PREVENTION RESEARCH CENTERS

Evaluation Results:
Program Context

Fall 2009

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Acknowledgments

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Introduction

The Prevention Research Centers (PRC) Program, located within the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC), is one of many CDC activities that fund extramural research. All the PRC Program's research is conducted at academic research centers that compete for selection as members of the PRC network. The prevention research is characterized as population-based as well as community-based and participatory.

This report provides results from a national evaluation of the PRC Program. Four contextual studies were conducted to describe what the overall PRC Program contributes to public health practice and policy through its research and training activities, how community-based participatory research is implemented across the PRCs, and how PRCs are structured and organized.

The report has a companion volume on program monitoring that gives results for performance indicators.[1] A study team (see Methods) collected and analyzed the information for this report. The Macro evaluation team assessed the results to make recommendations to the program, which are included in this report.

Background

In 1984, Congress authorized the Secretary of Health and Human Services (HHS) to create a network of academic centers to conduct applied public health research.[2] CDC was selected to administer the PRC Program and to provide leadership, technical assistance, and oversight. The program formally began when 3 academic centers were funded in 1986, and since 2004, the network has included 33 centers, each of which is selected through competitive peer review.

Since the program's inception, applicants have been required to meet certain eligibility criteria—chiefly, affiliation with a school of public health or a school of medicine or osteopathy with an accredited preventive medicine residency. Additional requirements are listed below:

- Multidisciplinary faculty with expertise in public health and working relationships with experts in related fields.
- Graduate training programs relevant to disease prevention.
- Core faculty in epidemiology; biostatistics; social, behavioral, and environmental sciences; and health administration.
- Demonstrated curriculum in disease prevention.
- Capability for residency training in public health or preventive medicine.

The core funding—about $26 million per year—is distributed among the PRCs to support elements of basic infrastructure and at least one core research project, conducted in partnership with a community, at each center.

In 1993, additional competitive funds became available to PRCs only to conduct special interest projects specified and supported by divisions throughout CDC and HHS. The expertise the PRCs build by conducting the core and special interest projects often makes them highly competitive for additional research funding offered by foundations, institutes, and other nongovernmental organizations. As a result, the PRCs' total portfolio includes several hundred research projects going on at any given time.

The PRCs are in the forefront of developing and practicing community-based participatory research (CBPR). The close and long-term ties forged between each academic institution and its study population—generally an underserved community—encourage commitment and trust and help communities adopt and sustain change over time. The established relationships allow other researchers to readily introduce new research into the community. The program announcement issued in 2003 for funding fiscal years 2004–2009 explicitly required grantees to conduct a participatory, community-based core research project, planned in collaboration with community partners and guided by a community committee.

Working closely with communities, prevention researchers strive to follow a series of steps that identify community health issues and proceed toward wide dissemination of effective interventions; that is, the partners aim to translate research into everyday practice to improve the lives of people in the research community and, ultimately, in comparable communities throughout the United States—and sometimes beyond its borders.[3]

National Evaluation

Since their inception, the PRCs evaluated their research by assessing the interventions being tested. Publication in the peer-reviewed literature was, and still is, a marker of the quality of the research conducted. However, CDC had not evaluated the cumulative and combined contributions of the PRCs. A review of the program published by the Institute of Medicine (IOM) in 1997 made several recommendations, one of which was to increase evaluation efforts.[4] The IOM report, combined with increased calls for federal accountability, increased size and prominence of the PRC Program, and increased support for evaluation efforts across CDC,[5] influenced leaders of the PRC Program to initiate a national evaluation in 2001. The resulting evaluation project was named Project DEFINE (Developing an Evaluation Framework: Insuring National Excellence), and it was guided by the CDC Framework for Program Evaluation in Public Health.[6]

During Phase I of Project DEFINE (Planning, 2001-2003), evaluation activities focused on engaging stakeholders, planning the evaluation, developing the program's logic model (Appendix A),[7,8] and documenting program activities.[9,10] Project DEFINE Phase II (Implementation) began in 2004, when the PRC Program office awarded a contract to Macro International for national evaluation activities. This report is a product of Project DEFINE Phase II.

Participatory Approach to Evaluation

The PRC Program implemented a participatory and utilization-focused evaluation approach to increase stakeholders' support, include the perspectives of PRCs' partners, and influence potential use of evaluation products and findings.[6,11] An advisory group—the Collaborative Evaluation Design Team (CEDT)—guided national evaluation activities to ensure that diverse perspectives were integrated into the evaluation design, interpretation of findings, and dissemination of results. (Appendix B lists CEDT members from Phase II of Project DEFINE who worked on the studies included in this report.)

Participatory processes were also used to gain feedback from PRCs' academic, community, and state partners during critical times in the design, planning, and implementation of the evaluation.

Purposes of the Evaluation

For Project DEFINE Phase II, discussions with program leaders and other key stakeholders identified two priority purposes for national evaluation activities.

1. National program accountability to stakeholders such as Congress, CDC leaders, and national partner organizations that advocate for the program.
2. Program improvement, particularly management of the national program.

