the reviewer teams across all questions. Further discussions and analysis of disagreements produced a final agreement exceeding 90 percent. A single response was prepared and presented to all team members for review and comment. Dr. Steckler then reviewed the questions and the synthesized responses to assess the face validity of the information reports, and concurred that the procedures followed had produced valid results.

Critique of the Approach

The design approach offered the optimal way to evaluate PATCH as it was operating when the study began. Preliminary analyses (e.g., based on discussions with CCDPHP staff, reviews of program documentation, review of the Steckler evaluation and interviews with the evaluation team) revealed a program still experiencing a re-definition of its purpose and further development in the field. This meant that there

was not a single, mature PATCH program to be evaluated, but rather that there was a variety of "programs" representing variations of the theme of the generic PATCH process.

This ongoing evolution of PATCH development called for a design that was adaptable to the considerable variability in characteristics and stages of program development that were known to exist across sites. The design also had to be responsive to the priority information needs of the evaluation's main stakeholder, CCDPHP staff, whose information needs are reflected in the questions in Figure 2. Finally the approach used a variety of data collection techniques - focus groups, unstructured interviews, review of CDC/PATCH FILES, observation of service delivery, and program implementation data - to support its conclusions. The use of multiple, complementary data sources enhances the validity of the analysis and interpretation since the findings were not dependent on a single source of evidence.

The obvious limitation of the study methodology concerns the generalizability of results. The study team used a non-probability, purposive sampling strategy to select the sites to be visited and the groups and individuals within those sites for whom information would be collected. Therefore, it is not appropriate to make generalizations based on results, as would be permitted by a probability sample possessing known statistical characteristics. At the same time, the number of sites visited represented approximately 40 percent of the total number of PATCH sites, providing a very large sample from which to analyze the operation of the program and assess its effectiveness.

To the extent that the sample was biased by the criteria used for selecting sites, our results are appropriately generalized only to those programs that have remained active beyond the initial stages of program development. Although the sites visited represent widely varying degrees of achievement and difficulties, these findings cannot be used to explain the experiences of sites which have not yet implemented interventions, either because of program difficulties or early development.

Because the use of qualitative data often leaves considerable room for competing interpretations, the inter-coder reliability checks were a critical part of our analysis process. Still, the data we used, while varied in the collection technique and rich in detail, contain a subjective element that some readers may find difficult to accept. In order to represent some of the complexity of the evidence considered, we present illustrative quotations within our interpretive descriptions.

Evaluation Team

The selection of the evaluation team was guided by the characteristics of the evaluation, especially the priority evaluation questions. The team leaders were experienced in the type of case study design used, and in the use of the range of appropriate data collection techniques (i.e., unstructured interviews, focus groups, observation of program operations, documentary analysis).

Developing and maintaining good working relations with the state and local PATCH staff was also very important, since the team was totally reliant on them to provide access to the local programs, and therefore the data for the evaluation. Also they were excellent information sources on the past and current operation of the program. Thus a sensitivity on the part of the evaluation team for the issues important to the local level was particularly critical for this study.

Overview of the Remainder of the Report

In the remainder of this report, we provide the results and conclusions for this study. Specifically, in Chapter 2, we present the results for each of the 10 evaluation questions that served to guide the evaluation. We begin by presenting the major themes that emerged for a given question. Next, we provide the data that elaborates upon the major themes. This information is further illustrated by quotes from actual participants in the study. We conclude each question by providing a summary of the results and describing what we, as a research team, consider the implications of these results to be for CDC. Chapter 3 contains a synthesis of the results, drawn across questions, and suggests applications for the current PATCH programs.

CHAPTER 2

Results

In this chapter, we present the study results. The data were obtained through our site visits to the 10 states and 20 sites presented in Figure 1. In the following, we address each of the 10 evaluation questions (contained in Figure 2) that guided the evaluation. We begin each question by indicating the major themes that emerged through our analyses. The Discussion of Results focuses on the major themes and indicates supportive information drawn from the data for each question. Quotes are provided in italics as illustrative of the types of data that produced the results we present. We then summarize responses for each question with a section titled Conclusions and Implications. Finally, we conclude each question by presenting a set of recommendations that outlines initiatives for action and policy that we believe would strengthen the PATCH process as it moves forward into the 1990s.

QUESTION 1: **Does participation in PATCH affect the practice of public health or public health education? Describe at the State Health Department and community levels.**

Major Themes:

Participation in PATCH affects the practice of public health in four major ways:

1. PATCH is a capacity builder for health educators;
2. PATCH lives up to its name, a planning approach to community health; it is increasing appreciation for the use of data and goal setting in planning;
3. PATCH is an exemplary model; it is being adopted by other groups; and
4. PATCH is an "intervention" for core group members; membership in the core group changes the risk-related behaviors of community leaders who in turn serve as role models for others in the community.

Discussion of Results:

PATCH as a capacity builder

As a capacity builder, PATCH teaches applied skills in program development and planning. This is most obvious in the sites where health promotion/chronic disease prevention resources prior to PATCH are generally inadequate (such as in rural and/or minority communities). Six of the 20 sites visited were classified by the research team as lacking in resources. In these instances, PATCH is "the only game in town" and provides an initial set of skills to target health risks as well as to develop and implement community programs.

> ***[PATCH] made the community mot-e health wise and responsible. (Core group member)***

> ***Outside of the schools, this is the only other organization around. (Core group member)***

Participants in resource-rich sites are more likely to have received some training in planning methods through various means such as schools of public health, their work or memberships in other

planning groups. Thus, it is significant that even these participants acknowledge that PATCH has helped them develop or tap into previously unused or underused planning skills. Of the 14 sites classified as "resource rich," 8 mention the value of training received through PATCH.

> *I had studied the procedure in school...the whole thing is different in the outside world....[This kind of understanding] only comes from experience....actually experiencing [the steps]. It pointed out the importance of going through the steps...from beginning to end. (Local coordinator)*

A number of people indicate that besides improving their capacity to plan interventions and deliver health care information, PATCH also has helped the communities to see health education (and educators) as useful and important.

> *PATCH helps health educators clarify their roles...it lends credibility. (Local coordinator)*

The data also indicate cases where PATCH has had little effect on health educators. In at least two states, this lack of change is attributed to the fact that they were practicing the PATCH process prior to the initiation of PATCH. For the majority of cases, however, the problem apparently stems from turnover. In the 20 sites visited, 17 reported turnover of the original local coordinator. In a number of instances, it was apparent to the research team that the PATCH process has never been adequately explained to the new local and state coordinators with responsibility for PATCH. The materials (e.g., the workshop manuals) may be available, but the new person does not recognize the importance of this information. The PATCH model, as currently implemented, does not provide a formal mechanism for education after the initial workshops are completed.

These situations demonstrate the need for an ongoing training program that will introduce new coordinators to PATCH's philosophy and methods. Training for state-level staff could include both information on the PATCH process and management techniques for assisting local-level programs. We did not find existing PATCH materials for the latter area.

> *I was not told much about PATCH..../ was just told, "Here it is." (State coordinator)*

> *They just asked me to be the core group chair. I got a big box [of materials]. It is under my desk. I've never had time to look at it. (Local coordinator)*

PATCH as a planning approach to community health

Respondents in at least eight sites emphasize that PATCH has increased their awareness of the importance of data and goal setting in planning. They report a better understanding of how a planning model works and how they can use models and statistics to appropriately tailor their own program.

> *PATCH has helped us identify problems and then makes it possible to do something about them. It has shown us a health planning model. [PATCH] has increased our awareness and use of statistics. (Local sponsoring agency administrator)*

Additionally, several states and sites report that through PATCH, they have come to increasingly value community participation and involvement. They soon recognized the positive energy that came from delegating responsibility for some areas of health education to the people who were most interested.

> *When I saw the ownership that a county or a community can take, I decided it [PATCH] was really worthwhile. I think it is one of the few programs where a community takes over, a health department relinquishes a lot of its control over things and allows a group of citizens from a lot of disciplines to attack a problem. (State coordinator)*

PATCH as an exemplary model

The suggestion that PATCH is a “model” model stems from the fact that the PATCH process has been adopted as a planning model in a number of health promotion and other related programs.

The most obvious example of the application of the PATCH model is, of course, the replication of new PATCH sites. Eight of the ten states visited have replication sites. Five have more than one replication, including one state with seven PATCH sites and another with six.

Five of the 10 states also report examples of how they have generalized the PATCH process to other programs because they have found it to be a valuable planning tool. In one state, for instance, PATCH has been incorporated into several other health-related programs as a planning tool and has been used as a model in several counties, including non-PATCH sites. Another state reports using the PATCH model for training chronic disease intervention (CDI) groups in low-income communities. A core group member from a third state reports that she served on a school health planning board; she introduced them to the PATCH

process model to help them identify objectives more systematically. Another state indicates "PATCH is a proven mechanism through which communities can mobilize health promotion at the grass roots level" and for this reason, they are "trying to get others to adopt the PATCH concept." In a different site in the same state, they report, "What we learn from PATCH continues to feed into other programs".

I often use the PATCH process in different programs...[It is] a planned approach to community problems. (State coordinator)

I use PATCH as a mode/ for training [in other health promotion programs]. (State sponsoring agency administrator)

PATCH as a risk reduction intervention for key community leaders

Our results indicate participation in the PATCH process serves as an intervention for many core group members. One benefit a number of members report from serving on a PATCH group is that they change their own health risk-related behaviors. These core group members then go out and, through example and word of mouth, influence the health risk-related behaviors of others (e.g., congregation members, family, etc.). Considering that core group members are often community leaders (and, therefore, role models for others), PATCH may be producing behavior changes independently of any planned intervention. This is particularly obvious in communities with limited resources; PATCH may provide the first opportunity to learn about risk reduction behavior modifications for core group members who, in turn, serve as role models for other community members. For example, one woman reports that she has quit smoking as a result of an introductory workshop to PATCH. Another core group member indicates she has lost over 100 pounds and has changed her eating habits as a result of her Participation in the PATCH program; as she expresses it, "Now I know what to do". Another core group member reports that he carefully checks food labels to ascertain the nutritional value prior to making a purchase as a result of the education he has received through PATCH. A rural minority minister told the research team that not only has he changed his own eating habits as a result of PATCH, but he also now preaches the importance of low-fat eating from his pulpit. He further reports that he has noticed people are now bringing healthier food to the church socials. Numerous other core groups describe how they consume less fat as a result of PATCH. Refreshments at core group meetings validate their increased awareness; several report they have gone from high-fat desserts to fruits and other low-fat selections.

We have probably made more difference for those participating in the [core group] than in the community. We have made some difference in Reverend [ ]'s church and congregation. It has probably impacted them on behavior change there..../ think the behavior change has been on the corporate members themselves....Probably at least 10 people have modified their lifestyles [as a result of participating in the PATCH core group]. (Local coordinator)

The education comes from group participation; now I take [the information from PATCH] back to my agency. (Core group member)

Conclusions and Implications:

1. PATCH is producing meaningful changes in the practice of public health by providing health educators with an applied model through which community health planning can be implemented.

2. The PATCH planning model is incorporated into other health promotion programs. The spread of the PATCH process model to other health-related programs suggests that the field implementation of a systematic community health planning approach is a useful mechanism for demonstrating the model's value to other health educators.

3. The changes in the health risk-related behavior of community leaders and other key individuals produced through PATCH are important because these early adopters then serve as powerful role models for middle and later adopters, thereby diffusing health promotion practices through the community.

Recommendations:

1. Orientation to and training in the PATCH process is clearly needed for incoming State and local coordinators. CDC could assist by providing leadership for this training of incoming PATCH staff. In most cases, the original workshop will have been completed, and thus, much of the training information from the existing PATCH manuals will no longer be directly relevant to incoming PATCH staff. We suggest, therefore, that the training for new local coordinators at existing PATCH sites focus on the general PATCH philosophy and ongoing leadership for the PATCH process. Examples of the kinds of information that might be helpful to local-level PATCH staff include:

    - techniques for maintaining and extending community interest in and awareness of PATCH;

- preventing burnout of volunteers;
- intervention strategies;
- techniques for planning additional interventions after the initial ones have been completed;
- techniques for institutionalizing PATCH in the community; and,
- evaluation methods.

Since the state-level PATCH staff are primarily responsible for providing technical assistance to the local staff, they should understand every component of PATCH at the local level. An orientation to the basic philosophy of PATCH is important for maintaining the integrity of PATCH over time and across staff. Strategies for providing leadership and technical assistance to ongoing sites are also needed. For incoming state-level staff who are to be responsible for starting new PATCH sites, training in selection and startup of new sites as well as in the leadership of the PATCH workshops is needed.

We recommend that training for incoming state and local staff be done through annual or semiannual workshops sponsored by CDC on a regional or national level, depending upon the numbers of people who would be involved. The advantages to the workshop approach are that new staff not only would acquire important information about the PATCH process, but also would develop important contacts from within CDC and with other PATCH programs. The networks of contacts developed through the workshops would serve as important information and support resources once the new staff are in the field.

2. By encouraging core group members to be community role models, PATCH can more effectively capitalize on natural, existing linkages to the community. Since core group members are often community leaders, they are key in setting the behavioral norms for the community. Core group members and other community leaders can be utilized in a number of ways. First, they can be encouraged to model healthy behaviors in the community. For example, if sedentary lifestyles are targeted, the core group members could be encouraged to participate in walking projects at locations and times where they can be seen. Also, core group members can disseminate information to others. They should, for example, be supplied with informational brochures that they could

readily distribute. And, they can recognize health risk reduction behaviors in others through acknowledgement and praise. A core group member might also be trained and paid to teach health promotion classes (e.g., exercise, smoking cessation). Furthermore, these examples represent general approaches to the roles core group members can play in producing changes in knowledge, attitudes, and behaviors in the community. Other approaches could be explored as well, contingent upon the targeted risk areas.

3. In assessing the effectiveness of PATCH, community-level changes should be considered as meaningful program outcome effects. Typically, changes in morbidity and mortality figures are considered the ideal outcome variables for determining the effectiveness of community health programs. If these variables are not assessed, behavioral changes are considered the next best option for evaluation purposes. The data obtained in the present study suggest, however, that other factors may be more relevant for determining, from the community level perspective, the effects of a community health program. Diffusion of the PATCH process to other programs, for example, is clearly a desirable program outcome. We recommend monitoring these changes for determining program impacts.

   Similarly, the effects of participation on PATCH core group members should be assessed, as well as the spread of this effect to others in the community who follow the lead of the core group role models. We suggest that communities could be provided with training in techniques for assessing program effects including, but not limited to, monitoring community level impacts and assessing the diffusion of behavior changes produced by the core group “role model” effects. Innovative methodologies are needed to collect the appropriate community-level information. CDC will need to work with communities in developing innovative ways to assess the community impacts of PATCH. (The role of community-level variables for assessing program effectiveness is also addressed in Question 2 and in more detail, regarding the specific types of assistance CDC could provide, in Chapter 3.)

QUESTION 2: **Does participation in PATCH influence changes in the structure or function of participating health agencies? If yes, describe at the State Health Department and community levels. How has the relationship been affected?**

Major Themes:

1. PATCH often produces functional changes for participating agencies, but it has not made major structural changes at the state or local levels.

2. PATCH increases the amount of networking for local sites; it improves cooperation for sites with ample resources, and it introduces resources and brings people together in sites with limited resources.

3. PATCH improves the relationship between the states and local sites and, to some extent, with CDC. However, these relationships were probably good to begin with, and the degree of improvement is difficult to discern. A small number of sites report that their relationship with CDC is somewhat strained.

Discussion of Results:

In answering this question, we have included both intra- and interorganizational factors. At the intraorganizational level, we examine changes in the organization and purpose of the state and local PATCH sponsors. Interorganizationally, we focus on changes in the nature or scope of relationships for PATCH participants and sponsors. Specifically, at this interorganizational level, we consider potential changes in the following relationships:

- between local organizations;
- between the states and the PATCH sites;
- between the states and CDC; and
- between the local sites and CDC.

In the following, we provide the results for both the intra- and interorganizational changes.

PATCH influences the functioning of sponsoring agencies more than their structure

In general, PATCH sponsorship does not lead to modification of an agency's structure. None of the states and sites visited had added PATCH to the sponsoring agency's organizational chart. However, PATCH is generally recognized as part of the agency's function. The majority of local and state coordinators report that PATCH administration is a fundamental part of their job with the amount of time spent being determined by the agreement they have with CDC.[1]

Ten of 20 local coordinators, and 6 of the 10 state coordinators, report that their PATCH role is part of their job description. Eight of the sites we visited report that their local coordinator has about 50 percent of their time designated for PATCH activities. It should be noted, however, that the amount of time allocated for and spent on PATCH is difficult to determine. Sites with other health promotion programs (e.g., other health promotion grants) apparently have difficulty reporting the amount of time allocated specifically for PATCH.

For several reasons, the amount of time a site has designated for PATCH does not necessarily predict the "success" of PATCH in that community. First, it is difficult to separate out the effects of other related factors such as the higher degree of administrative support from agency leadership that is typically associated with the allocation of greater amounts of local coordinator's time. Perhaps more importantly, however, some sites with more time allocated for the local coordinator's involvement in PATCH rely less on volunteer participation. In these cases, the PATCH "legwork" may be seen as the local coordinator's responsibility with the core group serving in an advisory capacity. Specifically, it does not seem appropriate for local coordinators to be responsible for labeling supermarket shelves or distributing low-fat recipes, as happened at some sites when the coordinator had considerable amounts of time to devote to PATCH. When the PATCH coordinator has only a limited amount of time for PATCH, our interviews suggest this encourages delegation of responsibilities, thereby enhancing community participation and commitment.

[1] In most cases the local coordinator is employed by the local sponsoring agency. And even in cases where volunteers serve as the local coordinator, an employee of the local sponsoring agency typically assists in the coordination of activities.

Properly motivated volunteers can then be responsible for the legwork in interventions as well as a number of other tasks, as currently happens in some communities.

> *[I spend] technically 20 percent [time on PATCH]. It averages out to be that. There are some weeks that all I do is PATCH. [However, she goes on to add:] I don't have to do it all because we have community and county involvement. (Local coordinator with 20 percent time allocated for PATCH)*

> *PATCH is definitely owned by the health district....If the district pulled out, PATCH would be gone. (Local coordinator with 50 percent or more time allocated for PATCH)*

In at least four sites and one state, the state and local coordinators report they do not have time allocated specifically for PATCH. In these cases, the state or local coordinator must find time, in addition to all of their other responsibilities, for PATCH activities.

> *PATCH is unreimbursed overtime. (Local coordinator)*

> *I really don't have time allocated anymore to give them. (State coordinator)*

In addition to defining staff job functions, PATCH influences other parts of the sponsoring agency's functioning as well. Evidence from six states and nine sites suggests PATCH has increased the state and local focus on health promotion. These sites indicate that PATCH makes people more aware of health promotion as well as encouraging them to take action in the area.

> *The interest in health promotion started with PATCH. Now we are involved in getting health education issues through out the state. (State sponsoring agency administrator)*

Nine sites also report that PATCH has enhanced their potential for receiving funds. This works in two ways. First, PATCH, is a concrete, visible, community-based structure that can be presented to local boards and funding agencies.

Second, if a core group is in place, those who have funds to distribute know whom to notify, and the core groups are ready to respond to requests for proposals.

> *PATCH got us the Kaiser foundation grant. With our willingness to work together and having a community group plus having the data, we got the [money]. There was no question in my mind [that PATCH helped]. We already had the community coalition in place doing things....(Local sponsoring agency administrator)*

PATCH improves networking among organizations

Change in the relationships between local organizations is one of the most pronounced and powerful influences of PATCH. Fourteen of the 20 sites visited report that PATCH has brought local organizations together in new ways. Core group members describe PATCH as a catalyst for cooperation among agencies. Moreover, they report that now, because of PATCH, there is less duplication of activities, and the health professionals are working cooperatively rather than competing. In most communities, there has been no other mechanism prior to PATCH to provide this cross-organizational structure.