Overarching Evaluation Questions

The overarching national evaluation questions, developed to reflect the priority purposes of the evaluation, are as follows:

- What does the PRC Program contribute to public health practice and policy
  - by conducting prevention research to develop and disseminate effective and translatable public health interventions?
  - by training the public health workforce?
- How is community-based participatory research implemented across PRCs?
- How are communities and partners engaged in PRCs' activities, and how does participation build community capacity?
- What are the similarities and differences across PRCs concerning infrastructure, organizational factors, and how PRCs partner with communities and organizations?

These questions guided the evaluation design, which included two complementary efforts: implementation of national program indicators and conduct of studies. The PRC Program indicators (Appendix C) guide data collection. The results are summarized across all 33 PRCs and reported in a companion volume to provide information on the depth and breadth of the program.[1] The studies, conducted in fall 2007, are the focus of this report.

Contextual Studies

Development and Purpose

Concepts not measurable by the performance indicators were identified and designated for in-depth studies. At an in-person meeting of the CEDT, the concepts were reviewed and prioritized. Four main topic areas emerged that correspond with constructs of the PRC Program logic model:

- Organizational and community characteristics.
- Community and research interactions around core research projects.
- Variety, goals, and contextual factors of the core research projects.
- Training, technical assistance, and mentoring activities.

The studies allowed the PRC Program to systematically describe and summarize these topics across PRCs for the first time. The four studies are described below.

Organizational and Community Characteristics Study

This study focused on answering the question, "What are the characteristics of PRCs related to staff, partner community, organizational and partnership structures, resources, leadership, and institutional environment?" The results provide most of the data needed to answer the following overarching evaluation question: What are the similarities and differences across PRCs concerning infrastructure, organizational factors, and how PRCs partner with communities and organizations? Data from indicators and other special studies also help answer this question.

Academic–Community Partner Interaction Study

This study focused on answering the question, "How do PRC researchers and their communities interact to develop, implement, evaluate, and disseminate the core prevention research project?" The question was designed to capture information on approaches to community-based participatory research (CBPR). Results from this study provide data to answer the following overarching evaluation questions: How is CBPR implemented across PRCs? How are communities and partners engaged in the PRCs' activities? How does participation in the PRC Program build community capacity? Data from other special studies and indicator data supplement this study's findings.

Core Research Study

This study focused on answering the question, "What are the varieties, goals, and contextual factors of the core prevention research being conducted by the PRCs?" Results from this study provide some data to answer the following overarching evaluation question: What does the PRC Program contribute to public health practice and policy by conducting prevention research to develop and disseminate effective and translatable public health interventions? PRC Program indicator data supplement the study results for this question.

Training, Technical Assistance, and Mentoring with Community Partners Study

This study focused on answering the question, "What is the diversity of PRC training, technical assistance (TA), and mentoring with communities and partners?" Results from this study provide some data to answer the following overarching evaluation question: What does the PRC Program contribute to public health practice and policy by training the public health workforce? PRC Program indicator data supplement these results.

Use of Data

The intent of the contextual studies is to provide a point-in-time, cross-sectional, descriptive view of several components of the PRC Program. The planned uses for and users of the results fall into the following areas:

- **Provide descriptive data on PRC communities and CBPR.** Data describing the PRC communities, community committees, and community involvement in PRC core research will be used to educate stakeholders and partners about the depth and breadth of community interaction and involvement in the PRC Program.
- **Understand the organizational and contextual environments in which the PRCs operate.** Data on contextual issues affecting the PRCs' activities and on the structures and staffing of PRCs will be used to identify areas in which PRCs can learn from each other and how the PRC Program office can provide suggestions around organizational structure or resources.

- **Inform future trainings, workshops, technical assistance (TA) or mentoring programs.** Data from all studies will identify areas in PRCs' community engagement, infrastructure, research, or training activities that could be enhanced through the development of tools, trainings, or workshops; the provision of TA; or the support of mentoring programs for PRCs and their partners.
- **Inform future funding opportunity announcements (FOAs).** The studies will identify areas for clarification and improvement as the PRC Program office writes future funding announcements.

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Methods

The Macro evaluation team, PRC Program office staff, and the CEDT developed specific evaluation questions for each study. The evaluators used two data collection methods.

- Document review systematically captured data from program and public documents for all 33 PRCs and their partner communities.
- Telephone interviews captured data that required in-depth exploration of specific topics with people at samples of PRCs.

The methods used for each study are summarized below (Table M-1), followed by details on who conducted the studies, how PRCs were selected, and how the data were handled. The two methods were implemented separately and the results from one method did not inform implementation of the other method.

Table M-1. Overview of Methods, by Study

Study name	Method
Organizational and Community Characteristics	Document Review Interview
Academic-Community Partner Interaction	Document Review Interview
Core Research	Document Review
Training, Technical Assistance, and Mentoring with Community Partners	Interview

Document Review

The document review enabled the Macro evaluation team and the PRC Program office staff (i.e., the study team) to accomplish the following:

- Summarize the reach of the PRC Program across its partner communities.
- Identify the number and types of community committees that exist and the types of guidelines these committees use.
- Assess the contexts in which, and resources with which, the PRCs function.
- Describe the range of organizational structures that characterize PRCs.
- Describe the variety, goals, and contextual factors of the core research projects.

Questions and Response Options

The study team collaborated with the CEDT over several months to develop and refine the document review evaluation questions and response options. The study team pilot-tested the questions and response options with documents from a few PRCs and further refined them (Appendix D).

Selection of PRC Projects for Inclusion in the Core Research Study

The 33 PRCs conduct 55 core research projects. For the PRCs with more than one core research project, the primary one was identified in one of two ways: either a PRC had previously designated a primary core research project or the PRC Program office staff identified the primary core research project based on a PRC's report of current research activities and progress.

Data Collection, Analysis, and Validation

For all 33 PRCs, the study team used a systematic process to obtain and review documents of four main types: (1) documents previously submitted by PRCs to the PRC Program office; (2) documents previously developed by PRC project officers*; (3) national data sets; and (4) Internet Web sites. The documents and data sources used for each study are listed in Appendix E.

The study team organized the documents in two ways. For the Organizational and Community Characteristics and Academic–Community Partner Interaction studies, the Macro evaluation team used ATLAS.ti† software to organize and store information from applications and progress reports. To manage these data, the Macro evaluation team developed a relational database using Microsoft Access†. For the Core Research study, the PRC Program office staff read and compiled information in Microsoft Word† forms.

For all three studies, the database or form presented information in a question and answer format, and as study team members reviewed each PRC's documents, they abstracted data to answer each evaluation question and noted the data sources. For some information, the study team examined multiple sources. Any discrepancies were entered into the database or form for clarification.

After data abstraction, the study team developed PRC-specific reports and implemented a two-step data validation process. First, Project Officers reviewed and validated the data using their knowledge of the PRCs and documents submitted by PRCs. Subsequently, each PRC reviewed and validated its data. The study team corrected the data after each step and noted the source of each correction in the database or form.

Finally, for the Organizational and Community Characteristics and Academic–Community Partner Interaction studies, data were aggregated and analyzed across PRCs using Microsoft Access. Macro evaluation team members transferred the data from Microsoft Access to Microsoft Excel† or SPSS† for calculation of means, standard deviations, and medians. For the Core Research Study, data were aggregated across PRCs using Microsoft Excel.

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* Project officers are program consultants who provide a link between CDC and its funded partners. Project officers collaborate with partners, practitioners, researchers, and policymakers to share effective prevention strategies and expertise; are responsive to partners' specific needs and situations; and help partners navigate CDC's procedures, policies, and organizational structure.

† Use of trade names are for identification only and do not imply endorsement by the U.S. Department of Health and Human Services.

Telephone Interviews

The in-depth telephone interviews enabled the study team to do the following:

- Explore community partnerships and community involvement in research.
- Describe the organizational structures and university support for community-based work.
- Identify the benefits of participating in the PRC network from both the academic and community perspectives.
- Describe community engagement in and support for training, technical assistance, and mentoring.

The Macro evaluation team conducted interviews for both the Organizational and Community Characteristics and the Academic–Community Partner Interaction studies, and PRC Program office staff conducted interviews for the study on training, technical assistance, and mentoring. These interviews were not conducted to assess individual PRCs, but to gather a variety of perspectives across samples of PRCs.

Interview Guide Development

The study team worked with the CEDT to identify six topic areas that guided the development of seven[‡] separate semi-structured interview guides, as described in Table M-2. The study team reviewed and modified all interview guides iteratively to ensure that questions were clearly worded and accurately captured the intent of the study and the overall topic areas. All interview guides are available in Appendix F.

[‡] The topic "Community partnerships, capacities of community committees, and participation in research by community committees" was developed into two interview guides, each having different questions for academic respondents and community respondents.

Table M-2. Interview guides by study, topic area, respondent, and intercoder agreement

Interview Guide Number	Topic Area	Respondent Category	Respondent Type	Intercoder Agreement %
Organizational and Community Characteristics Study				
1	Organizational structure and resources	Academic	6 Directors 2 Deputy Directors 1 Associate Director	79
Academic–Community Partner Interaction Study				
2	Community partnerships, capacities of community committees, and participation in research by community committees	Academic	2 Directors 1 Co-Director 3 Deputy Directors 3 Research Scientists	94
3	Community partnerships, capacities of community committees, and participation in research by community committees	Community	9 Community Members	92
4	Benefits and challenges of being in the PRC network	Academic	7 Directors 1 Deputy Director 1 Principal Investigator	82
5	Benefits and challenges of being in the PRC network and National Community Committee	Community	9 Community Members	91
Training, Technical Assistance, and Mentoring with Community Partners Study				
6	Diversity of PRC training activities	Academic	4 Directors 1 Associate Director 2 Research Scientists 1 Community Liaison 1 Administrator	84
7	Technical assistance activities and mentoring provided by PRCs	Academic	4 Directors 1 Co-Director 1 Deputy Director 1 Principal Investigator 1 Research Scientist 1 Communications Contact	89

Selection of PRCs and Respondent Type

The study team developed the sampling criteria (Appendix G), which the CEDT reviewed, so that representative samples of PRCs were available for the studies. For each interview guide, the study team identified up to four criteria that guided selection of PRCs and respondents and ensured a range of characteristics in the samples (e.g., length of time since the PRC was first funded or respondent's role in or knowledge of PRC activities). In addition, to limit burden on each PRC, the following parameters guided the overall selection:

- A PRC chosen for interview guides two or three (Table M-2) was not chosen for subsequent interviews due to the length of those interviews.
- A PRC that participated in a Macro staff visit in 2005 or in a Trust Tool Pilot in 2007 was not eligible for selection for interview guides two or three.[§]
- All PRCs would participate in at least one interview, but no PRC would participate in more than three interviews.