> *I feel it has been a very effective program in bringing these people together and getting things started. (Local coordinator).*

> *[PATCH] has brought together people and organizations that were fragmented before, and it has saved a lot of duplication of efforts, and it has also done away with a lot of territoriality. (Local sponsoring agency staff member)*

PATCH enhances working relationships among states, local agencies and CDC

In most cases, PATCH has had a positive influence on the relationship between the state sponsoring agency and the local community. State-level personnel view PATCH as a mechanism through which they can provide technical assistance, support, and information to local groups. Prior to the community's becoming a PATCH site, there may have been no obvious point of entry into the community's health promotion/disease prevention program. PATCH establishes a point of contact and a framework through which assistance and support can be offered. In most cases, prior to PATCH, a number of different resources (e.g., the American Heart Association, the Lung Association, the local hospitals) would have to be tapped into separately. Thus, PATCH has altered the function of a number of the sponsoring agencies by providing them with access to the communities, clarifying needs for problem-relevant technical assistance, information and support, and making them more visible to the local sites.

> *PATCH has strengthened the state-local bond in providing technical assistance. We are more accessible to them, and they [the local sponsoring agency] are more accessible to us. {State coordinator)*

From the local perspective, only three of the PATCH sites report tension in their relationship with the state sponsoring agency. The

remainder seemingly consider their relationship with the state to be good and are appreciative of the support given.

> *I feel that they've been extremely supportive . . . If I needed something I wouldn't hesitate to call [mentions both the state coordinator and the CDC representative.] (Local coordinator)*

However, our interviews suggest that in at least three cases, the state's involvement is minimal, highlighting the importance of **CDC's** continued involvement with the local sites, as well as a need for CDC to provide states with training regarding effective approaches to working with the local sites.

> *I feel that they [the state sponsoring agency] have been extremely supportive, but they have so much to do that I don't even expect their involvement. (Local eoordinator)*

State/CDC relationship

Most states report that they have a good relationship with CDC. Typically, however, we could not discern **if the relationship has** been improved by PATCH since, in a number of the states, the initial decision to participate in PATCH seems driven, at least in part, by the fact that a good relationship already existed between the state and CDC. One state, however, does indicate that participation in PATCH helped to establish a relationship with CDC that was nonexistent prior to PATCH.

> *[In the past, we were] reluctant to work with CDC. [Since becoming involved through PATCH] we have been very p/eased with the relationship and the support we have received from CDC. (State coordinator)*

In a small number of cases, the relationship between the state and CDC may have been worsened, rather than improved, partially as a result of PATCH. Generally, this feeling seems to be driven by the fact that these states anticipated PATCH would provide funding, and they were disappointed and distrustful of CDC when it did not.

Local/CDC relationship

Effects of participation in PATCH on the CDC/local relationship are generally very positive. In most cases, CDC is viewed as a very valuable resource. The sites report they receive important technical assistance from CDC. The local PATCH people indicate that they can "just pick up the phone and call CDC with any questions or problems" they have, although more original sites report this

perceived linkage than did the replication sites. Moreover, CDC is viewed as the "big shop," and recognition from CDC is a very powerful motivator. We think that part of the pride sites feel regarding their PATCH participation stems directly from the fact that PATCH is a CDC program. Additionally, formal recognition from CDC, even in very simple forms (e.g., plaques), is very important to the sites. This recognition from CDC is a largely untapped resource; we think a thoughtfully developed system of incentives and rewards could be very useful in improving site-level performance.

> *The counties seem to look at CDC and the people from there a/most as if they walk on water...the counties appreciate their availability....(State sponsoring agency administrator)*

The few negative comments given about CDC include points such as:

- they do not send information promptly,
- they ask a lot of the sites relative to what they are willing to give,
- funding is inadequate, and
- when money is available, the grant application period is usually too short to allow for adequate planning by the sites.

Some of these problems may stem from a genuine lack of understanding of CDC's own limitations. Many view CDC as having virtually unlimited resources in both money and staff. A clearer perspective on the actual restrictions, limitations, and demands could serve to avoid future misunderstandings.

In general, however, we found that CDC is viewed in a very positive manner by both the states and the local sites and that PATCH provides a concrete mechanism through which CDC can access both the state and the local level.

Conclusions and Implications:

1. While PATCH does not produce major organizational restructuring, it is generally recognized as part of the state sponsoring agency's function. This may ensure that the

agency will pursue clearly defined and relatively stable health promotion activities.

2. One of the most powerful effects of PATCH, at this point in time, occurs primarily through its impact on the community public health system. Organizations in PATCH communities begin working together in new and innovative ways. PATCH serves as the organizational mechanism producing these changes, and the energy created through the PATCH core group spurs the development and implementation of interventions. Considering the limited amount of money generally available for health promotion activities, the increased collaboration among service providers and decreased duplication of services suggest PATCH is a very cost effective approach to health promotion. The merit of a community public health program is typically judged on changes in individual risk-related behaviors and, ultimately, changes in the morbidity and mortality of the target community, although manifestation of these changes often does not occur until the program is well established. However, other intermediate impacts, such as changes to the community public health system, are important precursors to individual-level change.

3. PATCH generally improves relations or helps maintain already good relationships among the partners at the federal, state, and local levels. In cases where tensions result, these generally stem from unclear expectations, confusion regarding roles, or failure to follow through on activities as promised.

Recommendations:

1. A major strength of PATCH is the improved networking and cooperation that occurs between agencies at the local level. Innovative ways of building upon this benefit of PATCH should be explored. For example, PATCH interventions typically are programmatic in nature and focus on producing individual-level change. Given the potential power of the core group, the broad range of organizational and legislative/policy interventions that affect large numbers of people should be pursued. CDC could facilitate these activities through training activities/seminars that focus on these levels of change and that suggest strategies for

actually implementing them. These could range from relatively simple strategies such as organizing petition drives or contacting legislators, to more complex ones such as organizing press conferences or sponsoring lobbyists.

For added clout through PATCH, sites within a state could enter into cooperative agreements for a network of PATCH sites. Thus, if the networking possibilities for PATCH are capitalized on, PATCH potentially could serve as a means of organizing a national network of health-related organizations (through, for example, representatives from the core groups) by which local communities and states could rally for a range of health promotion/risk reduction issues.

2. As discussed earlier, one of the most important results of PATCH is the improved networking that occurs at the local level. We recommend that CDC and the states explore ways to achieve similar results at the state level. The state coordinator, for instance, could organize a group of health promotion/risk reduction state staff (e.g., representatives from the American Heart and Lung Associations offices) as well as political representatives (e.g., a representative from the state school board). The group's function would be similar to that of the local-level core group. Regular meetings, for instance, could result in better use of state-level health promotion resources through decreased duplication. Also, this group could coordinate activities among PATCH sites in the state.

   An added benefit of crossing groups at the state level is that this process should facilitate institutionalization of PATCH at the state level. As currently implemented, PATCH is often the responsibility of a single individual within the state-level structure. If this person leaves, or becomes distracted by other duties, PATCH may disappear. Involving a number of different people from a variety of agencies and sources would mitigate PATCH's vulnerability to personnel changes.

   CDC could assist the states in promoting the development of state-level PATCH groups by offering their endorsement of the state group. We believe that, at the local level, many of the turf issues that local agencies usually must combat when attempting to work together are circumvented with PATCH because CDC provides the medium through which

these groups can converse. Through similar support to the states, CDC could help them avoid these turf issues. CDC could also assist by providing an organizational structure and purpose for the state group working specifically with PATCH. This could be similar to the information shared with the local core group. Planning strategies for developing objectives could also be provided.

3. In many instances, the relationship between states or sites and CDC is strained because it is assumed that CDC will be more active with PATCH than it is able to be. Many sites believed that funding would be a large part of **CDC's** involvement with PATCH. CDC needs to state clearly to the states and sites, perhaps by revising and adding to the administrative agreement, exactly what can be expected from their participation. This information would include details about what can be expected from CDC in the form of technical support, including the amount of time sites can expect to wait for feedback, the amount of assistance that can be given in writing grants, and the projected number of site visits. Revising and extending the administrative agreement to include more detailed information about what CDC can and will deliver to PATCH sites would increase the communication between CDC, states, and sites and would help to avoid feelings of frustration at sites.

   In addition to defining their own role in PATCH, it would be helpful if CDC could clearly define the roles of the coordinators, particularly at the local level, and the expectations for core group members. At the onset of PATCH, coordinators should be made aware of what is expected of them. Training is needed particularly at the local level, on what a local coordinator is supposed to do, since there is wide variation across sites. This information may best be provided in the form of a workshop of state and local coordinators expected to be involved in PATCH. This technique not only would provide a mechanism for networking among sites but also would allow for training in such areas as the delegation of responsibilities and management sites, and the preparation of grants. This training could include clarifying roles of the coordinators in terms of who should be responsible for providing technical assistance at the state level, and, at the local level, who should be responsible for the legwork involved in implementing interventions. By clarifying this issue, perhaps local coordinators will be better able to

manage their time in developing and promoting PATCH in the community.

4. For many sites, PATCH is an ambitious undertaking; the sites should not be forced to "go it alone." Technical assistance is likely to be required for many sites, particularly those with fewer resources for implementing the data collection process and for starting their first intervention. The initial phase of PATCH seems to be one of the most critical times for providing assistance to sites. They should be paired with an individual whom they can call at each phase for help and advice. Conference calls, including CDC, state, and local staff, could be used to enhance communication at all levels of the PATCH process.

   CDC could offer these forms of support: (1) contact sites on a regular basis to remain informed of their progress, (2) conduct site visits, and (3) develop a system of incentives or rewards to offer sites. Sites are generally very excited to have CDC involvement in their PATCH program and the planned visit of CDC staff seems to generate a great deal of community participation and rallying around PATCH. In addition, particularly since travel is not always feasible, a system to provide awards and incentives to sites could help to encourage their continued involvement. This technique could identify individuals who have been extremely helpful to PATCH. It would also be particularly helpful after the completion of the site's first PATCH program, since this is a critical time in the cycle of PATCH, during which many sites tend to lose momentum.

   CDC's assistance and support will be especially important for sites for which the state's sponsoring agency has a minimal commitment to PATCH.

QUESTION 3: **Does the collection of common data elements (e.g., morbidity and mortality, Behavioral Risk Factor Survey, community opinion information) influence the health risks that are targeted and the types of interventions that are implemented?**

Major Themes:

1. Our data indicate mixed reactions to the Behavioral Risk Factor Survey (BRFS) and its role in the PATCH sites. Some sites do pay attention to the BRFS results and see that collecting data in the community helps create local ownership. Others, however, express serious concerns about the level of resources (time and money) required for completing this one task. Increasingly, states are using synthetic estimates to identify local health risk behaviors without the expense associated with conducting the BRFS at the local level.

2. Community-level data, particularly the Community Opinion Survey, are important in determining priority health problems and in targeting risk factors.

3. Data alone do not determine which priorities are targeted. The individual interests of those involved in PATCH and the influence of what is or is not already being done in the community are also important determinants of what is targeted.

4. Conflicts arise from the lack of a clear understanding regarding the purpose of PATCH. Specifically, states and sites are apparently uncertain as to whether the risk factors targeted by PATCH should cover a broad range of health promotion/risk reduction areas or should be restricted to chronic disease.

Discussion of Results:

Reactions to the BRFS

In 15 of the local PATCH sites, the BRFS was done in the community using volunteers, core group members, employees of the lead agency, or college and nursing students. State sponsoring

agencies did the BRFS for four of the sites, one using a professional interviewing firm to conduct the interviews.

Ten of the local PATCH sites and the state sponsors complained about the process of conducting the BRFS. The many hours it takes to conduct the BRFS, the time lapse between finishing the BRFS and getting the results of the analysis back from CDC, and the problem of volunteer burnout are all cited as problems.

On the other hand, four sites report benefits to conducting the BRFS at the local level. Two of the sites mention the benefits of the BRFS in terms of creating local ownership. The role of the BRFS in solidifying the core group was also mentioned by two sites.

*I think, if we didn't do the **BRFS,** that we wouldn't be here as a group.... (Local coordinator)*

I don't think I'd trade it... if really helped us establish a presence.. .. (Local coordinator)

Four of the sites used synthetic estimates in place of the community-sponsored BRFS, and 6 of the 10 states either currently use synthetic estimates or indicate that they plan to use synthetic estimates in the future.

If synthetic estimates can be used then BRFS is not a justifiable expense... I wouldn't want to put money into the BRFS now... (State sponsoring agency administrator)

Value of the Community Opinion Survey

Four sites expressed directly that they consider the Community Opinion Survey a better vehicle than the BRFS for rallying the community and creating solidarity among core group members.

*The community needs to have some understanding of exact/y what is going on in their community, and they are doing that with the Community Opinion Survey, but the **BRFS** can be done another way. (State sponsoring agency administrator)*

One result of using the Community Opinion Survey is that problems not related to chronic diseases and not considered by the BRFS and mortality data--e.g., teen pregnancy--are sometimes targeted because of the survey's strong influence.

We presented all the statistics-national, state-level and community-/eve/-and then made subcommittees directly from the Community Opinion Survey. (Local coordinator)

Value of morbidity and mortality data

Morbidity and mortality data are not used to the same extent as the BRFS and the Community Opinion Survey. The influence of the years of potential life lost (YPLL) for making decisions about the health problems targeted is apparent in only one state.

[Sites] pay attention to both the BRFS and the Community Opinion Survey.... The core group knows it is important to work on projects the community perceives to be important-especially the YPLL....That probably guides them more toward priority-setting than anything does. (State sponsoring agency administrator)

Other determinants of priorities

Determining what is not already being done in the community is important in the selection of priority health problems, according to six sites. When PATCH was beginning, not only did the sites feel they did not need to duplicate existing programs, but they also were concerned about turf issues with other agencies and wanted to do something that was really needed in the community.

We digested this information [BRFS], along with state morbidity and mortality data, and Community Opinion Survey results, and prioritized our major issues and set our goals.... We felt everyone had programs for cancer and heart disease...Not enough was being done in accident prevention so we made that [priority] number one. (Local sponsoring agency administrator)

In two cases, the sites report they already had some idea of what the problems were, and the surveys helped confirm this.

Even though you have a fee/ for things, it clicked that you were on the right path...(The data] showed what we were doing was what we should be doing. (Local coordinator)

Finally, seven of the sites visited indicate data are also influential in the decision not to select certain health problems. In two sites, some core group members had decided ahead of time what they thought might be major health problems in the community, but when the data showed that these problems did not really exist, some of the initial core group members dropped out of PATCH due to a lack of interest in what was eventually targeted. In the

other five sites, the political issues that had initiated core group members' involvement were not substantiated, so they were no longer interested in PATCH.

> *Once the data showed cancer was not a problem, then their interest waned. It wasn't a political issue anymore so it went back to the service people as a health problem, to those who had an interest in the health in the community. (Local coordinator)*

Purpose of PATCH

PATCH as a "chronic disease prevention program" versus PATCH as a "health promotion program" is an issue for both states and sites. On the one hand, an apparent objective of the PATCH planning process is to provide the flexibility for sites to target whatever issues they consider appropriate for their community. Yet, the emphasis of the BRFS, which only assesses risks for certain chronic diseases, suggests that PATCH should limit its focus to these areas. Also, over a fourth of the 20 sites report that CDC "wants" them to pick chronic disease issues. In some cases, they report they are free to select any risk factors but believe they are more likely to receive funding, particularly from CDC, if they target risk factors with a chronic disease focus. The conflict between the "chronic disease" versus a "health promotion" model has created some tensions among the sites, states, and CDC.

Six of the 20 sites report that they experienced resistance from CDC to working on non-chronic disease problems that were identified by the data as important and expressed resentment about not being allowed to select these issues. As one state-level person expresses it, this is "taking independence and decision-making away from local sites".

> *Communities have to decide what they can work on and what their needs are..... The data may say one thing is a bigger problem than another thing, but there are other factors that come into play.... (State sponsoring agency administrator)*

Sites differ in their response to this situation. Some have continued with what they wanted to do, but three report they lost momentum, and two sites report that many of the core group members have dropped out of PATCH as a result of this conflict in purpose.

Conclusions and Implications:

1. The BRFS is a time and energy-consuming project that is very demanding on the core group members. Results are often not used by the community in determining priority health problems or in targeting risk factors. Although the process of data collection is an important component to facilitating the community ownership of PATCH, the Community Opinion Survey may be a more useful instrument among communities.

2. Targeted health risk factors are determined from a combination of the data results, along with the interests of key individuals and consideration of community services already available that PATCH may compete with.

3. PATCH sites and states are unclear about what the focus of PATCH is supposed to be. Some think it should be limited to health promotion chronic disease while others believe it should encompass almost any area.

Recommendations:

1. Although we believe that local involvement in the BRFS is a valuable opportunity for volunteers to develop an investment in community health data, the benefits gained from PATCH volunteers actually conducting the BRFS do not seem to justify the effort required. If the BRFS continues to be used in the PATCH process, CDC needs to recognize the burden of the BRFS and advise sites on how information can be collected most efficiently (for example, using state-generated synthetic estimates or using volunteers who only do the BRFS). This will help avoid the problems of burnout and losing volunteers due to frustrations with the BRFS. Additionally, if CDC is to be involved in data processing for the sites, either the turnaround time should be reduced or the amount of time it will take to provide results should be clearly communicated.

2. CDC should clarify and communicate to the sites how interventions are to be selected. For example, guidance from CDC to the sites about how to weigh the various data elements and how to incorporate other factors (e.g., the opinions of core group members, the importance or lack of

importance of selecting areas in which other groups are involved) could be helpful.

In addition, we recommend that CDC articulate what, if any, restrictions exist regarding targeted health risk behaviors. Specifically, should the focus of PATCH be limited to chronic disease, or should it include a broader range of health issues? Furthermore, even if PATCH is designed to cover an unrestricted range of topics, CDC should discuss with both the state and the site any advantages or disadvantages to selecting a particular risk area. These discussions should occur early in the PATCH process, probably in the start-up phase prior to assembling the core group. Clarification of viable PATCH topic areas early in the process will help to eliminate tensions and misunderstandings among the key PATCH players: CDC, the state, and the local site.

QUESTION 4: Is there evidence that participation in the PATCH process results in the implementation of intervention activities that would not otherwise have been undertaken?

Major Themes:

1. Participation in the PATCH process is resulting in the implementation of interventions that would not otherwise have been undertaken.

2. Priority health problems, targeted risk factors, avoidance of duplication, individual interests, potential impact, funding opportunities, and achievable projects that can assure some degree of success, are all important factors in selecting interventions.

3. Interventions are generally directed toward individual rather than social environmental change, reflecting the current public health emphasis on personal responsibility in the prevention of illness.

Discussion of Results:

Interventions Resulting from PATCH

Seventeen sites report that the interventions that have been implemented would not have happened without PATCH. Most of the sites mention specific programs that would not have occurred without PATCH. Examples of such programs are Quit and Win, health risk appraisals, seat belt programs, a nutrition program, Students Against Drunk Driving (SADD), and Project Graduation.

> *I don't think they [programs] would have [happened without PATCH] or at least not to the extent that they did. I would have tried some similar things, but it would never have been the scope that PATCH was... (Local coordinator)*

Others feel that intervention activities may have happened without PATCH, but PATCH helped them focus on the problem earlier and served as a catalyst to address problems.

> *PATCH gave us the impetus and stimulus [to address problems].... These problems were of concern to us for years, but we wouldn't have approached them like PATCH does....[We] need the community involved and the PATCH process helped us do that. (Local sponsoring agency administrator)*

Several of the sites have other chronic disease risk reduction programs on-going simultaneously with PATCH, and some of the PATCH interventions are modifications of these or other existing programs. However, it is sometimes difficult for them to distinguish between PATCH and these other programs in terms of which activities are done for which program.

Selection of Interventions

As addressed in Question **3,** the priority health problems and targeted risk factors are important in determining interventions, but other factors also influence how interventions are selected. The technique for the actual selection of types of interventions tends to vary a great deal across sites. Many of the sites have organized task forces or committees around specific targeted areas, and it is within these groups that interventions are chosen and developed. Within each group, the techniques for developing ideas vary. Generally, health professionals serve on committees within their specialty area and have some preconceived notions of what types of interventions they would like to see implemented. Often, in those groups consisting predominantly of professionals or with a topic requiring highly specialized personnel, such as AIDS, the chairperson would present ideas to the group and discuss the feasibility of the programs in the group setting. However, the most common technique is to openly discuss the issues involved with a targeted risk factor and generate ideas within the group settings. In fact, five sites mentioned that brainstorming within these smaller groups is one of the major ways that interventions are discussed and decided upon. In some cases, ideas are sent back to the larger core group but often decisions are made within these specialized committees.