To facilitate respondent selection, the study team developed a table that listed PRCs in rows and the interview guides and criteria in columns. PRC Program office staff identified PRCs eligible for each interview guide by applying the criteria. PRCs for interview guides two and three were selected first, by using purposive sampling for the PRCs eligible under each criterion. For all other interview guides, random sampling was used when more PRCs than needed were eligible within a sampling criterion.

Nine people were interviewed for each interview guide. A sample size of nine was large enough to capture some breadth and variability among the PRCs and small enough to keep the studies manageable and permit detailed examination of key issues.

Process of Conducting Interviews

Three members of the Macro evaluation team conducted telephone interviews for the Organizational and Community Characteristics and the Academic-Community Partner Interaction Studies. For each interview, one person conducted the interview and took detailed notes. For the training, technical assistance, and mentoring study, one member of the PRC Program office conducted the telephone interviews which were recorded. Table M-2 indicates the interviewee type for each interview guide.

Each interview lasted 20 to 90 minutes. Interviewers used probes as needed to facilitate in-depth discussion, naturally flowing conversation, and sharing. All interviews were recorded and transcribed to facilitate analysis.

Coding, Analysis, and Reporting

Both the PRC Program office staff and the Macro evaluation team used ATLAS.ti (v 5.2.10) software to organize and retrieve interview data for analysis. From each interview guide, interviewers developed a preliminary set of codes, known as a start list.[1] The start list included overarching categories outlined in the interview guides as well as subcategories or probes (e.g., benefits and challenges of the PRC network, partner types, etc.). The study team arranged the codes hierarchically so that subcodes automatically linked to broader-level codes to facilitate the analysis of related topics.

[§] Macro staff visited selected PRCs in 2005 to learn about the PRC Program before implementing the evaluation. The Trust Tool Pilot studies were completed in 2007 to test a technical assistance tool developed for PRCs to use with their partners. One PRC that participated in a visit in 2005 was selected for interview guides two and three due to a small number of eligible PRCs for those guides.

In addition, the interviewers read each transcript to identify unexpected patterns or themes. This reading allowed the team to capture recurring themes as well as the breadth of responses.

Term used in results	Number of respondents
A couple	2
Few or a few	3
Some	4–5
Most	6–8
All	9

The interviewers met frequently to compare findings and discuss the interpretation of the data. To assess coding accuracy, two interviewers independently coded transcripts for each of the seven interview guides. The team compared codes and calculated intercoder agreement, which ranged from 79% to 94% (Table M-2). In addition, the entire evaluation team reviewed the summary findings and coded data, and the group either endorsed the results or recommended further examination of the data.

Throughout this report, the interview results use the following terms to designate the frequency of stating the same idea among the interviewees for each guide:

Review of Results

The study team summarized initial results from all studies and conducted a systematic review along with CEDT members. The CEDT and study team members provided feedback on clarity of data, areas that needed further validation, and themes or concepts to discuss or highlight in the report. An in-person CEDT meeting in October 2007 provided additional feedback on results.

Reporting of Results

The Macro evaluation team drafted the evaluation report on program context and developed recommendations for the program that emerged during this activity.

References

1. Miles MB, Huberman AM. Qualitative Data Analysis: An Expanded Sourcebook, Second Edition. Thousand Oaks (CA): Sage Publications; 1994.

Organizational and Community Characteristics Study

Results

This study focused on answering the question, "What are the characteristics of PRCs related to staff, partner community, organizational and partnership structures, resources, leadership, and institutional environment?" The results provide most of the data needed to answer the following overarching evaluation question: What are the similarities and differences across PRCs concerning infrastructure, organizational factors, and how PRCs partner with communities and organizations? Data from indicators and other studies also help answer this question.

Each PRC sets up an infrastructure that suits its organizational needs, and each one does so within the environment of a different academic institution. The organizational characteristics describe both how the PRCs relate to their academic institutions and how the PRCs themselves are structured.

The results from this study also describe PRC communities, which are located across the country. Each PRC partners with a community to accomplish the center's research, training, and other goals, and the partner community is defined as determined by each PRC. The PRCs partner with largely underserved communities to address health disparities and often overlooked health needs.