During these various group processes, the interventions chosen are not always related to what is targeted by the data. At least 6 sites noted that decisions regarding specific interventions rested in the desire to avoid duplicating preexisting programs. (Figure 4 shows this relationship for the sites we visited. Two additional tables, Figures 4a and 4 b, demonstrate the relationship between the data collection results, the targeted risk factors and the chosen interventions). Individual interests we're recognized by at least 4 sites as being important in selecting interventions, and often these decisions come from the health professionals involved in the core groups and on the PATCH committees.

The people involved [were influential in choosing the interventions] because they had very strong feelings about certain subjects... one woman felt strongly about teen pregnancy and really wanted to do

Figure 4

Priority Health Problems, Targeted Risk Factors, and Interventions Selected[1]

Site:	BRFS:	Community Opinion:	Targeted Risk Factors:	Types of Interventions:
1	Seatbelts Hypertension Obesity Alcohol Abuse Smoking Sedentary Liiestyle	injuries **(MV)** Heart Disease Cancer	Injuries **(MV)** Heart Disease Cancer infant Mortality Suicide	Highway Safety Program Youth Issues Drinking **&** Driving
2	Seatbelts Drinking & Driving		Injuries **(MV)** Cancer Infant Mortality Heart Disease Smoking **Seatbelt** Usage	Nutrition Health Risk Appraisals Teen Task Force **Seatbelt** Usage Fiiness
3	Drinking & Driving Obesity Alcohol/Drug Abuse Speeding Seatbelts	Alcohol/Drug Abuse Stress Teen Pregnancy Nutrition Mental Illness	Teen Pregnancy Injuries **(MV)**	**Seatbelt** Use Teen Pregnancy Prevention Nutrition Drinking **&** Driving
4	Drug/Alcohol Abuse Obesity Diet Smoking Exercise Seatbelts	Pollution Drug Abuse Lack of Access to Care Illiteracy Rate Lack of Health Education Teen Pregnancy	Injuries **(MV)** Cancer Heart Disease High Risk Pregnancy Problems of Aged	**Seatbelt** Use
5	Alcohol/Drug Injuries Hear Disease Cancer	Alcohol/Drug Abuse Smoking Lack of Housing Mental Health Pollution Lack of Education Cancer Diet	Alcohol/Drug Injuries Heart Disease Cancer Smoking	Drug and Alcohol Abuse **Seatbelt** Usage Stress Reduction Smoking Cessation Health Risk Appraisals Health Fairs Teen Health Awareness

[1] These data are based on information as reported from our interviews and record abstractions.

Figure 4 (continued)

Site:	**BRFS:**	Community Opinion:	Targeted Risk Factors:	Types of **Interventions:**
6	Smoking Sedentary Lifestyle Hypertension Seatbelts Alcohol Abuse	**Alcohol/Drug** Abuse Nutrition Smoking Teen Pregnancy	Nutrition Cholesterol	**Seatbelt** Education **Nutrition** Fitness
7	Smoking Alcohol Abuse Hypertension	Drug Abuse Heart Disease Indigent Care Cancer lack of Chronic Disease Prevention Smoking Teen Pregnancy	Heart Disease Cancer Injuries In the Home Smoking Elderly Falls Exercise	Smoking Cessation Fitness Programs Drinking **&** Driving **Geriatric** Problems Nutrition
8	Heart Disease	Fitness Smoking Drug Abuse Self-Esteem Teen Pregnancy Domestic Violence	Heart **Disease** **Exercise** **Smoking**	Nutrition Health Risk Appraisals Health Promotion Education
9	Sedentary Lifestyle Exercise Obesity Smoking	Alcohol/Drug Abuse Crime Domestic Violence Drinking & Driving	Sedentary Lifestyle Smoking Weight Control	Fitness Programs Health Fairs
10	Nutrition Exercise Stress Drug Abuse Seatbelts Smoking	Alcohol/Drug Abuse Crime Domestic Violence Accidents **(MV)** Family Dysfunction	Water Pollution Heart Disease Smoking Cancer Stress Obesity	Seatbelts Drug Abuse Education Smoking Cessation Fitness
11	Drinking and Driving **Seatbelt Nonuse**	Alcohol/Drug Abuse Heart Disease Cancer Stress Teen Pregnancy	Injuries **(MV)** Heart Disease Cancer	**Seatbelt** Usage Drug and Alcohol Abuse
12	Sedentary Lifestyle Smoking Hypertension	Alcohol/Drug Abuse Heart Disease Teen Pregnancy Hypertension/Stroke	Heart Disease	Nutrition

Figure 4 (continued)

Site:	BRFS:	Community Opinion:	Targeted Risk Factors:	Types of Interventions:
13	Smoking Obesity	Alcohol Abuse Teen Pregnancy High Blood Pressure Cancer Smoking	Heart Disease Lung Cancer/Smoking Stroke Injuries	Smoking Fitness Nutrition
14	No Data	Hypertension	Heart Disease Nutrition	Health Fairs
15	Hypertension Sedentary Llfestyle Diet **Obesity**	Drug Abuse Lack of Adequate Health Care AIDS Geriatric Problems Cancer Heart Disease	Drug Abuse Lack of Adequate Health Care AIDS Geriatric Problems Teens Wellness	Teen Issues AIDS Awareness Wellness Clinic Geriatric Problems Indigent Care
16	Seatbelts Hypertension Smoking	Alcohol/Drug Abuse Senior Health Problems Stress/Emotional Problems **STDs** Lack of Adequate Health Care	Drug/Alcohol Abuse Stress Problems Lack of Adequate Health Care	Lack of Care
17	Injuries **(MV)** Hypertension Obesity	Teen Pregnancy	Heart Cancer Accidents (MV) Stroke Suicide	Smoking Cessation
18	Hypertension Obesity Sedentary Lifestyle	Hypertension Teen Pregnancy Heart Problems	Heart Disease Teen Pregnancy	Cholesterol Screenings Fitness Sex Education Teen Pregnancy
19	Hypertension Cholesterol Smoking	Family Dysfunction Smoking Substance Abuse Heart Disease	Female Cancers Heart Disease Smoking	Cancer Education Smoking Cessation
20	Smoking Sedentary Lifestyle	Alcohol/Drug Abuse Water Pollution Child Abuse Spouse Abuse Teen Pregnancy	Smoking Exercise Nutrition Cholesterol	Smoking Health Risk Appraisals Cholesterol Screenings Fiiness Health Fairs

Figure 4a

Relationship of Data Collection Results to Targeted Risk Factors'

Site:	BRFS:	Community Opinion:	Targeted Risk Factors:
1	Seatbelts Hypertension Obesity Alcohol Abuse* Smoking Sedentary Lifestyle	Injuries (MV) Heart Disease Cancer	Injuries (MV) Heart Disease Cancer Infant Mortality** Suicide**
2	Seatbelts Drinking & Driving		Injuries (MV) Cancer** Infant Mortality** Heart Disease** Smoking** Seatbelt Usage
3	Drinking & Driving Obesity Alcohol/Drug Abuse Speeding Seatbelts	Alcohol/Drug Abuse Stress* Teen Pregnancy Nutrition* Mental Illness*	Teen Pregnancy Injuries (MV)
4	Drug/Alcohol Abuse* Obesity Diet Smoking Exercise Seatbelts	Pollution* Drug Abuse* Lack of Access to Care Illiteracy Rate* Lack of Health Education* Teen Pregnancy	Injuries (MV) Cancer Heart Disease High Risk Pregnancy Problems of Aged
5	Alcohol/Drug Injuries Hear Disease Cancer	Alcohol/Drug Abuse Smoking Lack of Housing* Mental Health* Pollution* Lack of Education* Cancer Diet	Alcohol/Drug Injuries Heart Disease Cancer Smoking

'These data are based on information as reported from our interviews and abstractions.

*Not targeted.
**Targeted but not supported by data.

Figure 4a (continued)

Site:	BRFS:	Community Opinion:	Targeted Risk Factors:
6	Smoking* Sedentary Lifestyle* Hypertension* Seatbelts* Alcohol Abuse*	Alcohol/Drug Abuse* Nutrition Smoking* Teen Pregnancy*	Nutrition Cholesterol
7	Smoking Alcohol Abuse* Hypertension	Drug Abuse* Heart Disease Indigent Care* Cancer Lack of Chronic Disease Prevention* Smoking Teen Pregnancy*	Heart Disease Cancer Injuries in the Home** Smoking Elderly Falls** Exercise
6	Heart Disease	Fiiness Smoking Drug Abuse* Self-Esteem* Teen Pregnancy* Domestic Violence*	Heart Disease Exercise Smoking
9	Sedentary Lifestyle Exercise Obesity Smoking	Alcohol/Drug Abuse* Crime* Domestic Violence* Drinking & Driving*	Sedentary Lifestyle Smoking Weight Control
10	Nutrition Exercise Stress Drug Abuse* Seatbelts* Smoking	Alcohol/Drug **Abuse*** Crime* Domestic Violence* Accidents **(MV)*** Family Dysfunction*	Water Pollution** Heart Disease Smoking Cancer Stress Obesity
11	Drinking and Driving **Seatbelt Nonuse**	Alcohol/Drug Abuse Heart Disease Cancer Stress* Teen Pregnancy*	Injuries **(MV)** Heart Disease Cancer
12	Sedentary Lifestyle Smoking Hypertension	Alcohol/Drug Abuse* Heart Disease Teen Pregnancy* Hypertension/Stroke*	Heart Disease

*Not targeted.
**Targeted but not supported by data.

Figure 4a (continued)

Site:	BRFS:	Community Opinion:	Targeted Risk Factors:
13	Smoking Obesity	Alcohol Abuse* Teen Pregnancy* High Blood Pressure Cancer Smoking	Heart Disease Lung Cancer/Smoking Stroke Injuries**
14	**No** Data	Hypertension	Heart Disease Nutrition
15	Hypertension Sedentary Lifestyle Diet Obesity	Drug Abuse Lack of Adequate Health Care AIDS Geriatric Problems Cancer Heart Disease	Drug Abuse Lack of Adequate Health Care AIDS Geriatric Problems Teens **Wellness**
16	Seatbelts* Hypertension* **Smoking***	Alcohol/Drug Abuse Senior Health Problems* Stress/Emotional Problems **STDs*** Lack of Adequate Health Care	Drug/Alcohol Abuse Stress Problems Lack of Adequate Health Care
17	Injuries **(MV)** Hypertension Obesity	Teen Pregnancy*	Heart Cancer Accidents **(MV)** Stroke Suicide
18	Hypertension Obesity Sedentary Lifestyle	Hypertension Teen Pregnancy Heart Problems	Heart Disease Teen Pregnancy
19	Hypertension Cholesterol Smoking	Family Dysfunction* Smoking Substance Abuse* Heart Disease	Female Cancers** Heart Disease Smoking
20	Smoking Sedentary **Lifestyle**	Alcohol/Drug Abuse* Water Pollution* Child Abuse* Spouse Abuse* Teen Pregnancy*	Smoking Exercise Nutrition Cholesterol

*Not targeted.
**Targeted but not supported by data.

Figure 4b

Relationship of Targeted Risk Factors to Selected Interventions'

Site:	Targeted Risk Factors:	Types of interventions:
1	injuries (MV) Heart Disease* Cancer* infant Mortality* Suicide*	Highway Safety Program Youth Issues** Drinking & Driving
2	injuries (MV) Cancer* Infant Mortality* Heart Disease Smoking Seatbeit Usage	Nutrition Health Risk Appraisals Teen Task Force** Seatbeit Usage Fitness
3	Teen Pregnancy injuries (MV)	Seatbeit Use Teen Pregnancy Prevention Nutrition** Drinking & Driving
4	injuries (MV) Cancer* Heart Disease* High Risk Pregnancy* Problems of Aged*	Seatbeit Use
5	Alcohol/Drug injuries* Heart Disease Cancer Smoking	Drug and Alcohol Abuse Seatbeit Usage Stress Reduction Smoking Cessation Health Risk Appraisals Health Fairs Teen Health Awareness**

'These data are based on information as reported from our interviews and record abstractions.

*No interventions started by date of site visit.
**Intervention implemented without targeting of health risk behavior,

Figure 4b (continued)

Site:	Targeted Risk Factors:	Types of Interventions:
6	Nutriiion Cholesterol	Seatbelt Education** Nutrition Fitness
7	Heart Disease Cancer Injuries in the Home Smoking Elderly Fails Exercise	Smoking Cessation Fitness Programs Drinking & Driving** Geriatric Problems Nutrition
8	Heart Disease Exercise Smoking*	Nutrition Health Risk Appraisals Prevention Education**
9	Sedentary Lifestyle Smoking Weight Control	Fitness Programs Health Fairs
10	Water Pollution* Heart Disease Smoking Cancer Stress* Obesity*	Seatbelts** Drug Abuse Education** Smoking Cessation Fitness
11	Injuries (MV) Heart Disease* Cancer*	Seatbelt Usage Drug and Alcohol Abuse
12	Heart Disease	Nutrition
13	Heart Disease Lung Cancer/Smoking Stroke* Injuries*	Smoking Fiiness Nutrition
14	Heart Disease Nutrition	Health Fairs

*No interventions started by date of site visit.

**Intervention implemented without targeting of health risk behavior.

Figure 4b (continued)

Site:	Targeted Risk Factors:	Types of Interventions:
15	Drug Abuse* Lack of Adequate Health Care AIDS Geriatric Problems Teens **Wellness**	Teen Issues AIDS Awareness **Wellness** Clinic Geriatric Problems Indigent Care
16	Drug/Alcohol Abuse* Stress Problems Lack of Adequate Health Care	Lack of Care
17	Heart Cancer Accidents (MV)* Stroke* Suicide*	Smoking Cessation
18	Heart Disease Teen Pregnancy	Cholesterol Screenings **Fitness** Sex Education Teen Pregnancy
19	Female Cancers Heart Disease Smoking	Cancer Education Smoking Cessation
20	Smoking Exercise Nutrition Cholesterol	Smoking Health Risk Appraisals Cholesterol Screenings Fitness Health Fairs

*No interventions started by date of site visit.
****Intervention implemented without targeting of health risk behavior.**

something about it... so your people involved have a big impact on the programs that are identified. (Core group member)

Doing something that the site could have some impact on was reported as a key factor in deciding upon interventions at three sites, as the following indicates.

Instead of spending great deals of money on cancer and heart disease which is high, [we] felt we could have an initial quicker impact on [J.. . . (Local sponsoring agency administrator)

Other important criteria that sites use in determining interventions are: availability and level of funding opportunity; the practicality and feasibility of the intervention; and, the probability that it will show some success in a fairly short period of time and have an impact on the community at large.

Types of Interventions

An ecological framework for health promotion interventions which focuses on both individual and social environment factors (Mc-Leroy et al., 1988) is generally not used by the PATCH sites. As illustrated in Figure 5, most interventions at visited sites are individually-oriented education and screening programs done in the general community, with few interventions directed at the social network, organizational, or policy levels. Even programs done in schools and work sites are oriented toward individual behavior change rather than change within the organizational setting.

A major focus of interventions is school-aged children, particularly teens, and is demonstrated by the implementation of 34 interventions for this target population. These programs generally focus on prevention or education to promote the use of birth control or seatbelt use. These interventions are usually individually-oriented with few sites focusing on peers or other social networks as part of an intervention. There are instances of attempts at policy change for requiring seat belt usage, regulating smoking, and providing services for the elderly, but generally this strategy is not used.

Considerable variation is found among the local PATCH sites in both the types and numbers of interventions done. As Figure 6 demonstrates, the areas of major emphasis for interventions in the sites we visited are general health promotion strategies (health fairs, wellness programs, health risk appraisals), seat belt usage, drug and alcohol abuse, adolescent health problems, fitness, nutrition and cholesterol control, and smoking cessation.

Figure 5

Intervention Matrix: Intervention Strategy vs. Setting*

	Target Population			
Change Strategy	School (Students)	Work Site (Employees)	Health Care (Patients) Clinic Population	Community (Groups)
Education/Communication	30	5	a	60
Training Workshop	4	1		4
Organization		1		
Legislation/Policy		1	2	3
Environmental Measures				1
Total	34	a	10	68

*Interventions that occurred more than one time (e.g., health fairs) are counted in this table for each occurrence.

Figure 6
Major Areas of Emphasis for Interventions*

Site	General Health Promotion	Seat Belts	Drugs and Alcohol	Teens (Pregnancy and Drugs)	Fitness/ Exercise/ Weight	Nutrition/ Cholesterol	Smoking	Elderly	Misc.	Total
1		2	3	1						6
2	2	3		1	1	1				8
3		6	1	6		1				14
4		5								5
5	10	1	3	1			2			17
6	2	1	2		2	1	1			9
7	1		1		1	1	2	1	2	9
8	1					1				2
9					2					3
10		1	2		1		1			5
11		2	2							4
12	1									1
13	1				2	1	1			5
14	1									1
15	4			1				3	1	9
16								1	1	2
17							1			1
18				3	1	3				7
19	2								2	4
20	2				2	1	3			8
Total	28	21	14	13	12	10	11	5	6	120

*Interventions that occurred more than one time (e.g., health fairs) are counted in this tabie for each occurrence.

Of the types of interventions selected, nine sites reported using prepackaged interventions, such as Quit and Win or Project LEAN. A number of sites have put together health services and health promotion resource materials, instituted speakers' bureaus to present health prevention messages, and offered instruction and training for other organizations on health-related issues.

Evaluation of Interventions

Seven of the sites have conducted evaluations of interventions. One of the local PATCH sites shared an evaluation of an intervention with us which was quite sophisticated. Generally, however, sites do not evaluate their interventions beyond a count of how many people attend specific programs, and most often, not even that.

There are some cases of follow-up, and pre-test, post-test measures taken; so the sites do have information that would lend itself to evaluation. However, many of the sites appear unwilling or unprepared to attempt such an evaluation alone. This seems to be due to concerns about the level of skills and staff time required to do evaluations. Most sites indicate that simply doing interventions is so demanding that evaluations are not feasible.

Of the sites that did evaluations, results indicate that they reached substantial numbers of people. One state, for example, estimates that PATCH had reached over 5,300 people during one year! Figure 7 contains examples of the sites' estimates of participation in various activities.

Conclusions and Implications:

1. PATCH stimulates the implementation of interventions that would not otherwise be offered to the community. It also serves as a catalyst to speed their implementation.

2. Interventions are typically selected for a variety of reasons that extend beyond results shown by collected data.

3. The types of interventions done clearly indicate that professionals and volunteers in the PATCH sites need more training and/or assistance to develop change strategies that go beyond an individual change model, if broad-based change approaches are a goal of PATCH.

Figure 7

Numbers Reached Through Interventions (All Programs)

Interventions	Statistics
Safety Belt Poster Contest in Schools	800 Participants
Youth Appreciation Week	35 Classes, 17-20 per Class
Beltman Program Presentations	909 Children Reached
Health Risk Appraisals	343 Completed in 2 Years
Smoking Cessation	151 Successful Quitters
Adult Health Risk Appraisals	18 Work sites, 1205 Individuals Reached
Health Fairs	913 Reached in 3 Years
Walking Program	484 Participated
Colesterol Screening	576 Screenings
Family Walking Program	350 People Registered
Health Fair	160 Participants
Cholesterol Screening	643 in General Public and Work sites

Recommendations:

1. CDC could assist the sites by providing intervention models and packets that describe how to design and implement interventions that are appropriate for priority health risks. For example, CDC should keep a catalog of "pre-packaged" interventions to share with the sites when requested. This could include not only programs such as Quit and Win or Project LEAN, but also successful interventions that were designed by other sites.

   Additionally, sites lack basic health information needed to develop interventions. As an example, during our site visits, we were asked if we could send one site low-fat recipes and other types of information. While we relayed these requests to CDC, we believe this indicates a potential need for CDC to develop "a clearinghouse capacity." Further, since CDC has access to the most recent and up-to-date information, it would probably be helpful for them to share the current changes in theory, as well as guidelines in health education programs and guidelines in health promotions with the states and sites. For example, if there are questions about a cholesterol screening machine, this could be relayed to sites who are considering purchasing one. In short, CDC, with its national perspective and current information, could speed the information dissemination process to the state and local sites to facilitate the selection of appropriate interventions.