The findings are organized in three sections:

- Characteristics of the Structure, Resources, and Support of the PRCs' Academic Institutions
- Aspects of the PRCs' Organizational Structures
- Characteristics of the PRCs' Partner and Core Research Communities

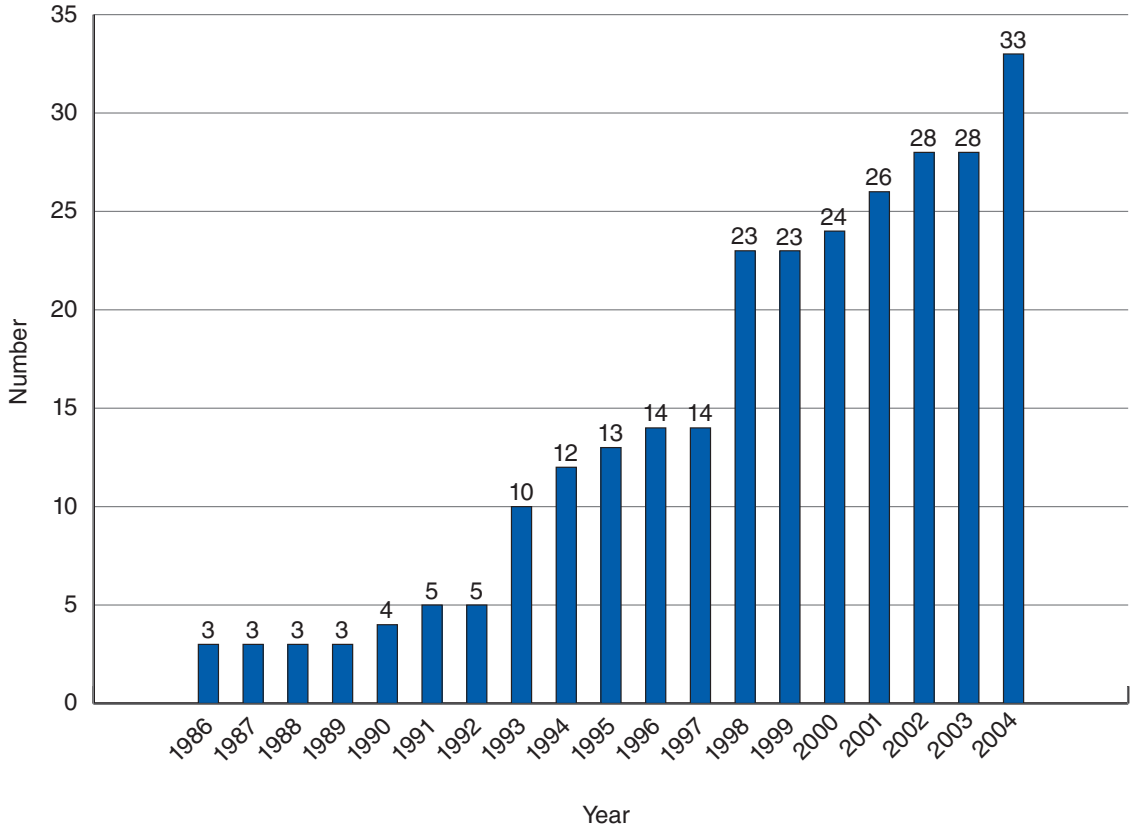
The text notes when findings resulted from the document review or the interviews.

Characteristics of the Structure, Resources, and Support of the PRCs' Academic Institutions

Types of Academic Institutions (Document Review)

PRCs are funded for five-year cycles, and they must reapply each funding cycle. The first three PRCs were funded in 1986 (Figure R-1), and the next funding cycle begins in 2009. Additional centers were added to the network almost every year beginning in 1990. No centers have been added since 2004.

Figure R-1. Number of Funded PRCs, by Year

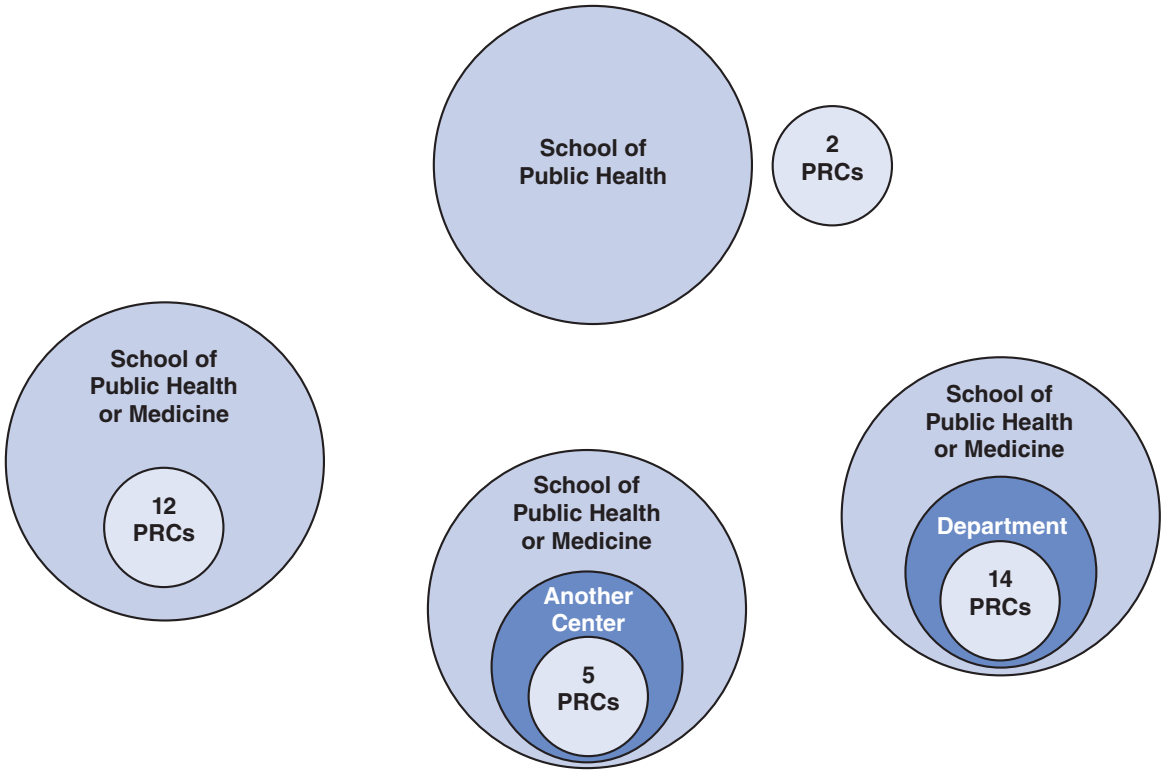


Source: CDC PRC Program Web site.

Funding for each PRC is provided by CDC through a cooperative agreement with the center's academic institution. As required by law, the fiscal agent of each PRC is a school of public health or a school of medicine or osteopathy with a department of preventive medicine. Twenty-five of the 33 PRCs funded in the 2004-2009 cycle were funded through schools of public health, and 8 were funded through schools of medicine. Twenty-three PRCs were in public academic institutions, and of those, 7 were land-grant institutions; 10 PRCs were in private academic institutions. Table R-1 (Appendix H) lists the 33 PRCs and identifies characteristics of each.

The PRCs funded in the 2004-2009 cycle had four types of relationships to their academic hosts (Figure R-2): a center external to a school of public health's organizational structure, although funded through the school; freestanding within a school of public health or medicine; within another center; or within a department. The number of PRCs to which each configuration applies is given in the figure.

Figure R-2. PRCs' Locations within Academic Institutions' Organizational Structures



Source: PRC Web sites, university or school Web site, fiscal year 2004 PRC applications.

Cost of Living in the Locations of the PRCs' Academic Institutions (Document Review)

Cost of living may have implications for employing and maintaining staff and faculty members, and the overall cost of doing business at the location. Table R-2 in Appendix H shows the range of cost of living in the cities of PRCs' academic institutions. The table lists PRCs from lowest to highest cost of living; College Station, Texas, and Houston, Texas (Texas A&M University and University of Texas Health Science Center at Houston, respectively), were the two lower-bound cities, and New York, New York (Columbia University), was the single upper-bound city. The median was Morgantown, West Virginia.

Indirect Rates (Document Review and Academic Interview Respondents—Interview Guide 3)

Indirect cost rates are negotiated between an academic institution and the federal government, and they represent the proportion of a grant or cooperative agreement funds subtracted from the grant to help cover the academic institution's general operating expenses. Indirect rates are calculated as a percentage of the grant's direct costs, which are expenses associated directly with the conduct and operation of the grant or cooperative agreement. Table R-3 shows the range of institutional indirect rates charged by the 33 PRC academic institutions, as reported on the PRCs' budget requests for fiscal year 2007. Because not all direct costs are subject to an indirect rate, the evaluators calculated the actual indirect rate for each PRC.*

Table R-3. Indirect Rates at PRCs' Academic Institutions (N = 33 PRCs)

Type of Indirect Rate	Percentage of Indirect Costs Rates		
	Range	Mean (SD)	Median
Institutional indirect cost rate	8–64	40 (14)	46
Actual indirect cost rate	6–47	25 (9)	26

SD = Standard deviation.
Source: Fiscal year 2007 PRC core budgets.

A few respondents reported that their PRCs received lower indirect cost rates as an incentive for researchers to conduct research through the PRC.

Sometimes, universities return some money they receive from indirect rates. Most of the nine PRC representatives interviewed reported receiving some indirect costs back from their academic institutions; from the core funding award, respondents who could cite a specific number reported a return of 7% to 28%. In interviews, none of the respondents reported that the academic institutions that return indirect costs to the PRCs distinguish between core or special interest projects (SIPs) or other grants. A few respondents said indirect costs are returned to faculty members who use the money to support PRC research or infrastructure. Respondents said that few, if any, restrictions apply to how PRCs spend money they receive as returned indirect costs with the one exception that the money could not be used as salary support for permanent staff.

Among PRCs whose indirect costs are not returned, respondents stated that the academic institution would lose money on grants or that it wanted to keep the money for its own infrastructure.

Universities also have different rules about grants that restrict the indirect rate a university can charge, which could affect a PRC's ability to apply for some supplemental grants. One respondent mentioned that an academic institution may avoid applying for grants that cap indirect cost rates because they may cost the academic institution more to administer than the funding supplied by the grant.