2. Sites often want interventions that will bring success and produce behavioral change quickly. Many of the health professionals involved in PATCH are more oriented and have training in an individual change model of health promotion, causing an emphasis in the selection of these types of interventions with little consideration for the long-term effects PATCH programs could accomplish. Thus, interventions targeting social environmental factors may not be readily considered since they often take more time and effort to implement and show success.

   If these broad base programs are considered a function of PATCH, CDC could address this issue in the context of a workshop presented to coordinators be selected from and emphasizing the importance of implementing change at the individual, social, and policy levels. It may well be the case

that these broad-based interventions have not been considered a feasible product of PATCH and, therefore,they are not readily attempted. To validate this function of PATCH, evidence from other sites that have accomplished these changes could be presented.

QUESTION 5: Is **there evidence** PATCH **has become institutionalized?**

Major Themes:

1. There is a continuum of institutionalization ranging from absorption of the PATCH model into the sponsoring agency's programs to development of PATCH as a program whose support extends beyond the sponsoring agency.

2. Institutionalization is a developmental process.

3. Community awareness is a necessary precursor to institutionalization.

4. Community ownership, as opposed to agency ownership, is important if PATCH is to become institutionalized.

Discussion of Results:

Absorption vs. Institutionalization

At the state level, PATCH is absorbed into the structure of the sponsoring agency at least as often as it is institutionalized as an agency component with its own identity and constituency. Several state informants spoke of PATCH as an approach that should be part of all health education efforts rather than being a separate part of the department's organization.

> *It's the direction we saw [health care]....going in..it's the direction we want the state to go in.... (Stare coordinator)*

None of the states visited have incorporated PATCH into their organizational charts, although most have allocated staff to the coordination of PATCH as discussed in Question 2. PATCH is generally described as a program that is established in the state's work plan and that is part of what the state administrators want their continued activities to be.

> *[The stare] sees PATCH as a process; nor just a single program but as something which should be integrated into all health education program[s]. (State sponsoring agency administrator)*

Most state coordinators cite PATCH as part of their responsibilities, although only two have it included in their job description. Two states have full-time coordinators assigned to PATCH while another has two coordinators each working 50 percent on PATCH,

constituting a full time position. The remaining states either have positions that have a percentage of their time dedicated to PATCH (six) or have not allocated any staff time to PATCH (one).

At the local level, PATCH is more likely to be viewed as a program than as an approach. Almost half of the sites visited (eight) have local coordinators who devote about 50 percent of their time to PATCH activities, although these percentages are difficult to determine accurately. Many people express the need for a full-time local coordinator in order for PATCH to become more organized and active in the community.

> *If we had a full-time PATCH coordinator, we could have been more active. (State coordinator)*

Adoption of PATCH as a philosophy rather than as an institutionalized program may be seen as a testimony to the model's persuasiveness. However, the lack of a separate base (in terms of organizational status), funding or staff time commitment, makes PATCH more vulnerable to loosing its foothold in the event of a funding squeeze or leadership change.

> *It's a project that our office happens to do and should our higher-ups say these [other] projects come first, that they are repriortizing, then we would have to drop PATCH. That's why it was so important to us to build in a support system for PATCH to give it to counties where it was going to be successful, and to make sure there's open communication amongst PATCH counties. (State coordinator)*

At both the state and local levels, two major resources considered necessary for institutionalization are staff time and additional funding. Those states that have been more successful at expanding these resources are more likely to feel that PATCH has become institutionalized.

> *The overwhelming feeling is that without adequate funding and staff, PATCH cannot become truly institutionalized. (Local focus group participant)*

> *[To] create a long-lasting, established process, there has to be some commitment to have positions maintained. Otherwise, efforts are too fragmented. (Local coordinator)*

Although some funding may be necessary to support institutionalization, an established PATCH program often acts as a capacity-building tool that helps both states and sites get funding, thus helping to solidify the program's position. As noted earlier, two states feel that experience with PATCH was a key factor in their winning Kaiser Foundation and Project LEAN grants. Several sites

have been able to get grant money on their own to help support PATCH activities, while others identified additional sources of funding through their contact with CDC.

Institutionalization as a Developmental Process

Institutionalization is a developmental process in the sense that certain stages of program growth must be completed before it occurs, although not all programs completing these stages will necessarily become institutionalized. The process of institutionalization thus depends both on time and on the successful completion of PATCH's initial phases. Workshops and data collection facilitate group cohesiveness by allowing people to become aware of each other's interests and concerns, to resolve turf battles, and to work through the decision-making process of choosing the initial intervention.

A turning point at which institutionalization may begin to be evident is the implementation of the first intervention. A completed intervention gives the program legitimacy, increases community awareness of PATCH, attracts new core group members and agencies, and builds program support by generating funding or in-kind donations from local businesses.

The period following the site's first intervention appears to be a critical point. Unless the core group has made plans that extend beyond this point, the PATCH process may not be sustained. This loop back to the planning of further interventions is not incorporated into the PATCH model, and some sites have floundered for lack of strategies to bring the group back to the initial stages.

> *Lack of skills in making a commitment and following through [with the] ebb and flow [is a major problem]. (State coordinator)*

Many factors influence whether subsequent interventions are started after the initial one is completed. One factor that influences the core group's activity level is the selection of priority areas. The degree to which the core group feels committed to the priority area selected may be a good predictor of subsequent activity.

The continuation of PATCH also is enhanced when members believe their first interventions have been successful. This success is felt when one or more interventions are completed, and core group members are able to see some results come from their work.

The key to it is that we've been able to see something happening, where the other committees have not really seen things happening...so they can say well, we've accomplished this much, let's do more.... This committee has been more productive in that sense. (Local sponsoring agency staff)

The importance of a sense of success in spurring further activities suggests a need for a formal group process following initial interventions, in which achievements are recognized, problems identified, and enthusiasm renewed.

Community Awareness and Growth of PATCH

According to Steckler and Goodman (1988), certain precursor conditions are needed to facilitate the institutionalization of PATCH. These conditions include awareness, concern, receptivity, availability, adequacy, and benefits. The most critical of these conditions seems to be the increase in community members' awareness of the existence of PATCH and a growing understanding of the overall concept of health prevention and promotion.

At the state level, awareness among health professionals is a good indicator of the institutionalization of PATCH and generally influences how many counties request to be replication sites. For example, states that replicate quickly report that they had actively publicized PATCH through state-wide health educator meetings to encourage participation.

At the local level, over half of the sites visited believed that PATCH has influenced health awareness at both the public and the professional levels. Many sites talk about how people in the community are aware of PATCH and, therefore are more aware of health issues.

PATCH is identified as an organization in the community that people know about. (Local coordinator)

PATCH has made the people more aware of their problems. (Local coordinator)

People on the street are talking about it and spreading the word so people are finding our about it. (Local focus group participant)

Because health professionals are involved, the knowledge of PATCH is spread to the involved agencies so that these facilities become aware of the concept of PATCH. This process is best seen in the adoption of the PATCH model by other programs and agencies, as discussed in Question 1.

A lot of the county agencies are aware of PATCH and what we do. (Local coordinator)

However, a few feel their community is not aware of PATCH programs. For these sites, awareness is limited to core group members or those who attended interventions; few in the community are thought to understand the broad concept of PATCH in terms of the need for community participation to address health issues.

Not too many people see the broad picture [of community health promotion]. (Local coordinator)

In addition, PATCH outreach is often limited to specific socioeconomic groups. Communities express difficulty in tapping into other populations, such as poor or older persons. Teaching sites strategies for reaching more isolated populations could help develop PATCH into a broader-based program for a given community, thereby enhancing institutionalization.

Community vs. Agency Ownership

Ownership of PATCH is defined along two axes: the degree of involvement of the sponsoring agency and the composition of the core group. Figure 8 depicts the distribution of sites visited according to these characteristics. When asked who owns PATCH, the majority of sites indicate that it is a community program. The research team, however, believes that evidence suggests that PATCH is owned by the local sponsoring agency at about half of the 20 sites visited. Within this context, we defined agency ownership as including the following characteristics:

- Perception by core group members and the public that PATCH is one of the agency's programs;
- The feeling that PATCH would not survive if the sponsoring agency were no longer involved; and,
- The assumption of primary responsibility for coordination and leadership by agency staff.

In those sites in which the research team considered PATCH to truly belong to the community, PATCH is primarily managed by community members with the sponsoring agency acting as a catalyst. In this arrangement, the sponsoring agency provides the medium through which the group operates. The core group, in turn, has control over PATCH's activities and is responsible for

Figure 8
Characteristics of Agency Ownership and Core Group Membership, by Number of Sites

Ownership	Core Group Membership			
	Sponsoring Agency Only	Agency and Core Group of Only Health-Related Professionals	Agency and Core Group of Health Professionals and Community Members	All Core Group/ Community Members[1]
Sponsoring Agency[2]	1	5	3	
Agency and Community[3]		4	5	
Community[4]				2

[1] In this situation, local coordinator has minimal involvement with PATCH by helping only when necessary in organizing activities.

[2] Sponsoring agency ownership is defined as:

- perception by core group member and the public that PATCH is one of the agency's programs
- feeling that PATCH would not survive if the sponsoring agency were no longer involved
- assumption of primary responsibility for coordination and leadership by agency staff

[3] Joint ownership is defined as:

- assumption of some responsibility by sponsoring agency of the primary tasks, but delegation of tasks to the core group does occur
- axe group has some freedom in making decisions but agency ultimately decides which interventions will be done

[4] Community ownership is defined as:

- community members manage while the sponsoring agency acts as a catalyst by coordinating efforts
- core group is responsible for selecting, developing, and implementing interventions

developing and implementing interventions they choose. Core group members in community-owned PATCH sites are very active with PATCH and act to disseminate the process throughout the community.

> *[The] community owns PATCH. That is exact/y what it should be. The health department is a catalyst. The amount of representation from the **community** says it all. (Local coordinator)*

In addition to the question of agency ownership, the ownership of PATCH is also influenced by the composition of the core group and the degree to which decision-making is shared with the local coordinator. We categorized core group membership at four levels:

- Agency only;
- Agency with a core group consisting of only health professionals;
- Agency with a mixed core group of health professionals and other community members; and
- Primarily community involvement, with only minimal support from the sponsoring agency.

Across sites, the majority of active core group members are from health agencies or somehow involved in health-related work. When involvement includes only these health professionals, sites seem to have difficulty identifying PATCH as a separate entity from the sponsoring agency. However, if PATCH is diversified and community members have a major share of the responsibility in carrying out interventions, PATCH is better able to attract citizens to become involved and, therefore, begins to be viewed as a community project. PATCH's ability to become identified as a community project is one of the most positive aspects of the PATCH process.

> *There seems little doubt in anyone's mind that the community owns PATCH....& is not a health department program. Other than the local coordinator, health department people are not even required to participate in PATCH programs. (local sponsoring agency administrator)*

> *These [programs] are having impact because people have ownership and involvement, and **they** want **to** see these things happen. (Local coordinator)*

The process of delegating PATCH activities throughout the community greatly influences how readily the community takes ownership. An aspect of the local coordinators' abilities that affects this ownership of PATCH is their willingness to delegate responsibilities and truly act as coordinators of the PATCH process. As suggested in Question 2, this ability is somewhat related to the amount of time allocated for the local coordinator to do PATCH. If the local coordinator is full-time, there seems to be a greater tendency for this individual to carry out most of the responsibilities, including choosing interventions and soliciting for funds. A full-time coordinator is more visible but not necessarily as effective as one with less time dedicated to PATCH. With a full-time coordinator, PATCH is more likely to continue to be identified as a program of the sponsoring agency. Dissemination of PATCH is less likely to occur because other agencies or even core group members are not able to coordinate PATCH programs and be responsible for maintaining interventions.

> *One of the hardest things to implementing a successful PATCH is just letting go and /et the community do it...let the community people lead the groups because if they lead, they will carry it through...[We] would try and get the chair of the coalition to take on more of the organizational responsibilities. When we got to the point of* **the interventions, they had the responsibility and followed through.** *Give more responsibility earlier. (Local coordinator)*

In addition, a large proportion of the ownership and institutionalization of PATCH rests upon the coalition-building abilities of the local coordinator. If this individual or some key person, such as the medical director (i.e., the local champion, as described in Steckler and Goodman, 1988), supports PATCH, the program will become institutionalized much more quickly. This is demonstrated by the data in Question 9 that indicate variables relevant to site selection. This is particularly true when this individual is well-connected politically and can therefore easily increase volunteer involvement, elicit significant group support, and maintain media coverage for PATCH. These factors tend to help PATCH at all stages of its development but are particularly important during its initiation by encouraging people to "buy into" PATCH.

In contrast, sites that had no local champion tended to be slower at initiating interventions and had more difficulty with turf battles (i.e., dealing with the political aspects of PATCH) and with the general organization of PATCH activities.

Conclusions and Implications:

1. Although it does not seem necessary to have a full-time coordinator, at least a 25 to 30 percent block of time is needed to allow organization of initial core group activities. Once the core group and the PATCH process become more established in the community, it is conceivable that less time will be needed from this individual.

2. In order for PATCH to become integrated into the services offered at either the state or the local level, a modest level of resources has to be available, including both funding and staff time.

3. The PATCH model, as presented in the workshops, does not incorporate a plan for continuing activity beyond the first intervention. Many sites find that the enthusiasm and momentum of the core group falters at this point; therefore the program may falter and die.

4. Increased community awareness, which is often lacking, is vital to institutionalization. It may be helpful to teach local coordinators strategies for using the media to publicize PATCH and for developing ways to reach isolated populations. The local coordinator's ability to disseminate programs and advocate for PATCH are also important skills to broaden the reach of PATCH. Skills taught should include fund-raising strategies, communication and dissemination skills, and delegation of PATCH responsibilities.

Recommendations:

1. Attempts should be made to clarify the availability of adequate support for the local coordinator's role prior to program initiation. To ensure this, we recommend that steps be taken to ensure at least two years of support for PATCH from the sponsoring agency prior to initiation of PATCH. This could be accomplished through a written administrative agreement negotiated between the local sponsoring agency, the state, and CDC. Necessary components of the agreements include the amount of time the local and state coordinators will have allocated specifically for PATCH and any financial support to be provided. At the end of the two-year period and at subsequent two-year intervals, the administrative agreement should be reviewed, revised as appropriate, and renewed.

2. Lack of funding is an issue for the majority of sites and can limit what the site is capable of accomplishing through PATCH. Since it is not feasible for CDC to provide all of the necessary funds, we recommend instructing local coordinators and core group members on ways to elicit funds.

   Over the life of the program, most sites will find they need to generate resources to help implement interventions, and perhaps to support the local coordinator's position. There are several possible approaches to generating resources that may be appropriate to different groups and communities. The most widely applicable strategy is the solicitation of support from local businesses in the form of in-kind donation (i.e., a print shop may donate its services by reproducing posters) or a monetary donation in exchange for publicity as a program sponsor. Over time, both local coordinators and core group members may need to "sell" PATCH to their agencies in order to enlist support for their time or operating expenses. Some established sites will be interested in applying to grant programs like Project LEAN, or even in approaching foundations independently with grant applications.

   CDC can support sites' fundraising activities by providing information about strategies which have been used successfully in other communities, disseminating information about upcoming funding opportunities, and identifying "how-to" resources to assist sites that wish to prepare grant applications. Advice on the effective presentation of evaluation data in soliciting resources would have added benefit of underscoring the importance of performing evaluations. Strategies for fundraising could either be included in workshops **or used as a topic for ongoing training updates.**

3. By assisting sites in planning beyond the completion of the first intervention, CDC will encourage the institutionalization of PATCH into the community. Frustration and burnout is often noted at this phase of the project; therefore, providing a mechanism for initiating another intervention would be helpful in maintaining the progress of PATCH.

   A "continuation" loop should be built into the PATCH model, the purpose of which is to encourage continuation of PATCH after completion of an intervention. Training for local coordinators should recommend strategies for this,

such as an event, held at least annually, dedicated to debriefing and congratulations after completion of the first intervention. The goals of this event would be twofold: first, to serve as an opportunity for participants to celebrate their achievements, and second, to reassess progress to date and consider any modifications to the work plan. Placing a priority on ongoing planning again underscores the need for more intensive training in evaluation, with specific attention given to the use of process and outcome data for reassessing of priority areas and interventions.

4. Teaching PATCH sites to enhance media utilization would increase community awareness of PATCH. Perhaps most importantly, media coverage offers the opportunity to bring the PATCH approach to many parts of the community simultaneously. Used strategically, media coverage could be a tool in broadening PATCH's base of support and participation beyond its traditional constituency of health and social service workers by spreading news of the program to interested parties throughout the community. Media coverage could also strengthen program participation by providing local recognition for persons who are involved in PATCH. Finally, effective media use can improve community participation by publicizing interventions in advance and reporting on them as they occur.

   Guidebooks on media use, such as the one prepared by the **National Cancer Institute,** ***Media Strategies*** **for** *Smoking* ***Control***, may be adapted for use by PATCH sites or distributed as is. Additionally, this is another area in which networking among sites could be extremely fruitful. In the course of site visits, several successful examples of media use were described. One local newspaper columnist shared his experience of smoking cessation with readers each week, and another arranged newspaper coverage of the process of program development, including printing the names of those who signed up as core group members.

QUESTION 6: **Describe how people in the field define or measure success.**

Major Themes:

PATCH states and sites define success for PATCH in terms of:

1. Improved awareness and reduction in health risk-related behaviors for individuals in the community; and

2 Organizationally, in terms of PATCH's growth and development in the community.

Discussion of Results:

During the planning process for Phase I, a great deal of effort went into trying to determine how to define and measure success for PATCH. As a result of our conversations with CDC during this Phase I activity, we decided to include this question as one of our study questions to determine how sites define success. In general, their definitions for success could be categorized as relating to either individual change in knowledge or behavior or growth and development of the PATCH program.

Individual Change

Regarding individual change, twelve sites report that they consider PATCH to be successful if it has increased the level of awareness of health risks and has provided knowledge about appropriate behavior modifications to decrease the associated risks. Some sites stressed that, rather than trying to educate the entire community at once, if they could educate a few people who in turn could educate others, this too would be indicative of a successful PATCH program.

> *People now know [as a result of PATCH intervention] what cholesterol is and they are coming out for screenings. (Local focus group participant)*

I feel that if we educate a few people and slowly get the message across to the population, then [PATCH] has succeeded. (State coordinator).

While sites recognize that the ultimate measure of the success of PATCH is behavioral change and improvements in health status, they acknowledge that those changes are slow to occur and difficult to measure. Rather than get discouraged by a failure to identify significant health effects, sites focus on changing knowledge and attitudes regarding health promotion and risk reduction, as they are important precursors to behavioral change. Again, however, the sites recognize that even with knowledge and attitudes, the level at which change occurs initially will be small, but can be expected to increase over time with persistent efforts to educate.

[Success for PATCH is] change in unhealthy behaviors and **making a difference** *in* **just a few lives. (Local coordinator)**

Growth of PATCH

Seven sites discuss a successful PATCH as being one where the process grows and becomes increasingly incorporated into the community. Agency involvement both in terms of the numbers of agencies and the amount of their involvement increases and community networking is enhanced. More people, particularly community-level volunteers, also become involved.

Success would be if the community is strong and organized, **has good** *leadership, and is ready to deal with any problem that comes along. (State sponsoring agency administra tor)*

[Success is when PATCH can] generate new people to invest rime in PATCH (Local coordinator)

Through the growth of PATCH in the community, the potential for changes in the health status of the community is enhanced because the education efforts and programs are more likely to continue and increase their impact on the community.

Conclusions and Implications:

1. PATCH states and sites offer two levels for "success" at PATCH sites. The first is directed towards changes at the individual level; the latter towards changes in organizational functions. These two measures of success are important ones to consider for evaluating the success of PATCH since they coincide with program participants' definitions for success.

2. Sites and states also acknowledge that individual change may come slowly and only affect a limited number of people in the early stages; this factor, too, should be considered in evaluating the effectiveness of a PATCH program or intervention.

3. When core group members are satisfied with the progress of PATCH, this helps to maintain their interest in and commitment to PATCH.

4. "Success breeds success." The more PATCH can project itself as successful, the higher the level of interest in the community will be.