* Actual indirect cost rate = 100 – (direct cost/total cost)

Resources Received from Academic Institutions (Academic Interview Respondents—Interview Guide 3)

Respondents were asked about the types of resources that their host institutions made available to their PRCs. Most respondents said their PRCs received some form of in-kind support or resources, primarily as office space, facilities, and services (e.g., information technology, travel support, general administration of grants, and personnel). One respondent received funds to pay staff salaries. In contrast, one respondent said the PRC had not received any resources from the academic institution; however, this respondent also said the PRC was well supported by grant funds from other sources.

Most respondents said no restrictions were placed on how the resources were used (e.g., whether they must support core projects, SIPs, or other projects).

Displaced faculty salary dollars result when funds that an academic institution originally designated for faculty salaries are freed because faculty members cover some portion of their salaries from grants or other funding. How this money is handled differed by academic institution. A few respondents said the money was returned to the institution or to the faculty member's department (or both). Some respondents noted that faculty members could use the displaced dollars to "buy out" of teaching, which gave them more time to spend on research related to the PRC. One respondent mentioned that displaced funds could be used to pay the summer salary for a faculty member on a 9-month calendar.

Support for and Barriers to Community-Based Participatory Research at PRCs' Academic Institutions (Academic Interview Respondents—Interview Guide 3)

Regarding academic institutions' support for community-based participatory research (CBPR), respondents reported an underlying tension between PRCs, their academic institutions, and their communities. However, most respondents thought that their institutions were supportive of CBPR—in theory if not in practice. However, only a few respondents could provide concrete ways their academic institutions demonstrated support for CBPR. For example, one respondent reported that the institution added a community member to the academic institution's institutional review board (IRB):

> [The community researcher on the IRB has] been very helpful for supporting the conduct of prevention research.…We are no longer coming in and having to start from scratch, re-explaining what we're doing each time we submit a protocol. So, that's a big improvement. So, the university…, I think, deserves credit for that.

Some respondents noted that their academic institutions saw community involvement as part of the institutional identity, and this view of community involvement has helped the PRC conduct CBPR. However, a few respondents questioned whether their academic institutions were truly committed to CBPR or whether they were likely to highlight the PRC's work to advance a particular agenda. One respondent described feeling uncomfortable when representatives of the academic institution held a meeting in the community to gain support for expansion and development within the community:

> … it was almost like a sales job—trying to impress people that we really are about the community. And part of that, I think, is accurate and needs to be articulated more, but there needs to be, I think, the support backing up that talk with much more concrete programming and support.

Two other respondents sensed that CBPR was becoming increasingly important at their academic institutions. One of these respondents noted that, although no specific action had been taken, discussions were under way about how to incorporate CBPR into faculty tenure considerations.

Other facilitators of CBPR that some respondents mentioned included the following:

- Maintaining strong relationships with state and local health departments.
- Generating buy-in and interest from state office holders (e.g., the governor).
- Attention to, and interest in, the community on the part of the academic institution's leadership.

Overall, most respondents did not think their respective academic institutions inhibited the conduct of CBPR, and they characterized their academic institution as supportive of or neutral about CBPR. However, some respondents mentioned barriers. For example, a few respondents reported that an institution's emphasis on publication and academic productivity did not always fit the model of CBPR, which is slow paced and does not lend itself to publication in the short term. Another barrier mentioned by a few respondents was the difficulty in finding an administrative mechanism at an institution for activities such as paying incentives to or hiring community members as staff. Two respondents mentioned a lack of coordination at the institution in tracking research being conducted in the community, which resulted in multiple academic departments or institutions involving the same community in their separate research without knowing about the other researchers' work. Furthermore, difficulties in one project created setbacks for other projects, as described here:

> People also have to realize that when they do something negative, when there's a misstep, when there's some confusion, when a request isn't honored or whatever it is, it not only reflects on them, it reflects on everybody that's associated with the university….[It] lasts far longer than some of these programs exist, so that sometimes you go into a situation, you end up having to undo the damage that somebody else did several months before.

Credit from the Academic Institution for Work Conducted by the PRC (Academic Interview Respondents—Interview Guide 3)

Most respondents stated that the PRC's work was highlighted by the academic institution in newsletters and press releases as well as through grants and publications. Most respondents were satisfied with the level of recognition; one respondent stated,

> I don't think we're any less recognized than any other entity on campus, it's just a question of how do you get on the radar screen.…We certainly work hard and our communication person works hard to make sure that we're on the radar screen.

However, a few respondents said their PRCs needed to do a better job of publicizing their work and that improved communication would promote their work. As one respondent stated,

> …one of our major priorities is to increase our visibility within the university as a valued center of research and to be seen as something bigger and important to the university in terms of its relationship with the communities and the region.

A few respondents thought that their academic institution needed to do a better job of sharing credit with the PRC for the community-based research conducted and for research dollars that come in through the PRC. Two respondents stated that their academic institution publicized the PRC for fundraising purposes, but its use did not necessarily translate into material support for or recognition of the PRC.