Recommendations:

1. By training sites in evaluation, CDC can facilitate each site feeling successful. The sites can be taught to select achievable, realistic measures of success to be the focus of their evaluation. More specifically, they can be trained to recognize the value of intermediate level data (e.g., numbers of people attending an intervention) as indicators of success. By providing training on process and outcome evaluation analyses, the sites will be able to monitor the progress of their projects along with ultimately confirming the success of their interventions. This information could be used in developing subsequent interventions, by identifying barriers to be avoided, in addition to providing media data to inform the community of the success of PATCH.

2. As addressed in Question 5, local coordinators can be trained and encouraged to use the media to broadcast any and ail successes that PATCH has achieved. This will enhance the perception that PATCH is successful, thereby increasing community interest in PATCH.

QUESTION 7: What factors predict the level of participation in PATCH?

Major Themes:

1. PATCH is more established and tends to thrive in communities that have greater resources, including health and social service agencies with professional staff.

2. Reliance on professional core group members helps PATCH programs produce results but has drawbacks in terms of limited time availability and community ownership.

3. The local coordinator is key to initial and ongoing program participation.

4. Burnout of volunteers is a problem and may be mitigated by providing incentives for participation.

5. Most programs report the need for some level of funding to support the local coordinator's position, implement interventions, and/or assist with operating expenses.

6. Trying to establish and maintain PATCH in a very large geographic area is generally difficult.

The ideas compiled here represent informants' descriptions of factors that "made a difference" either by being "facilitators" or "barriers" to the PATCH process. There was a strong degree of consistency among sites; that is, a factor was often mentioned as an asset by one site, and its absence as a problem by another. Since PATCH does not exist without individual and community participation, which is greatly affected by these factors, they can be considered very real predictors of success.

Discussion of Results:

Community Resources

There is no question that PATCH programs are more readily established and sustained within communities that have at least moderate levels of organizational resources. Principally, these resources include health-related agencies and facilities and social service agencies. Other key organizational support can be provided

by the media, local businesses, schools, and municipal organizations. These factors affect the PATCH environment in several ways.

First, a greater number of health and social service organizations means a larger pool from which potential core group members with relevant experience and training can be drawn. Although the ideal level of professionalism is open for debate (and discussed in the "Core Group Membership" section to follow), the presence of working human service personnel in the community represents a bank not only of skills but also of motivation and commitment. These are people who do not have to be sold on the importance of targeting health problems and the value of interventions. If these agencies have also worked together on previous problems, the experience gained in pre-existing networks may greatly facilitate the development of PATCH. By contrast, communities with few health-related agencies, which may themselves be underfunded and understaffed, are likely to experience difficulty in generating PATCH programs/interventions.

> *Resources have a huge influence-not only the organizational resources, but also the skills of the people in the core group [are] a huge resource. [Site] has people trained in health education, [while in another site] the majority of the group probably has only an eighth-grade education. (State sponsoring agency administrator)*

> *[Nonprofessional core group members] don't have the ins and the outs; they are not the shakers and the movers in the county, and they don't know where the purse strings are. This may not be an indicator of a successful group but it is an indicator of a group that is more likely to see success sooner. (Local coordinator)*

Second, a community with a variety of health-related institutions is more likely to contain one organization that will take a sponsorship role for PATCH, support part of the local coordinator's time, and possibly underwrite operational costs.

> *One of the key factors was that (agency] was willing to carry a huge amount of the load, to go ahead and do things when they didn't have much support.... Without that kind of commitment on the part of someone who was able to do that, the whole thing would have collapsed. (Local focus group participant)*

At both the state and local levels, the degree of commitment to PATCH among agency leadership is a critical determinant of the support that program personnel will receive for PATCH activities. If the leadership of the sponsoring agency is committed to both

health promotion and the PATCH model, there is likely to be a willingness to champion PATCH.

> *[An important factor] was the support of their health **officer...People** really respect him and want to be involved where he's **involved...He's** even gone so far as to co-sign on letters from [the local coordinator] and personally invites people to meetings. (State coordinator)*

Third, solicitation of financial support and in-kind contributions is easier in a community with a number of relatively prosperous businesses and organizations. The lack of such options greatly increases the program's need for external funding.

> *When you have to get things donated, you find you are having to continuous/y knock on the same doors, and this gets old. (Local coordinator)*

Some resentments occur because PATCH is a CDC program, and community time and money are being used for it, suggesting that identification of PATCH as a community effort is not complete.

> *We're actually spending a lot of money to bring about a **CDC** project. (Local sponsoring agency administrator)*

Programs that have organized and demonstrated some initial successes will have an advantage in securing additional support. However, solicitation of external support requires staff time and expertise to develop grant proposals or other fundraising strategies. Resource-poor communities may find it particularly difficult to generate additional resources.

> *To guarantee some success for this approach you need to be able to give **[it]** the resources to get off the ground, to somehow prove itself to the city officials so it can **get** some benefits in the long run. (Local sponsoring agency administrator)*

> *Sites like [site name] don't have the resources **to** get more resources. (State sponsoring agency administrator)*

Finally, the concept of a health promotion program is often difficult to sell to organizations and individuals who are confronted with survival issues, such as keeping a community hospital open or paying the rent. Rightly or wrongly, health promotion is seen as somewhat of a luxury item about which poor communities may not have time to worry.

Many [people here] are at the survival stage, so these [health promotion] issues aren't important. They wony about getting food on the table. (State sponsoring agency administrator)

At the other end of the spectrum, an abundance of existing resources may present challenges. When a variety of health and social service programs are already in place, PATCH groups find it challenging to identify a problem that gets people excited but that isn't already being addressed.

*The PATCH model would work best in a community that didn't already have health promotion resources, didn't have agencies doing **the** work. (Local coordinator)*

State agencies also express resource concerns. A major concern is finding the staff time needed to provide adequate support to sites. From the state perspective, work with resource-poor communities is particularly demanding in that they are likely to need additional training and ongoing technical assistance.

[In] rural areas, [we] have to work hard to develop people and community resources....Takes a lot of state effort. (Stare sponsoring agency administrator)

States also report that it would be helpful to have funds that they, in turn, could allocate to the local sites. These monies could be used to assist with data collection, program start-up, and other similar needs.

Core group membership

Core group membership, which includes a variety of health professionals, community leaders, and laypersons, is generally seen as desirable, although there are also some drawbacks to this type of diversified group. When describing an ideal core group, nine sites discussed the advantage of a coalition of professionals, although they often simultaneously lamented the lack of community people. These professionals, as noted above, are already motivated in the areas PATCH addresses and have training and experience in data analysis, program management, and community development. Because their PATCH role is likely to be congruent with their daily job activities, it is easier to work it into their schedule.

However, one of the chief drawbacks to reliance on health professionals as core group members is that such persons are unlikely to have much time to devote to PATCH unless it can be integrated with job activities.

Most PATCH volunteers work in private voluntary organizations. [They] aren't available to go sit in a supermarket handing out samples of low-fat foods. (Local coordinator)

In 16 of the sites, the health professionals are involved in the core group not only as individuals, but also as representatives of their agency; when one leaves, the replacement will be chosen from that agency's staff. This arrangement, while helping with PATCH's institutionalization, may also place the core group more firmly as a coalition of professionals and organizations.

If [core group member] were to leave, we'd recruit the person who took his place... We certainly know who we need at the tab/e to make the process work. (Local focus group participant)

Most communities were also able to involve at least a few non-health leaders such as government officials, school administrators, or clergy. Such members share many of the advantages of health professionals, such as relationships with other community leaders, management experience, and community organization skills. Either they are among the community's "movers and shakers", or they have access to them. However, they will need help to develop an understanding of health behavior issues and commitment to educational processes and community interventions. Many groups are specifically interested in encouraging the involvement of business leaders, but they rarely participate as core group members.

One of the difficulties was in getting into businesses and getting them involved... We went through the Chamber of Commerce, but they decided it was not one of their goals to...work with us. (Local coordinator)

Community--i.e., lay--members were specifically recognized by ten sites to be important contributors to the core group. They have time available but require greater support from the program if they are to develop as active members. An issue that emerges is the level of sophistication required for all core group members. A related issue is whether the training for the lay members should be equivalent to that for the health professionals. For example, while core group members who are health professionals frequently complained about the redundancy of the workshops, such workshops do cover material that is likely to be new to laypersons. Therefore, long gaps of time between workshops or interventions may be difficult for laypersons.

If you are already involved in health education as an issue, it doesn't seem like such a long time because you deal with the concepts every

day. But for lay people, when they hear about this once every three months and have to relearn the process every time, people get bored before you get off the ground. (Local focus group participant)

Another problem identified was that lay members frequently become involved in PATCH out of concern for a specific health issue. If that issue is not identified as a PATCH priority, then they may lose interest and drop out of the core group.

People dropped out because we weren't going to take on [ ]. We had to bring new people on. (Local focus group participant)]

None of the sites visited reported having a functional, separate community group, although one mentioned a cadre of volunteers who could be called upon when needed. We have no interview data that explain the "disappearance" of the community group from the PATCH model. A community group would be responsible for much of the legwork required with PATCH. It also would offer core group members a means of concentrating their efforts on planning and evaluation, thus limiting PATCH's time demands.

Local Coordinator

The local coordinator is most critical to the program's success, particularly in its early stages. Informants readily identified lists of desirable characteristics that can be summarized in terms of: personal traits (enthusiastic, persuasive, easygoing, diplomatic), community development skills (knows the community, has group facilitation skills, is able to relinquish control) and health expertise (preferably a health educator or public health nurse).

[She] could talk with God and not get nervous. She could talk a chicken out of a chicken dinner. (Local sponsoring agency administrator)

The local coordinator serves the valuable function of coordinating all of the PATCH activities and committees. **He/she, in some cases, also does much of the** "legwork" that is required to keep **PATCH functioning and doing interventions. The local coordinator is also a prime source of information for the core group because he/she is** in communication with the state coordinator and/or **CDC.** Ideally, this person tends to have a strong commitment to PATCH and provides the necessary leadership and encouragement to maintain a strong program.

A particularly important characteristic of a local coordinator is the ability to facilitate the core group's functioning and to delegate

responsibilities. Sites where PATCH was identified as an institutionalized program tended to have coordinators who serve more as public relations officers for PATCH, by coordinating the functions of the core group, maintaining media coverage, and facilitating the initiation of a PATCH program, than as active health educators. These local coordinators tended to delegate responsibilities more readily to core group members and volunteers in order to concentrate their efforts on seeing that PATCH barriers are eliminated and more people learn about PATCH. These strategies, as discussed in Question 5, tend to help not only institutionalize PATCH, but to enhance the participation and enthusiasm of core group members by increasing their level of responsibility and ownership in PATCH.

Preventing Burnout

Burnout is a problem that was explicitly discussed by only five sites, but seemed to be a problem or potential problem at many of the sites. The greatest cause of burnout is conducting the BRFS because it is a labor-intensive activity, and often a long period of time passes before results of the survey are available. Other sources of burnout are simply the demands of conducting interventions, which are often big events, and maintaining functioning committees--all on a voluntary basis.

Several interviewees identified solutions to the almost universal issue of volunteer burnout:

- Fun and rewards, in the form of volunteer dinners and parties;
- Community recognition via media coverage or certificates of appreciation;
- Structural innovations, such as co-coordinators, to reduce burden and supplement individual skills; and
- Limiting strain by rotating committee chairs or by tailoring PATCH roles to time availability and interests.

Funding

Sixteen of the 20 visited sites identified a need for outside funding. The need for financial resources was usually described at one (or

more) of three levels: funding for a part- or full-time local coordinator, funding to support interventions, and for operational support for such expenses as stationery and telephone calls.

The need for support of a local coordinator position was frequently mentioned, particularly in resource-poor communities. Leadership in such communities is likely to require more intense inputs of time, since fewer resources are available to be called on and must instead be developed from within the community. The idea of a funded local coordinator position was, of course, also attractive to communities with greater resources as well.

> *The places that need PATCH the most are the ones {in which] it is most difficult to get PATCH to work. These sites need the paid positions. (State sponsoring agency administrator)*

Most communities described outside funding to support interventions as a priority, since fielding interventions almost always requires at least a small amount of money, in addition to volunteer labor. A few sites have been successful enough at generating in-kind contributions from local businesses that they do not feel that CDC funding is needed for this purpose. While enlistment of local sponsorship may be an appropriate goal, it will be more difficult in resource-poor communities.

> *Regardless of the good will of the community groups and the volunteers, **you** need financial resources to get things done. (Local sponsoring agency administrator)*

> *[There have been] lots of in-kind donations, so funding hasn't been a problem. (Local coordinator)*

Many sites described the need for funding to support operational expenses. Even agencies that underwrite the time of employees for core group membership sometimes balk at supporting photocopying. Funding for PATCH stationery, although minimal, may be important for reducing tensions over ownership and control and for developing program legitimacy.

> *Here we are, we're going to save the world, and we can't afford an envelope. (Local coordinator)*

Geographic setting

The geographic scope of a PATCH site affects its development. Several sites described problems related to a program site that is so big that travel to PATCH events or core group meetings is

difficult. Others spoke of PATCH sites that include several communities with no history of working together. In such cases, activities may either become concentrated in the dominant community, or they may lose focus as the program tries to maintain presence in all communities. Definition of the smallest possible community unit offers the advantage of retaining identity and personal relationships, as long as that unit still includes adequate resources.

> *[This area] is so parochial. There are four independent towns. With each town there is a feeling of ownership and neighborhood. How do we take PATCH and se// it to our communities and bring it back to the larger picture? (Local coordinator)*

Conclusions and Implications

1. PATCH is most readily implemented and maintained in communities that have at least moderate levels of health resources; it is more difficult in communities classified as resource-poor. Generally, more assistance is needed from CDC or the state to implement PATCH in these resource-poor communities. However, in terms of relative payoffs, the resource poor communities may provide the greater benefits because of the dearth of other health promotion resources available in these communities.

2. While professionals are vital resources for the core group, exclusive reliance on health professionals for core group membership ultimately handicaps the program. Specifically, the extensive reliance on these health professionals may effectively limit community involvement and, subsequently, community "buy-in" to PATCH.

3. Volunteers may be lost during the training sessions. This is due to the fact that the content of training materials (i.e., the workshop materials), is very difficult for some core group members to comprehend while others find the materials redundant with the information and skills they already possess. For example, the training needs of the health professionals typically differ markedly from those of the lay volunteers participating in PATCH.

4. Failure to tailor PATCH activities to volunteer needs probably results in a loss of volunteers or, minimally, the decreased interest and enthusiasm for the program. Specifi-

cally, in some sites, the expected roles and level of participation are essentially the same for all core group members. The community group, as proposed in the original PATCH model, offers a means for customizing PATCH to better meet volunteer needs. As implemented, however, virtually all of the sites visited combine the core and community groups and, thereby, inhibit the organizational differences between the two types of groups.

5. Both professionals and volunteers experience burnout and could benefit from recognition for time and effort spent on PATCH. Two key phases of PATCH seem to enhance burnout, the process of data collection and after the first intervention is completed.

6. Funding is an issue for most sites and could be addressed in several ways. Sites complain about the lack of funds for small accessories such as stationary and many feel their community cannot generate the funds on its own. CDC should consider these issues, along with the characteristics of the community, such as the level of resources and the geographic area, when allocating funds, particularly at the onset of PATCH.

Recommendations:

1. Although PATCH is seemingly most readily implemented and maintained in communities with moderate to high levels of resources, we believe communities with lower health-related resources should still be encouraged to participate in PATCH since these communities can be expected to benefit significantly from a successful PATCH. If these sites are selected, however, we suggest that CDC be prepared to provide them with resources, in the forms of technical assistance, funding, and general encouragement. For example, these communities will not likely have the skills to implement interventions that those with better established health networks may have. Thus, they could, for example, benefit from clearly outlined information on particular intervention strategies, general guidelines on community mobilization, and readily accessible technical assistance and moral support once they begin to implement the intervention.

Resource-rich communities have different kinds of needs that CDC could help meet. In particular, these sites report difficulties in finding interventions to implement that would not involve encroachment on another program's territory. Also, with a large number of organizations, coordination of service becomes a significant problem. CDC could assist these communities by providing information and guidance on approaches to coordination among programs. Also, these sites should consider looking beyond interventions focused at the individual level to those with a more community-based emphasis. For example, if a number of agencies are brought together, it may be a more efficient and effective use of their energy to look beyond a specific, limited intervention (e.g., a health fair) to instead have more of a policy focus (e.g., to advocate for legislative changes for a given disease prevention area).

Based on the above, we recommend that CDC work with the state and local communities to assess how available resources may best be used to yield the most benefits for the existing resource levels, as well as to determine and help address, gaps to be filled before PATCH can be successfully implemented and maintained.

2. Sites should be encouraged to develop strong agency support and representation from both the sponsoring agency and other community agencies, as well as to foster good representation of the lay community. In recruiting PATCH core group members, the local coordinator could pursue a number of options to develop a balanced group. Recruitment, for example, could be done through the local newspaper, civic clubs, and churches, as well as through local community agencies. Not all core group members necessarily need to be selected because of their reputation for community leadership. While leaders are important for networking, planning, and providing general credibility to the program, they may have little time for actual implementation of activities. Lay persons may have fewer activities and therefore, more time to commit to the day-to-day activities associated with developing, implementing, and maintaining a PATCH intervention.

   Reinstating the "community group" may be an effective way to ensure this blend between leaders and other community members to participate in PATCH.

3. Related to Recommendation 2, we also suggest that PATCH be more tailored to the needs of individual volunteers who participate. Some sites currently are doing this quite effectively while others offer the same structure and options for all participants. However, since PATCH participation, particularly for lay members, is done only for the intrinsic satisfaction it offers, we believe care should be taken to ensure that the experience is as rewarding as possible for participants. To a large extent, this can be accomplished through tailoring the program and building in the flexibility necessary to allow for individuals' needs to be addressed. The approach of one site, in which every potential participant was matched to a PATCH activity that could be accomplished in the amount of time that person had available, exemplifies this more individualized strategy to increasing both initial and ongoing participation.

   As addressed in Question 4, attempts could be made to provide different levels of training to volunteers. For example, training for some volunteers might focus on a variety of topics (e.g.,data collection techniques, community organization skills, and evaluation) thereby giving volunteers the opportunity to select areas of specific interest. Fine-tuning the training packages to accommodate the varying levels of sophistication of the members could maintain volunteer involvement and alleviate the frustrations felt by those who view the workshops as teaching skills they already possess. Within this approach, however, it would be important to provide an overarching framework that builds in a sense of camaraderie and shared commitment to the PATCH process to prevent the program from becoming fragmented.

4. Characteristics of the local coordinator are important determinants to how well PATCH will succeed. The most important factor is that the coordinator believes in the PATCH concept, and is enthusiastic to see it succeed. Experience in managing large health education projects and in working with political issues enhances their ability to coordinate PATCH. Providing training to local coordinators to define their role in PATCH, such as their need to be a true "coordinator" of the functioning of the whole group and delegate responsibilities accordingly would help to enhance their capabilities to produce a successful PATCH program.

5. Efforts to encourage the continued involvement of lay and professional core group members would help to alleviate burnout. The presentation of awards, certificates, and citations would accomplish a great deal in maintaining volunteer support.

6. Size of the PATCH community is an important variable for consideration in starting new PATCH sites. As discussed, some PATCH communities find that they have taken on too large of a geographical area to effectively coordinate activities. In a number of cases, this stems from the perception that, since the program is administered by the local health department, the span for PATCH should include the entire health department service area. In addition to these kinds of logistical problems, we also found evidence of lack of a shared sense of community and turf issues (e.g., rivalry) between towns. We believe that CDC could assist the sites in determining the appropriate size of the area to be served. In our opinion, the key is to determine what the "community" is for a given area and limit the span of a particular PATCH program to this area. In large cities, for example, this area may be limited to a neighborhood or it may be a small section of the city. CDC's assistance in examining these issues will likely take some of the pressure off of the local communities to try to be "encompassing" as many currently feel compelled to do.

QUESTION 8: **Are there qualitative differences between the initial PATCH sites (those with CDC staff conducting the workshops) and the replication sites (those with minimal CDC staff involvement)? If so, describe.**

Major Themes:

1. The PATCH workshops are often modified substantially for use at the replication sites.

2. A number of state coordinators indicate the original sites are more successful than the replication sites because the "best" site is selected first.

3. Other state coordinators suggest the replication sites are more successful due to the application of lessons learned from the original sites.

Discussion of Results:

Modification of the PATCH Workshops

A primary difference between the original and replication sites is the way that workshops are conducted. The most common modification is to shorten the length of the workshops. In most of the sites that assumed responsibility for implementing the workshops (without assistance from CDC), an abbreviated version was used. This was, to a large extent, a response to the common complaint about the amount of time it took to complete the workshops. PATCH core group members are either busy professionals or community members who are involved in many organizations. Neither has an extensive amount of time for the technical training offered in the workshops.

> *In the beginning, the meetings were so boring and long...So we felt [we] would start losing people if we continued with the CDC process... so we began having half-day meetings. (Local coordinator)*

In general, states and sites report making the workshops less technical. Two different reasons for doing so are offered. First, when the core group largely consisted of health professionals, the workshop implementors either thought or were told that this group was already familiar with the technical information, and therefore, it could be

omitted. Second, some sites considered the CDC version too technical for the general community volunteers and, therefore, simplified it.

> *The training sessions were too time-consuming and laborious. They were too comprehensive - people in public health don't need it. (State coordinator)*

> *The workshops have changed [as they have been modified for local sites]. A lot of the academic stuff is not there...The length and the amount of detail of the workshops has changed. (State coordinator)*

According to the PATCH model, the workshops for the original sites are supposed to be conducted by CDC while the replication sites are supposed to have workshops conducted by the state sponsoring agency. To a large extent, this model is being followed; however, there are several states in which CDC has participated in conducting the workshops at more than one site. In the cases in which CDC does not assist in the replication workshops, a CDC representative occasionally sits in on one or two of the workshops. As the replications continue, CDC's involvement becomes minimal, (generally just a few phone calls). Perhaps because of the reduction in CDC's involvement with the replication sites, those sites further down the "replication chain" seem to be more hesitant to contact CDC with questions. They are more likely, instead, to go to the state sponsoring agency. This is consistent with the PATCH model; however, as discussed in Question 10, CDC's presence carries with it important, intangible significance (credibility, status, reward) for the sites that is lost when CDC is relatively uninvolved with the sites. It is possible that the lack of CDC involvement is detrimental to the motivation and success of some replication sites.

Differences in the Relative Success of the Original Versus the Replication Sites

Opinions differed on which site, the original or the replication, is generally more successful. A number of state-level staff suggested that the original sites tend to be more successful. One explanation that is offered for the difference is that the states chose the most active, health promotion oriented sites to do PATCH first.

I think that as we're going we're getting weaker... The replication sires are weaker because we picked the best first and now we are down to the second string. (Stare coordinator)

Furthermore, the theory of innovation diffusion (Rogers, 1987) would predict that the original sites would generally be the stronger sites since the early adopters tend to be more knowledgeable about a given area (i.e., health promotion) as well as more willing to take risks (i.e., start a PATCH program). Later adopters (i.e., replication sites) must build both their health promotion knowledge and confidence in their ability to implement PATCH. The likelihood of a second site adopting PATCH, according to the theory, is enhanced significantly when new participants can witness PATCH's success at the original sites.

If, in fact, the original sites are more successful, another possible reason for this difference is that the PATCH model becomes too "watered down" by the time it is applied to the replication sites. Perhaps the strengths of the PATCH model are lost as modifications are made to the workshops and other aspects of the model. This result could be particularly significant if the PATCH sites that are chosen later do not have as much of a health promotion orientation as the original sites. These sites would need, even more than the originals, the full education process offered by the workshops and the PATCH model.

Another difference in perceived success between the original and the replication sites is that the original sites implement more interventions than the replication sites. There are at least three possible explanations for this phenomenon:

- the length of time the site has been operating;
- the number of health risks revealed by the data or a narrow scope of interest on the part of the core group; or
- the original sites could, in fact, be stronger than the replications, with the number of interventions serving as an indicator of their success.

Because of the possibility that the number of interventions is related to the strength of the site, perhaps CDC should

monitor the differences in the number of interventions over time to observe whether or not this phenomenon continues to exist. If this is viewed as a problem, then appropriate steps could be taken to facilitate and encourage the replication sites to conduct more interventions.

An opposing view of the difference between original and replication sites expressed by a minority of the state coordinators is that replication sites tend to be stronger than the original sites due to lessons learned from the original sites' experiences.

> *[There are] more coordinators at the replication sites - [We] ask for two [local coordinators], two, not one, there is so much work to do... Replication sites are stronger than original sites because of things learned. (State coordinator)*
>
> *The second time around, [we] are better at it. (State coordinator)*

These state coordinators believe that the modifications and adaptations made to the PATCH model are improvements that ultimately produce a more successful site.

Conclusions and Implications:

1. Obvious differences in the PATCH process exist between the original and replication sites. Most often, these differences involve shortening the amount of training provided through the workshops. The effects of these modifications are unclear. Typically, it is the more technical and academic aspects that are omitted. It may be the case that some of the more subtle, but important, processes become lost through these modifications.

2. Decreased involvement with CDC as replications spread is also potentially problematic. As noted in other sections (e.g., Question 2, 6, IO), association with CDC carries with it a number of benefits and motivators, such as access to information, prestige, and support, that we believe to be critical components for the survival of the PATCH process at existing and emerging PATCH replication sites.

3. There are differences in the perceived success of the original and replication sites. While it may be too

early to identify the causes of these differences, CDC should recognize that PATCH is being 'translated" in different ways. These differences are causing the variations in results. If a connection does exist, then steps can be taken to adjust the sites' interpretation of PATCH to ensure a greater chance for success.

Recommendations:

1. Recognizing that many sites will feel that the workshops must be shortened if participation is to be maintained. CDC can ensure that vital component of the PATCH process are not eliminated in the process by offering alternative workshop modules with more streamlined technical components.

   As discussed in Question 7, communities will vary in the experience and professionalism that prospective members bring to the core group. Given the variety among PATCH sites, it is probably unrealistic to expect that any one workshop format will be appropriate for every group. State and local coordinators may rightfully decide that shortening the workshops is appropriate, either to reduce time demands on members or to allow time for training in other areas. In those instances, offering workshop modules modified by CDC program staff would be preferable to risking local modifications that may eliminate important elements of the PATCH philosophy, community, diagnosis process, or methods for identifying priority areas.

   One argument for use of the comprehensive workshop format is that the core group members who do not come from health professions will need a thorough introduction to the technical material. In groups where this only applied to one or two individuals, it may be preferable to provide them with the full workshop materials for home study, with assistance from the local coordinator. They could then participate in a more abbreviated workshop with no sacrifice to the depth of their preparation, while the enthusiasm of the group would not be strained by hours spent reviewing familiar material.

2. Whether original or replication sites are the stronger ones within a state, all will benefit from regular opportunities for contact with each other. Increased networking will allow sites to transfer lessons learned from one site to another, rather than relying upon the state coordinator for all communications. In addition, interaction among sites seem always to provide an important source of affirmation and encouragement to local personnel.

   Question 10 discusses recommendations for facilitating interactions among states. The conferences and newsletters suggested for national-level networking would be equally helpful, and far easier to implement, at the state level. States with several sites might consider annual conferences with both time for sharing experiences and outside speakers on topics of emerging interest. States with only two or three sites may use a simpler format, with one-day meetings held at the state capital or hosted by one site. For states with several sites, a semi-annual or quarterly newsletter could provide an opportunity for sites to report on current activities. Distributing a newsletter would be a fairly economical way of including core group members in the communications. A simpler alternative is a quarterly conference call between the state coordinator and local coordinators, which would allow an instantaneous exchange of problems and solutions while encouraging a sense of connectedness among sites.

3. Developing capabilities among state personnel for conducting workshops and providing technical assistance to the sites is necessary for the diffusion of the PATCH model and for the cost-efficiency of the national program. However, CDC must identify ways of maintaining relationships with local coordinators and core group members without usurping the state coordinator's growing responsibilities.

   Annual state conferences, as described above, would provide an economical method for CDC personnel to interact with local coordinators and core group members. By leading workshop sessions during the conference and participating in awards ceremonies, CDC staff could keep in touch with local

concerns, provide technical expertise to the state, and invest in the event some of the prestige associated with **CDC's** involvement in the program. At the same time, attending one such conference, rather than visiting each site, would offer CDC substantial savings of time and cost -- enough to justify offering some CDC funding for state conferences.

An alternative to state PATCH conferences would be annual visits by a CDC staff member, accompanied by the state coordinator, to each site. CDC staff could plan on participating in an annual review in which the site assessed its progress, enjoyed recognition for its successes, and identified problem areas needing further attention. The CDC representative would serve both as a technical resource for the self-assessment process and as a symbol of official national recognition for the site's achievements.

4. State coordinators should monitor the number of interventions implemented by each site to assess whether there are in fact differences in the activity levels of original and replication sites. Of course, the number of interventions implemented is a rough measure of the strengths of the site that needs to be supplemented by information on what kinds of interventions were staged and how many community members participated. Over time, the information will provide a useful indicator of variations among sites that can help identify problems associated with core group turnover, unmet training needs, or deficits at the local coordinator level.

QUESTION 9: **Does it make a difference in the success of PATCH whether the initial interest for a given site comes from the State Health Department or from the community level?**

Major Themes:

1. Due to the fact that many of the sites began PATCH several years ago, it is often no longer clear if initial interest in PATCH came from the state or the community level.

2. Criteria important to consider in the selection of new PATCH sites include:

   - The motivation on the part of the site to take on PATCH;
   - The availability of a dynamic local coordinator and, ideally, a program champion;
   - State support; and
   - A commitment to the health promotion model which is the foundation for PATCH.

Discussion of Results:

Assessment of Initial Interest

Because considerable time has elapsed since the majority of sites in our study were initiated, it is no longer clear, in many cases, who (the state or the local community) provided the initial source of interest in PATCH. In at least seven of the sites, the state apparently learned of PATCH first and then either picked a site to do PATCH or presented it to a number of PATCH sites, one or more of whom then volunteered to do PATCH. Sites chosen by the states were typically identified because of their strength in health promotion. These sites also tended to have a highly competent local sponsoring agency and staff and a good relationship with the state sponsoring agency.

> *The state selected target communities that bad . . ..good local staff, and, where the local health departments had good relationships with other community groups. (State coordinator)*

Further, a number of sites that heard of PATCH through the state and volunteered to implement the process had a history of working with the community prior to PATCH.

> *I think we were known through national conferences as doing a lot of work in health promotion. One of the requirements was that you have a community approach, and there was a lot that we were already doing. The agencies were working together... (Local coordinator)*

> *[We had a] hisroty of community involvement. (Local sponsoring agency administrator)*

These sites may be naturally more likely to succeed than other sites without this background because of their ability of avoid "turf battles" among agencies.

Factors Important for Selecting New PATCH Sites

While it is difficult to discuss, at this point in time, exactly where initial interest for PATCH arose for the sites visited, our efforts to answer this question produced data we think are relevant for selecting PATCH sites in the future. First, motivation to participate in PATCH on the part of the site is beneficial because the state does not have to "push" PATCH on them. This characteristic could explain why the majority of the eleven sites that approached the state about PATCH were considered to be the most successful at institutionalizing PATCH into the community.

> *Hypothetically if the interest comes from the community, it is the best way to go because then I don't have to hard-sell the community. They have already bought into it. (Stare sponsoring agency administrator)*

If the state is motivated and cannot find a site that is equally motivated to participate in PATCH, then a site may be selected that is not particularly interested in the PATCH approach to community health. This is one of the difficulties in spreading the PATCH program--how to sell it to the sites that are reluctant to take on new programs.

Second, regardless of where the initial interest for doing PATCH arises, two support people are seemingly important contributors to success at any given site:

- The local coordinator; and

- An individual who is well-placed politically and is willing to advocate for and protect PATCH (i.e., a local champion).

The local coordinator is generally the person most relied upon to get the job of instituting PATCH done. She/he schedules core group meetings and often does much of the leg-work required to implement interventions. Because PATCH is usually a part of their work plan, the local coordinator is best able to devote the time necessary for organizing and coordinating PATCH efforts. Further, this person often serves as a cheerleader and motivator to keep the core group member committed to PATCH. Without the hard work of a dedicated local coordinator, many PATCH sites would flounder or fold.

At some sites, there is a local champion (e.g., the medical director or sponsoring agency administrator) who advocates for PATCH through the various political levels of the sponsoring organization and the community. This person is typically less involved in the day-to-day activities of PATCH than the local coordinator; however, he or she believes in the PATCH model and encourages others to support it as well. This person seeks out ways to give PATCH visibility and often brings in other key players to help strengthen the core group or facilitate interventions. A person performing this role was identified for ten of the PATCH sites we visited and was unanimously felt to be integral to the success of those PATCH programs.

Third, for those states that have more than three PATCH sites, it is important to note that the state gives a tremendous amount of support for PATCH. These states' sponsoring agencies believe in the concept of PATCH and are committed to the expansion of PATCH through the incorporation of a number of sites into the program. Six states were seen as very willing to nurture PATCH along and do what they could to facilitate the PATCH model. Without that strong state support, PATCH does not seem to grow beyond a few sites in each state, as was evidenced in at least three of the states visited.

Fourth, the site's reason for initiating an interest in PATCH is also important. During our visits, it was apparent that some sites' motivation for implementing PATCH stemmed

from the belief that health promotion activities were important and were best accomplished through a community-based approach. Other sites, however, apparently adopted PATCH primarily because they viewed it as a potential mechanism for obtaining funding (although this was seldom stated explicitly).

> *[One county] became a site because...the director for a regional health service approached the state wanting a way to get more* organized and possibly receive more funding. *(State coordinator)*

As Goodman and Steckler (1988) suggest, when this kind of opportunism is the primary motivation for an organization to adopt a new program, often the commitment is lacking to overcome any obstacles or difficulties that are encountered. In the case of sites that qualify as having opportunistic motivations for taking on PATCH, a lack of commitment could certainly lead to a less successful experience.

When the sites are motivated by a commitment to building community coalitions, they tend to be more committed to PATCH and more satisfied with the PATCH process and outcomes. Those sites with funding as their primary motivator for involvement with PATCH may tend to be more disillusioned and disappointed with the PATCH program as a whole since PATCH is not inherently a mechanism for funding.

Conclusions and Implications:

1. We were unable to discern definitively if the initial source of interest (state or local) makes a difference in the success of PATCH. When asked this question, the sites and states often gave vague or conflicting responses. This could simply be because there have been personnel changes, so the current personnel were not involved in the initiation of PATCH. Further, this evaluation is, in many cases, so long after the initiation of PATCH that it is difficult for them to remember who was originally interested.

2. We believe the results obtained for this question have strong implications for selecting new PATCH sites. Important variables for initiating a successful site include:

- Motivation to do PATCH;
- An energetic and enthusiastic local coordinator.
- A supporter in addition to the local coordinator, who is knowledgeable of and connected with the politics of the local community;
- Support for PATCH at the state level; and
- A local commitment to health promotion enacted through community-based coalitions;

Recommendations:

1. Since it is more desirable to have sites approach the states to become involved in PATCH, an important part of the initial development phase could include state-wide publicizing of the PATCH concept and the opportunities it offers. This media campaign could be in the form of conferences, newsletters, or memos to key health educators to attract their interest in such a program. They could be informed of the costs and benefits of PATCH so that the potential sites can decide for themselves if PATCH is capable of flourishing in their community.

2. In addition to simply educating health professionals about PATCH within each state, CDC and the state sponsoring agency should take a more active role in determining which sites are the most appropriate, once sites have expressed an interest in PATCH. For example, CDC could develop a set of criteria that generally predict success at the site level. Personal interviews with the local coordinator should be conducted in an attempt to assess the motivations and goals of that community. If the medical director and staff of the local sponsoring agency will have regular contact with the local coordinator, they should be interviewed to determine the level of support PATCH would receive from key professionals in addition to the local coordinator's past experiences and successes with similar programs.

Another important aspect which can affect the success of PATCH is the state's level of commitment to PATCH, and this can only be feasibly assessed by CDC. When a state expresses an interest in PATCH, it may be practical to have them complete a short application for approval. This form could begin by assessing their prior experience with similar programs and their goals for becoming a PATCH state. Once a new state is added to the PATCH program, they should be interviewed by CDC staff. This interview could serve two major purposes. First, it would provide a forum for CDC to explain their role in PATCH and to clearly define the expectations states should have for being a PATCH site. Second, it would serve as a mechanism for CDC to assess the state's motivation for becoming a PATCH program and help determine their capacity for locating and maintaining PATCH sites.

QUESTION 10: What should CDC's role be?

Major Theme:

The three main areas in which **PATCH** states and sites feel CDC should have a primary role are:

1. Funding;
2. Technical assistance; and
3. The facilitation of networking between the sites.

Discussion of Results:

Funding

The states and sites are almost unanimous in their call for more funding from CDC. Eighteen of the 20 sites visited requested additional CDC funding. Generally, they would like this funding for the establishment of PATCH, providing for a local coordinator position, implementing interventions, and maintaining an office. A lack of adequate financial support requires a much greater effort on the part of already stretched PATCH core group members or volunteers. Not only do they have to conduct the BRFS and develop intervention strategies, but they also have to raise money to support these activities. Further, the commitment of these people may be tested because they feel concern about the long-term viability of a program that does not have adequate funding.

The sites vary in the amount of funding that they feel CDC could provide, suggesting amounts that range from a few thousand dollars for office supplies to $15,000 for a part-time PATCH coordinator.

> *We don't want thousands and thousands of dollars to do these grandiose things. We want very simple things here. But simplicity costs, too...A couple of thousand, maybe three to five [would be enough]...The more money, the more projects you can do. (Local coordinator)*

> *If CDC could provide some money for a health educator position, this would be key. In many health departments, this is not*

*a priority position...This **would** make a big difference in getting and keeping the program...in getting some stability in that **program....$12,000** per year would do it.... (Local sponsoring agency administrator)*

Technical Assistance

The requests for technical assistance are predominantly for training, dispersing information, evaluating programs, and analyzing data. Further, the sites would like CDC to be more proactive in offering technical assistance. For example, sites want CDC to send out information about interventions when it discovers or develops a good idea.

*The state [needs] to provide training to communities to know how to evaluate and **analyze** data. The state doesn't often have this expertise, so CDC needs to provide it. (Local medical director)*

We need more technicai assistance: manuals, periodic staff training, workshops, more material development, training of trainers.... (State coordinator)

*We were hoping CDC would be some type of warehouse that could provide information so that we didn't have to just **rely** on our limited resources. (Local sponsoring agency administrator)*

At the very least, sites need for CDC to be responsive when requests are made for information or assistance. This can be understandably difficult due to the limited number of staff available for PATCH at CDC; therefore, it also would be helpful for sites to be made aware of what they can reasonably expect from CDC and alternative sources of information and assistance.

We almost need a cooperative agreement with CDC-the local health department will do certain things, and CDC can be counted on to do certain things. (Local coordinator)

Some sites express interest in evaluating their interventions but basically consider themselves to be practitioners and feel unprepared to do evaluations. Similarly, several of the state coordinators or administrators expressed the need for help from CDC in learning about evaluation research.

Staff training materials, in general, seem to be lacking for both state and local coordinators. New coordinators often

do not seem to be aware of the more technical aspects of PATCH, and since they missed the workshops, in most cases, there does not seem to be a mechanism for them to learn needed skills. Clearly, this can hinder the progress of PATCH or steer a site "in the wrong direction" if a coordinator is unaware of CDC's PATCH policies and procedures.

CDC can further benefit the sites through regular visits which serve not only as opportunities for training but also as both a motivator and a reward. Working with CDC and having visits from CDC confers a strong feeling of status to the sites. This is particularly true in the small towns, since it is rare for national organizations to take notice of efforts at the community level. In many ways, the local PATCH sites feel that the support and presence of CDC legitimizes both the PATCH program and their efforts. Further, as discussed for Question 7, when CDC issues awards or certificates to the local sites, they are proudly displayed and give the local media an opportunity to do a story on the success of PATCH.

> *When (CDC) came evety six months, this was important. It kind of rejuvenated the group...This was useful in showing the group that someone out there thought the group was important. Also, it kept new information coming in. (local sponsoring agency administrator)*

> *The community has a higher trust level when there is a contact person at CDC that we can use if we run into problems. (Local sponsoring agency administrator)*

The Facilitation of Networking Between Sites

A return to the PATCHWORKS newsletter and more national/regional conferences are requested by the sites to learn from each other. Again, with regards to the desire for conferences, funding is needed for the sites and states to be able to attend. The desire to avoid "reinventing the wheel" is often expressed. Through the newsletter and conferences, sites can share with each other "packaged interventions" that may be useful in a number of different communities, and also can discuss lessons learned about the PATCH process and/or interventions.

> *One concern of mine was...knowing what's going on with PATCH in other states because we're all for not reinventing the*

wheel, so it would be **helpful** *to have access to what's going on in other states. (State coordinator)*

If I get to know the people in Ohio or Florida....[I can] find out they have the same kind of problems...If I'm running a PATCH program that's been done somewhere else, I can contact that person. Sometimes it helps to know what is going on at the [other] PATCH sites. (State coordinator)

The call for more information sharing between PATCH sites was a strong theme in the evaluation of PATCH conducted by Steckler and Orville [1989]. A summary of their findings states that over 94 percent of the survey respondents (PATCH sites and state coordinators) indicated that they would like CDC to provide more information on PATCH interventions from other states. It was further stated that "while CDC does provide some information about various PATCH programs in its "CDC PATCHWORK" newsletter, many people we interviewed suggested that the newsletter might also serve as a networking tool to foster communication between sites in different parts of the country."

Another suggested way to foster this communication was through national PATCH conferences. Conferences could provide ongoing training in community organization and program implementation targeted specifically for PATCH. As an added benefit, these conferences would likely serve as motivators and reinforcers for local PATCH participants.

When [ ] went to the [Project LEAN] conference, she really came back charged up. (Local sponsoring agency administrator)

Conclusions and Implications:

1. Virtually all of the states and sites visited requested that CDC play an increasing role as provider of resources: financially and through providing information. In particular, sites would like **to rely more heavily** upon CDC as a source of information. Through its national position, CDC probably has better access to the latest health-related information and could relay this information quickly and efficiently; this is particularly important for the resource-poor sites.

2. PATCH programs also recognize the resource potential available through other sites and would like increased networking among sites. CDC serves as the common "umbrella" through which these sites could be linked.

Recommendations:

1. While we recognize CDC is limited in the amount of money that can be provided to PATCH programs, we found sites generally indicate that even relatively small amounts of funding (a couple of thousand dollars) would be extremely helpful as an independent resource base (i.e., not tied to any particular agency) for PATCH, particularly during the initiation of PATCH into the community.

2. If CDC could compile sets of information on interventions for the major health risk factor areas (e.g., a set of low-fat recipes) that could be distributed to the sites, this would be more cost effective than each site preparing its own. Information on successful interventions is viewed as particularly relevant to keep sites from "reinventing the wheel." Furthermore, CDC's assisting in the development ensures the interventions incorporate state-of-the-art information. These intervention programs could be shared at conferences or through newsletters.

3. We believe that PATCH participants would benefit from increased opportunities to meet and talk with representatives from other PATCH states and sites. For example, after the focus groups were conducted during the Project LEAN conference, a number of people commented on how helpful it had been for them to have the opportunity to discuss PATCH with people from other sites, to learn about what they were doing as well as to learn that they faced similar problems and to share solutions developed for these problems. Thus, although the focus groups were designed to be data collection sessions, participants were appreciative of the limited opportunity they provided for sharing PATCH experiences.

4. Additionally, reinstating a regular written information source, such as PATCHWORKS, would be helpful. While CDC reports difficulties in previous efforts to obtain information from sites for PATCHWORKS, this may be partially attributable to the way the information was solicited. We anticipate sites would be willing to share information with other sites to foster a stronger PATCH network. Furthermore states should maintain records of the progress of each PATCH site and report these findings to CDC to be included in the newsletter. The reinstitution of PATCHWORKS also could provide a mechanism for CDC to reward particular individuals or programs by focusing on them in the newsletter. This newsletter should be mailed not only to local and state coordinators, but also to core group members in order to keep them more actively involved in the program.

CHAPTER 3

As a result of a number of organizational and management decisions, the PATCH program is about to undergo significant modification of the model that was in place during the course of this evaluation. In this chapter, we attempt to extrapolate our results to the emergent PATCH model so that the results will be maximally useful for the "new" PATCH. We begin by describing briefly the proposed changes for the PATCH model; we then synthesize the recommendations we have developed for the new PATCH model and suggest their applications for the revised PATCH. For each of these, we indicate steps CDC could take in facilitating **the growth and development of** PATCH. We conclude by suggesting from a broad perspective, what CDC's role could entail.

The "New " PATCH

The proliferation of PATCH, due to the increasing numbers of states and sites, has tested the limited availability of CDC staff and resources. As a result, CDC has sought more efficient but equally effective approaches to PATCH implementation and dissemination. These changes have led to the consideration by CDC staff of a new "training the trainers" model for PATCH. In this model, CDC would provide state-level training; in turn, the states would assume responsibility for the implementation and maintenance of PATCH at the local levels. Through conversations among CDC staff, Dr. Allan Steckler of UNC, and the RTI research team, we have explored ways to apply some of the lessons learned through this evaluation, as well as through the one previously conducted by Dr. Steckler, to a revised PATCH that incorporates a "training the trainers" approach. A number of these recommendations have been included in the specific questions presented in Chapter 2.

Our synthesis of this information is organized by three stage of the PATCH process:

- initiation;
- maintenance; and
- maximization.

Recommendations for initiation describe start-up activities for PATCH, for both the states and the local sites, up to the point in the process where an intervention is implemented. The "maintenance" section contains ideas for how to keep the process going beyond the first intervention. The third stage, described as "maximization", is where we provide recommendations designed to make the most cost effective use of available resources and to derive the greatest number of benefits possible from the PATCH process. We address each of these stages for both the state and local levels.

Initiation of New PATCH Sites

State Level Develooment

With the shift to the "training the trainer" model, the new roles and responsibilities for CDC, the states, and the PATCH sites will need to be clearly stated early in the process. We recommend an administrative agreement be negotiated with the states prior to beginning the implementation process. This agreement should clearly specify the activities to be undertaken by the state, including what they will provide to the local communities and how they will work with the sites (e.g., in-service meetings, teaching materials, and supervision). In turn, CDC should specify the amount and type of assistance they expect to provide to the states and local sites. This would include not only the amount of staff time and materials CDC could provide in the way of technical assistance, but it also would indicate, as precisely as possible, any funding the state could anticipate receiving from CDC. In these negotiations between the state and CDC staff, we recommend that this administrative agreement be initially negotiated for at least a 2-year period and be renegotiated at subsequent 2-year intervals.

We also suggest that CDC should limit their selection of states for PATCH sites to those most committed to the process. We do not believe, for example, that the state whose primary interest in PATCH is to obtain funding, is as good a candidate for PATCH as the state that is interested because they believe in the PATCH methodology and application. If states are not fully committed to PATCH, we recommend CDC seriously consider the practicality of introducing PATCH in that state. Alternatively, if the state is committed but does not have resources available to provide an adequate

level of support, CDC will need to decide whether supplying an increased level of support to sites is feasible. Lessons learned from CDC's previous experience in selecting states could provide guidance on determining commitment. Given, however, that several of the CDC staff originally involved in field work have moved to other positions, effective ways of communicating lessons learned about assessing sites (as well as in other areas) could be explored. One relatively simple mechanism for accomplishing this would be an annual weekend retreat for both current and former staff.

CDC and the state also should decide what the overall program objectives will be and clearly specify these to the sites. If PATCH is to focus on health promotion and chronic disease prevention, this should be explicitly stated, and defined at both the state and the local site. Alternatively, if PATCH is designed as a community health program that has the flexibility to attack any health problem the community identifies, this should also be agreed upon. We recommend the former approach; i.e., that PATCH serve as a health promotion/chronic disease prevention program that targets a specific set of health behaviors, at least during the initial stages of program development. This restricted focus helps alleviate problems that result from defining the program goals too broadly. Some sites, for example, had developed interventions for problems outside of this purview. While these are often commendable projects, they may decrease the credibility of PATCH as a health promotion program. In addition, too broad a range of health issues will disperse the resources available to PATCH. By clearly stating program goals and limiting the range of risk factors PATCH is designed to target, there will be less miscommunication and misunderstanding once the program is in the community's control.

Once a state and CDC sign an administrative agreement, CDC will need to take a role in educating state coordinators about their responsibilities for establishing and maintaining sites. Examples of the kinds of training issues to be addressed include leadership, management, and public relations. Additionally, training on the types of interventions sites can consider (e.g., individual vs. social environmental change programs) and techniques for evaluation would help the state agency provide

technical assistance to sites, which is seen by sites as one of the state's primary roles. Also, if CDC provided instruction to state-level personnel on Strategies for improving media coverage and networking among sites, they would be better able to facilitate the growth of PATCH on a state-wide basis.

Because turnover at the state-level will have more serious ramifications with the "training the trainer" model, we suggest CDC present the information to multiple potential trainers (e.g., three or four). Not only would this diffuse the information at the state level, it also would allow the potential for more PATCH sites to be implemented since more state-level personnel resources would (at least, theoretically), be available. Because CDC involvement is an essential component in encouraging the PATCH process, CDC should also consider providing ongoing support for PATCH in each state by assigning a field staff person to each state sponsoring agency to assist with PATCH oversight for that state.

In terms of how states develop and implement local-level training, CDC must expect them to modify the methodology as they see fit for their local communities. This is only natural from an organizational perspective, and has already occurred in several of the states who have replicated PATCH on their own. While this is to be expected, however, it should not be disregarded. Through repeated "reinventions", the PATCH process may become so diluted that it is no longer the same program and may only be of minimal effectiveness. The program, as implemented in some of these sites, no longer resembles PATCH and is pursuing very different goals. We believe that CDC could legitimately impose some restrictions on how PATCH is to be implemented. We also believe that it is critical that CDC develop mechanisms to carefully monitor any major changes in workshops to ensure the continued integrity of the key process components. If a CDC representative is assigned to each PATCH state, as suggested above, this person could also teach states how to monitor changes as communities take ownership of PATCH. This monitoring format should be developed by CDC staff. CDC staff should also maintain an agreed upon involvement with the local sites, so that CDC can track the effects of modifications to the PATCH process. Our results indicate that certain aspects of the PATCH workshops could be

modified without significant negative effects. This will make it easier for the states to conduct them and also will allow a greater level of participation by people with only limited amounts of time available. We think, however, that some level of training in the overall PATCH philosophy and process should be a program requirement for core group members.

Local Level Develoopment

A series of questions should be considered for the PATCH start up at a new site. First, where should the site be located? A major consideration for this point is the level of interest in PATCH expressed by a potential PATCH community. We believe sites that initiate contact with CDC or the state are more motivated to accommodate the PATCH process. Sites with a history of health promotion projects are also good prospects for PATCH. However, we believe that there may be some communities whose lack of resources may limit their initially hearing about PATCH, as well as their history of health promotion activities, yet who may be very responsive when approached about the program.

Regardless of where initial interest in PATCH comes from, we believe an important prediction for a site's success is their motivation for participating. As was the case at the state level, we suggest sites interested in PATCH predominantly as a mechanism through which they can obtain funds should be avoided. Those wanting to do PATCH because they support its philosophy and approach are probably going to be easier to work with and ultimately, more successful. CDC's activities prior to site selection, including interviews with both potential state and local participants, will be critical to discerning motivation to do PATCH.

Our data also suggest limiting the geographical areas within the community to which PATCH responds. We found that sites that were trying to provide services to a large area encompassing diverse populations (e.g., county-wide) had more difficulty organizationally than sites with smaller geographical areas.

In terms of funding, we suggest that CDC seriously consider the possibility of assisting states in implementing PATCH at new sites by providing at least a minimal level of seed money to help start the process (e.g., $3,000-$5,000). Perhaps this

could be done by requiring the state to match CDC funding. This assistance is of particular importance to sites that do not have well established health-related resources. Although PATCH is more readily implemented in "resource rich" communities, we do not believe "resource poor" communities should be overlooked. Rather, we recommend that CDC and the state clearly define their objectives before selecting sites. If, for example, the state wants to strengthen existing resources in a community through the improved networking that PATCH offers, those sites with more resources would probably be better candidates for implementation. Alternatively, if CDC or the State wants to target communities with fewer existing resources (e.g., rural or minority communities) PATCH can be an effective mechanism for providing these health promotion resources. However, more assistance (both financial and technical) will be required in those sites. The decision to support resource-poor sites should, therefore, be contingent upon the level of funding CDC and/or the state is willing and able to provide.

Another important variable for the initiation of PATCH at a new site is the local coordinator. This person is one of the most fundamental elements in ensuring that the PATCH concept survives in the community. The person selected should believe in the PATCH methodology as an effective mechanism for working with the community. Personal characteristics and skills, such as being outgoing, having a sense of humor, processing good organizational skills, and having the ability to work with people are also important for the local coordinator. Experience in managing health education projects, good public relations skills, writing grant proposals, and experience in working within a political environment should enhance their abilities to coordinate PATCH. We suggest that the person should be able to devote at least 25 percent of their time to PATCH, with enough flexibility **in their schedule to allow them to allocate** additional time during the more intensive periods, such as program startup and at the implementation of interventions. This time allocation must be agreed upon by the local coordinator's supervisor. The local coordinator should be trained in the PATCH process by the state or CDC. The local coordinator's training also should include general leadership and management, such as how to motivate volunteers, delegate

activities, obtain additional resources, and work effectively with the media. Both the state and CDC should play active roles in providing this training.

In addition to the local coordinator, there is a second person who plays a key role in supporting PATCH. This person is the "local champion". We restrict the use of this term to those who serve as a "steward" for PATCH in the political waters of its environment. He or she must strongly believe in the concept of PATCH and serve as its defender. Although the person may not have significant time available for day-to-day PATCH activities, he or she must be at a high enough level in the political chain to get paperwork through the system quickly and efficiently, elicit financial assistance, network with other agencies, and solicit cooperation from relevant agency administrators. In other words, this person should generally be savvy about local politics and able to manipulate the system so that PATCH receives the attention it needs to grow and prosper there. If such a person can be identified early, PATCH's chances of survival are more secure. Examples of local champions at various sites include the mayor, the medical director for the local health department, and the city manager.

Another vital component to a successful PATCH program is the core group. The identification and recruitment of these volunteers should be made thoughtfully. Although sites recognize the need to involve health agency professionals, the value of maintaining a diverse mixture of professionals and lay members is critical. An increased diversity within the group helps to broaden the reach of PATCH and positively influences the community ownership of PATCH.

A further issue critical to the success of PATCH is the collection of local data for targeting interventions. Conducting a "full-blown" BRFS survey at the local level is probably unnecessary, and may in fact have negative consequences. However, the availability of some type of local data is critical for gaining the community support needed for local buy-in and obtaining political support for PATCH. We believe the Community Opinion Survey is very useful for this purpose and that CDC should train volunteers in how to collect and interpret this data for planning community interventions. Increased use of the morbidity and mortality data also could be helpful

in that these offer "objective" local level data.

We often found that many PATCH sites did not rely on any of the data to target risk factors. Thus, sites also need assistance in making the transition from the data to identifying target risk factors to selecting interventions. We recommend that CDC take a lead role in helping the state and their communities develop and/or select interventions. This contact also could provide an opportunity for CDC to assist in developing evaluation plans early in the intervention process.

In short, we believe that with careful planning and good communications, PATCH can be effectively implemented in the "training the trainer" model. However, for PATCH to be maintained in a community, we believe some ongoing presence by CDC is imperative. Recommendations for maintaining PATCH as well as CDC's role in the ongoing process are described in the following section.

Maintaining PATCH in the Local Community

The initial enthusiasm for PATCH often wanes after the first intervention has been implemented. Up to this point, the PATCH community has been enthusiastically preparing for the intervention and, after it is completed, "post-intervention" depression can be seen. At this point, the group has accomplished their "mission" and they may flounder unless action is taken relatively quickly (e.g., within the month immediately following the intervention). Both the state and the PATCH site are often tired and need motivating to ensure the continuation of PATCH. In the following sections, we will suggest methods to ensure the maintenance of PATCH at both the state and local levels.

State Level Maintenance

The primary role of the state coordinator in maintaining the momentum of PATCH is through providing technical assistance and by monitoring progress at each site so that problems can be easily identified. For example, our observations indicate that communities varied in the number of interventions that were ongoing at any time and that communities expecting a lot of interventions to occur at the same time often experienced time pressures that could have been alleviated by scheduling the programs on a more intermittent basis. Therefore, we recommend that the state

encourage sites to stagger various activities/interventions to ensure that they do not all occur at the same time, otherwise the community experiences a time crunch that leads to early burnout.

Once a community has successfully completed their first intervention, the State should encourage all of the partners (i.e., CDC, the State, and local site) to meet and prepare an outline of the next steps for future interventions including community events to raise money, media coverage, etc. It's also critical at this point to make sure that volunteers receive recognition for their efforts through awards, banquets, and particularly media coverage. It would be wise to have a staff member from both CDC and the state attend any banquet and at this time, to schedule the next core group meeting where the next intervention will be planned. This will provide the sites outside support and enthusiasm for PATCH.

Another role the state can play in maintaining PATCH is in developing a networking system at the state level so that information about planning, implementation, barriers, and successes can be shared among PATCH sites. This information also should be distributed among states. Reinstating a regular written information source, such as PATCHWORKS, would be helpful. While CDC reports difficulties in obtaining information from sites for PATCHWORKS, this problem could be alleviated by having the states report on activities of their sites. We think that sites would be willing to provide information to foster a stronger PATCH, particularly if the state took responsibility for soliciting the information. The reinstitution of PATCHWORKS could not only serve to enhance state-wide networking but also could provide a mechanism for CDC to reward particular individuals or programs by focusing on them in a newsletter. Based on information collected, CDC also could submit states or sites for consideration in receiving the Secretaries' Awards or other meaningful awards.

Local Level Maintenance

Ongoing training is a vital component for maintaining PATCH at the local level. This is needed for several reasons. First, turnover of the local coordinator and volunteers is an inevitable factor in program operation. Second, as PATCH grows,

new people will be brought into the process. For PATCH to continue as it was designed, the state and CDC will need to provide training on the PATCH process for new members as well as training for all members on skills that are required throughout the PATCH cycle but not covered in detail in the workshops. Training should be provided as the needs for these new skills emerge, as opposed to trying to provide too much information too early in the program's development. All partners need to identify the kind of training that is needed and at what points in the process to provide it. Examples of the areas training needs to address are:

- strategies for implementating different types of interventions;
- program evaluation techniques;
- fund raising skills;
- strategies for obtaining media support;
- enhancement of program institutionalization; and
- maintenance of volunteer support.

Another issue related to PATCH maintenance is the prevention of "burnout" of volunteers. Care should be taken to ensure that individual volunteers' needs are met. If, for instance, the volunteer's primary interest is working with people, he or she should be provided this kind of opportunity. Similarly, the amount of time the volunteer has available to donate should also be given consideration. If this time is limited, tasks should be assigned accordingly. Time constraints should be of particular concern when modifying the training volunteers will receive. The PATCH training should tailor the process to the needs of the individual core group members. In other words, PATCH training should include a variety of levels and the trainers could have the option of assigning or identifying additional materials for volunteers according to their needs.

An additional technique for alleviating burnout and enhancing community-wide participation is to encourage diversity among the core group members. Sites should develop strong agency support and representation in PATCH, as well as foster

good representation of the lay community. While community leaders are important for networking, planning, and providing general credibility to the program, they may have little time for actual implementation of activities. Lay persons may have fewer, or at least different, activities and therefore, they may have more time to commit or be more likely to view the day-to-day activities associated with developing, implementing and maintaining a PATCH intervention as fun (i.e., not work related). If the strengths and interests of each volunteer are identified and capitalized upon in determining their role in PATCH, volunteers are likely to be more satisfied with their responsibilities and better able to maintain enthusiasm. We also suggest that the development of "community group", described in the original PATCH model, be encouraged. We envision members of this group as not necessarily participating in all phases of PATCH but more as a reserve that can be called upon when needed. Thus, this group is more action focused.

Maximizing PATCH

In this section, we discuss ways to maximize PATCH to yield the greatest payoff for the community's investment. Maximization extends beyond particular interventions, focusing instead on the community level effects that can be generated as a by-product of the PATCH process. Specifically, inherent within the PATCH process are "spillover" effects or the externalities of PATCH. These need to be identified and utilized to maximize the overall effectiveness of PATCH without significantly increasing the costs or altering the model. Ways to develop these community level effects are described below.

First among these "spillover effects" is the improved networking that occurs among community agencies involved with the PATCH core group. Major turf feuds, for instance, may be mitigated by bringing various agencies/groups together to work for a common cause (i.e., PATCH). Through sharing both information and resources, health services agencies, other linking agencies, church groups, and so forth, can identify ways to avoid duplication of services, thus effectively extending already stretched resources. CDC could encourage working relationships by providing seed money in the amount of $3,000-$5,000 for PATCH supplies (e.g., stationary, lunches),

to minimize PATCH's identification with any one particular agency. This financial recognition from CDC is important because it extends PATCH beyond a given agency, emphasizing instead the fact that the program is a nationally sponsored one. In addition, this networking provides a mechanism for CDC to become more visible and accessible to local agencies with which they have not previously worked. In other words, although CDC has traditionally worked primarily through local health departments, PATCH allows the opportunity for other groups to establish a working relationship with CDC. This is particularly relevant for establishing contacts with minority groups that may not be readily accessible through the traditional health department/CDC approach.

Resources within the PATCH core group also can be used to extend the benefits of PATCH beyond any particular intervention. Since core group members are often key formal and informal leaders in the community, their individual potential for "spreading the health word" should be explored. For example, encouraging core members to serve as role models in health not only changes their behaviors but can change the behaviors of those around them. CDC could consider a "teaching the teacher" approach here. Specifically, these potential role models can be trained in techniques to take a leadership role in promoting health promotion programs or to serve as liaisons to other agencies. The preacher we described in Question 2, for example, who discusses low fat foods from the pulpit, is probably as effective in changing peoples' knowledge, attitudes, and behaviors as any information distributed at a health fair! More use of informal teaching techniques, through core group members, could significantly increase PATCH's effectiveness with very little added costs for the program. We suggest these lay leaders might be appropriate for providing formal instruction as well. For instance, CDC could provide minimal funding to these community leaders to teach (or team teach, with a health educator) exercise classes or conduct weight reduction support groups. This could be particularly effective in eliciting involvement and change in minority communities where the local health educators are white.

A third way we see to maximize PATCH's potential is to encourage communities to focus on interventions that extend beyond the individual level. The core group and other members of the PATCH community have both considerable energy and power: two key ingredients for creating policy or legislative changes. These changes generally have impacts on a greater number of people, thereby increasing the payoff for the investments made (i.e., as opposed to changing the behaviors of a few individuals). With training and guidance from CDC, and the state and local coordinators, the power of the core group can be better utilized in producing this type of broad-based change. We should add, however, that community or organizational level change should not be the primary focus of PATCH. Since a number of the volunteers will be participating in PATCH because they enjoy working with people, the individual level interventions should also be emphasized. Therefore, we recommended that PATCH communities be given guidance for selecting a variety of intervention types. The "intervention matrix", developed by CDC and contained in Appendix C is useful for guiding the development of interventions in a number of different areas.

A fourth way to maximize PATCH is to provide the local coordinators with the skills needed to obtain funding from sources outside of CDC, such as various national foundations. Numerous funding sources such as national foundations are available to assist in funding. Often, however, the local communities' members do not know about these resources or have the skills necessary to access them. More information from CDC, about the CDC grant preparation process, how to write grants, and the identification of other financial resources, would provide the communities with the skills to tap into them. This strategy would decrease the community's reliance on CDC for funding and would expand the group's potential.

Evaluating PATCH

Evaluation of a community program like PATCH will never be a simple task because communities differ on various factors, such as the level of available resources, the number of active participants, the dynamics of the community, and the levels of commitment to PATCH. Yet, evaluation of PATCH should be emphasized for two reasons. First, if the community can demonstrate that the program is effective,

PATCH communities should be in a better position to compete for resources. Second, the PATCH process is a complex one from a program-wide perspective. To operate programs effectively, this process should be assessed to determine how well it is working and how it can be improved. Evaluation of the PATCH process should be of particular interest to CDC as they shift to the new PATCH model. As more responsibility is given to the states, care in monitoring how the PATCH process is modified would guarantee that the concepts and goals of PATCH are not compromised.

Determining what components of the PATCH model can be changed or shortened while still maintaining its effectiveness is an important empirical question that should be carefully monitored. Certain guiding features that could be assessed to ensure the new PATCH is working effectively include the following:

- Are interventions in place within one to two years after start-up?
- Who is receiving training and what is the nature of this training?
- Are community-level networks being established? What do they look like?
- Are the number of sites increasing in a given state?

The answers to these questions serve as early "indicators of success" for the "training of the trainers" model of PATCH. In other words, if these changes are not occurring, it will be important to discover why and take action to remedy the problem.

We also want to strongly emphasize that it is important to look beyond the traditional variables such as changes in morbidity and mortality for assessing PATCH's effectiveness. Figure 9 demonstrates the range of impacts PATCH can have on the community public health system. Evaluation of PATCH at this level, in addition to the individual level, is imperative for detecting the full range of impacts PATCH can have. Similarly, the spread of PATCH's effects should be assessed beyond simply looking at the individual who attends a given intervention. Rather, this person is likely to influence another who in turn may affect still others. Thus, discovering creative ways to measure this "ripple effect" are critical for assessing PATCH.

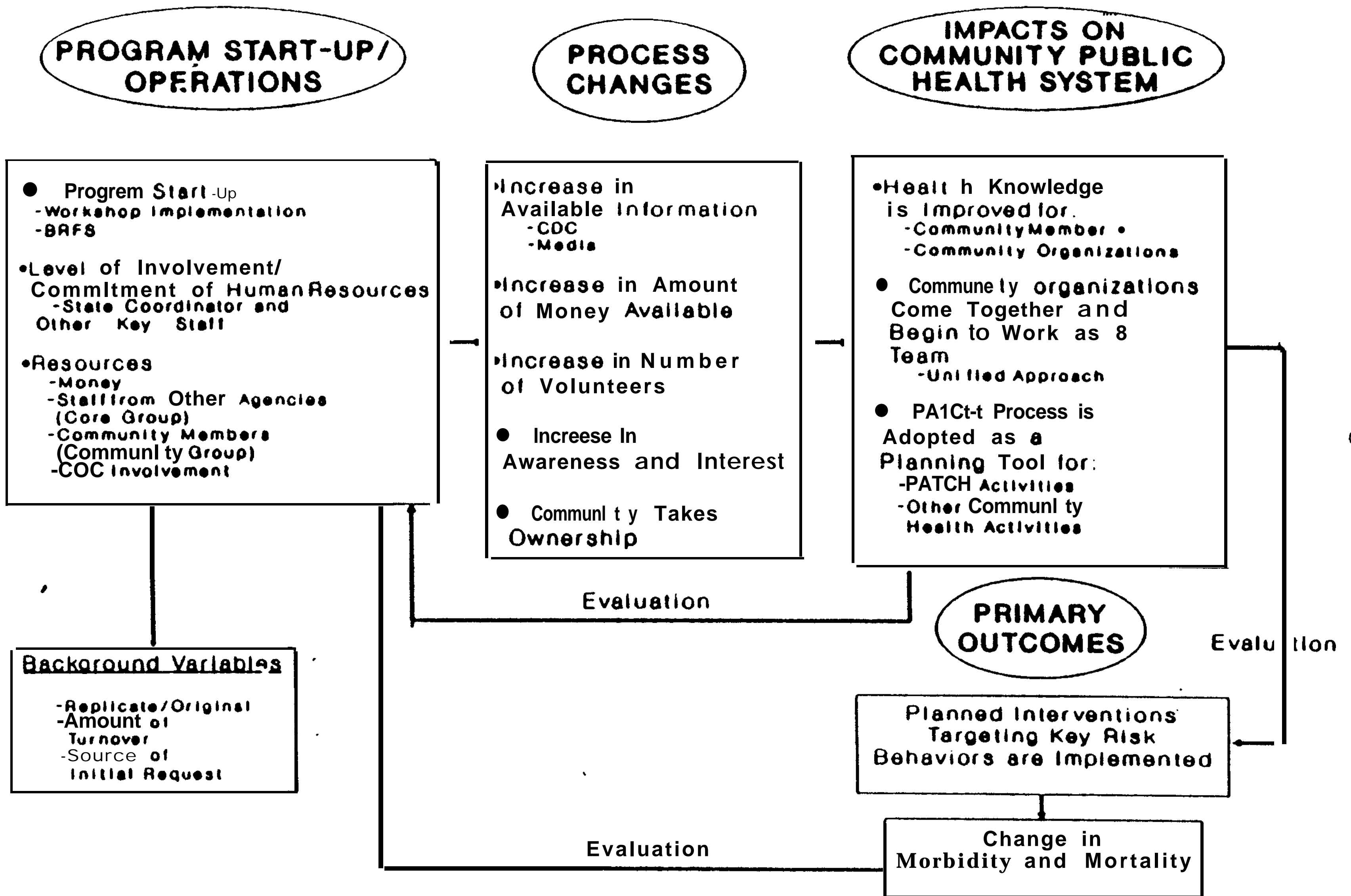


Figure 9

PATCH as a National Program

At this point, we have emphasized mostly what CDC can provide to the PATCH states and communities. We want to point out, however, that PATCH also offers benefits to CDC. First, the program establishes clear points of access to the states and local communities. CDC can readily mobilize these contacts as needed for both rapid and ongoing dissemination of information. This is particularly important for reaching the resource poor communities for which PATCH may be the "only game in town" that focuses on health promotion or chronic disease prevention. PATCH's grassroot level of energy and resources can be tapped as needed to facilitate CDC's mission and objectives. As concerns for reaching the local communities (particularly rural or minority ones) increase, we believe PATCH offers a critical link to these communities.

Summary

In summary, we believe that CDC must make decisions about the PATCH process as it applies to the three phases: initiation, maintenance, and maximization. CDC needs to determine the kind of technical assistance that is needed, and for whom, when a new site commits to PATCH, as well as on an ongoing basis after the site is established. This assistance includes skill building, CDC direct staff support, and money. There will be some variance in this assistance, depending on the community, that is, whether it is a strong community with previous experience working in health promotion or whether there is a basic need to establish a health promotion agenda in the community.

At the level of maintenance, CDC assistance will be quite different, with more emphasis on supporting the core group, training its members, and building liaisons with other agencies and implementing a number of different interventions.

Finally, at the maximization phase, CDC needs to recognize that these sites will become increasingly incorporated into the community. In most cases, the methodology will be expanded and/or include other community health needs. CDC might develop a check list that indicates how well the PATCH process has been implemented, the number of interventions, and the degree of institutionalization. If the

Site chooses to remain actively involved in PATCH, CDC could continue providing technical assistance -with the type and amount renegotiated periodically through the administrative agreement. A number of options could be explored in working with these "veteran" PATCH communities. For example, as part of the exchange for receipt of the ongoing technical assistance, the community might be willing to serve as a training site for newer PATCH sites. Or, if the community chooses to do so, CDC could certify these sites as "PATCH emeritus" and maintain limited contact, merely to monitor how PATCH has changed its direction and evaluate the ripple effects.

At each stage of PATCH -- the initiation, maintenance, and maximization -- roles and responsibilities of each of the PATCH partners (i.e., CDC, the state, and the local community) vary. Additionally, as PATCH continues to grow, with more states and sites joining the partnership, CDC will need to redefine its level of involvement with the PATCH program. We urge CDC to continually monitor PATCH, and to seek innovative approaches for spreading the PATCH process, while not prematurely forsaking those sites in which PATCH has been started but is not yet sufficiently established to survive without support from CDC.

Conclusions

We think the PATCH model is a logically sound one and it has been successful in facilitating local health promotion and chronic disease prevention at the state and local levels. However, we do not believe PATCH has been given the opportunity to reach its fullest potential. If CDC continues with PATCH, as indications suggest, we strongly recommend certain conditions be met for the program is to be maximally effective. First, CDC should commit to providing a minimum level of funding ($3,000-5, 000) to the states and to the sites. Without it we believe PATCH will continue to find it difficult to thrive. Second, a continued CDC presence will be important for the survival of PATCH, even with the "training the trainers" model. Although this again can be minimal, and more efficient ways (e.g., telephone conferences, annual meetings) could be pursued to provide this presence, we strongly believe that without it, PATCH will not survive. And, we stress that this contact should be maintained over the life of PATCH, not just in the initiation stages. Under the old implementation model, CDC

presence was strong up to the implementation of interventions. We think, however, that what happens after that first intervention is also a major determinant of PATCH's ability to survive and become an institutionalized part of the state and local health promotion network. Without a strong commitment to provide, at the very least, ongoing minimal support from CDC, we would seriously question whether it is cost effective to implement PATCH.

Alternatively, with both the commitment of much needed resources and the ongoing communication between the PATCH partners, the PATCH program can be an effective mechanism for successfully accomplishing CDC's outreach mission in the areas of health promotion and chronic disease prevention as the nation moves towards achieving its health objectives for the Year 2000. For these reasons, we strongly urge the CDC management to continue its exploration of ways to further develop the PATCH potential.

REFERENCES

Goodman, R.M. and A. Steckler
1988 "Assessing the Institutionalization of Health Promotion Programs. Department of Health Behavior and Health Education, School of Public Health, University of North Carolina, Chapel Hill, North Carolina.

McLeroy,, K.R., D. Bibeau, A. Steckler, and K. Glarry
1988 "An Ecological Perspective on Health Promotion Programs." Health Education Quarterlv 15:351 -377.

Miles, M. B. and Huberman, A. M.
1984 Qualitative Data Analysis, Beverly Hills, California: Sage Publications, pp. 60-63.

Rogers, E.M.
1987 Takina Care: Understandina and Encouraaina Self-Protective Behavior. New York: Cambridge University Press, pp. 77-94.

Rothman, J.
1979 "Three Models of Community Organization Practice, Their Mixing and Phasing." In Strateaies of Communitv Oraanization, pp. 25-45, Cox, F.M., J.L. Erlich, J. Rothman, J.E. Tropman, 3rd Edition, Itsca: F.E. Peacock Publishers, Inc.

Schiller, P.L., A. Steckler, and L. Dawson
1988 Participatory Planning in Community Health Education. Oakland: Third Party Pub.

Steckler, A., K. Orville, E. Eng, and L. Dawson
1989 "Patching It Together a Formative Evaluation of CDC's Planned Approach to Community Health (PATCH) Program." University of North Carolina, June.

APPENDIX A

CHECKLIST

DOCUMENTS AND RECORDS RECEIVED

___ BRFS survey (if modified) and results

BRFS survey replication (if completed)

Public Opinion Survey and results

Information on the Public Opinion Survey methodology

___ Information on other data sources used to determine health risk factors

Completed intervention Matrix for each program*

Master timetables completed for intervention implementation*

___ Any evaluation data or information (e.g., numbers attending intervention, opinion information, measures on effect of program-pounds lost, etc., and impacts of interventions on other agencies)

___ Objectives for Workshop II*

"Opionnaires" from the Workshops*

Results of handout 8 from Workshop III, "How is our PATCH community doing?"

Work plan for the intervention*

Completed evaluation worksheet*

Organizational chart

Brochure/statement of PATCH host agency's mission and services

Program-related advertising materials

Program goals and objectives (for each year of program)

Yearly or periodic program reports

___ Letters, memoranda, and other communication about the program

Agendas, written reports of events, minutes of meetings

Formal studies or evaluations of the program

*These materials are from the workshops

APPENDIX B

STATE INTERVIEW GUIDE

FOR FOCUS GROUPS OR INTERVIEWS

1. How did your state get involved in PATCH? What factors were most important? What have been critical incidents?

2. Describe the evolution of PATCH at the state level (e.g., for each site). How closely did you follow the CDC model? How has the administration of PATCH changed?

3. What differences has PATCH made in the types of programs offered? Specifically, what are the programs?

4. In what ways, if any, has PATCH influenced the State Health Department?

   - Changes in interactions with other agencies
   - Emphasis on targeting health problems
   - Increased use of data in targeting health problems
   - Changes in the way health workers do their job

5. Has PATCH become an integrated part of your Health Department?

   - Is it part of your annual work plan (individual and/or agency)?
   - In kind of transfers of funds?
   - PATCH is on organizational chart?
   - Policy statement regarding PATCH
   - Changes in structure

6. What are the differences between original and replication sites in your state?

   - in the organization
   - in the start-up
   - in the development
   - in the success
   - conducting the workshops

   *Are there any sites no longer in existence?

7. Does it make a difference in the success of PATCH whether the initial contact comes from the SHD or from the community level?

8. How would you describe the State-local relationship in the PATCH program?

   What kinds of interventions take place?
   Who is involved, individuals and/or organizations?

9. How well established is PATCH in your state? For example, has it resulted in more jobs, improve your ability to generate funds, improve linkage with other programs?

10. What would be the three most important things you would do in setting up the program?

11. Have you gotten what you expected from PATCH?

12. What state resources are devoted to PATCH (e.g., money, staff time, etc.)?

13. How was the BRFS collected? Has it been useful? If yes, how?

14. Are there data maintained at the state level which relates to the implementation and evaluation of the programs and/or interventions?

15. What are the characteristics of a successful PATCH program?

16. What should be CDC's role in helping PATCH?

BACKGROUND AND DESCRIPTIVE QUESTIONS

STATE AND LOCAL LEVEL

(FOR MEDICAL DIRECTORS, etc.)

1. What do you see as major health problems and/or issues in your state or community?
2. How does PATCH relate to the need to deal with these problems?
3. Does PATCH have a special role to play in addressing these problems?
4. Is PATCH well-established in the state or community? If so, why? If not, why not? What have been in the barriers to establishing programs?
5. Do you see PATCH's role as changing in the future?
6. What can be done to strengthen it?

LOCAL FOCUS GROUPS AND LOCAL INTERVIEW GUIDE

1. How did your community get involved in PATCH? What factors were most important?

2. Are there certain individuals and/or organizations that are especially important to the PATCH program? Why are they important?

3. Who "owns" PATCH in the-community?

4. Describe the activities of the core group. Has the group changed over time? If yes, How? Why? What effect does this have on programs? How much time is required to participate in this group?

5. How do you decide on the interventions to implement in your community?

   *What is the actual process of determining priorities and interventions?

6. How would you describe the State-Local Relationship in the PATCH program?

   Type of interactions
   Individuals and organizations involved

7. What are the main barriers to PATCH at the community level? What are the facilitators?

8. What is the cost of PATCH? Can you estimate the budgeted amount?

9. In what ways, if any, has PATCH influenced your local lead agency (e.g., Health Department)?

   Changes in interaction with other agencies
   Emphasis on targeting health problems
   Changes in the way health workers do their jobs
   Changes in the health department structure

10. Has PATCH made a difference in the community? What changes has PATCH made in the community?

    Interventions started that would not have otherwise been untaken:
    Effects on other community organizations?
    Effects on health behaviors and overall health status

11. Are there data or information available relating to the implementation and evaluation of your programs or interventions?

12. Have you gotten what you expected from PATCH?

13. If you had to do over again, what 3 things would you do exactly the same way? What 3 things would you do differently?

    * How would you advise someone starting these programs?

14. What are the characteristics of a successful PATCH program?

15. What should CDC's role be in helping PATCH?

BACKGROUND AND DESCRIPTIVE QUESTIONS

LOCAL LEVEL

LOCAL COORDINATORS

1. Describe the history of PATCH in your community. When did PATCH get started? Has there been any staff turnover since the start of PATCH?

2. How were workshops conducted? Did you follow the PATCH CDC model? How has the process differed?

3. How was the data collected (i.e., BRFS, Community Opinion Survey)? Which has been the most helpful?

4. Who participates in the core group? How many members are there? What has been the response of your community to PATCH?

5. What are the programs which have been started or discussed as possibilities? What are the activities you are going to get them started or to facilitate their continuation?

   *Complete the Intervention Matrix

6. What has been the funding for PATCH each year since it began?

7. What do you see as the optimal role for the county Medical Director?