Aspects of the PRCs' Organizational Structures

To gain insight into each PRC's organizational structure, the evaluators examined organizational charts, staff lists, and reports submitted by the PRCs to the PRC Program office. The reviewers identified three main aspects of the PRCs' organizational structures: (1) PRC faculty and staff, (2) the division of labor, and (3) community committee involvement in PRCs' organization. Interviews with academic respondents helped further describe the PRCs' organizational structures.

PRC Faculty and Staff (Document Review)

Across all centers, PRCs employed 581 faculty and staff members, filling 231 full time equivalent positions. Table R-4 shows the total number of employees and full time equivalent positions at all PRCs and at each center.

Table R-4. PRCs' Staffing

	Number			
Type	**Total**	**Range**	**Mean (SD)**	**Median**
Faculty and staff members	581	9–37	18 (6)	17
Full time equivalent positions	231	2–12	7 (2)	7

Source: Fiscal year 2007 PRC core budgets.

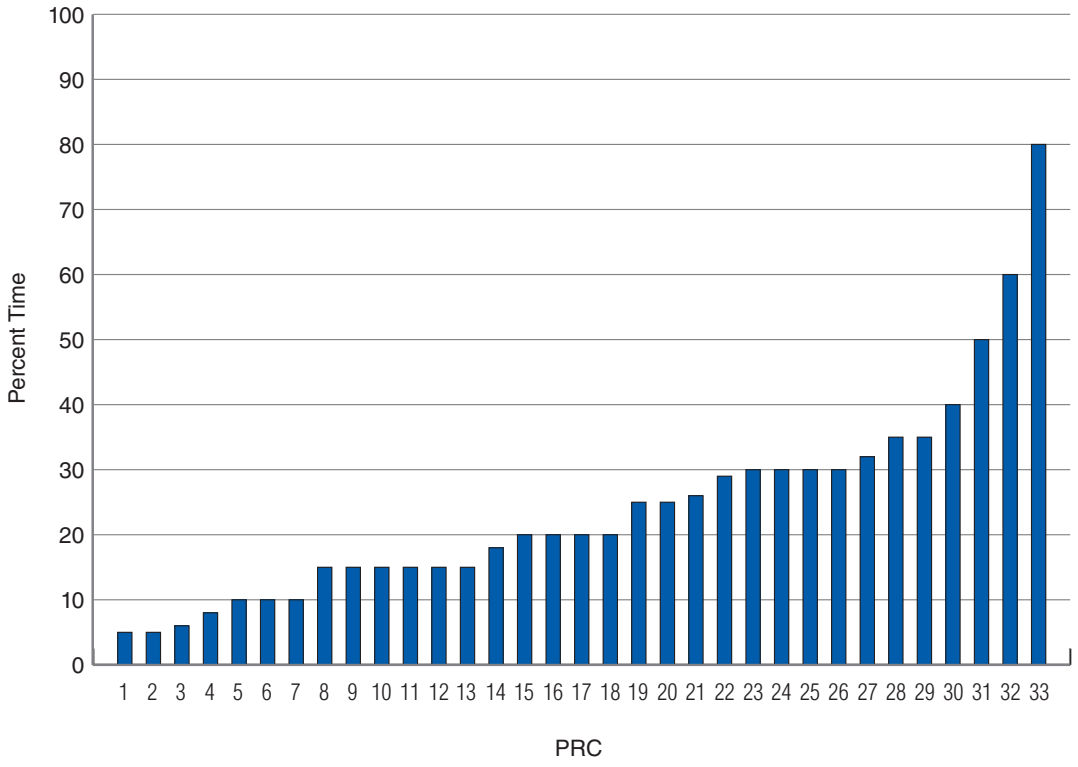
The percentage of time allocated to the PRC's key activities by selected faculty and staff (based on fiscal year 2007 budget documents) is listed in Table R-5. Figure R-3 shows the percentage of the principal investigator's or director's time that is designated for funding across the 33 PRCs; the range is substantial.

Table R-5. Number of PRCs Having a Faculty or Staff Position and the Percent Time Each Position Is Funded

Number		Percent Time		
	Position	Range	Mean (SD)	Median
33	Center PI or director	5–80	25 (16)	20
14	Deputy director (involved in research)	20–100	57 (29)	55
16	Center administrator or managing director (non-research)*	7–100	68 (31)	73
39	PI of core research	1–100	28 (23)	20
12	Community liaison†	25–100	71 (31)	80
35	Evaluator*	10–100	42 (32)	25

SD = Standard deviation; PI = Principal investigator.
Source: Fiscal year 2007 PRC core budgets.
* Percent time is unknown for 2 people.
† Percent time is unknown for 3 people.

Figure R-3. Percent Time Center PI or Director Is Funded by PRC



Source: Fiscal year 2007 PRC core budgets.

Of the 14 PRCs first funded in 1986 through 1997, 5 (36%) have had one center director or PI and 5 have had 3 or more. Of the 19 PRCs first funded in 1998 through 2004, 11 (58%) have had one PI or director and only 1 had 3 or more. Sixteen PRCs have retained the same PI or director since initial funding (Table R-6).

Table R-6. Number of Directors at PRCs, by Initial Funding Year

Year	Number (%) of PRCs by number of PRC directors		
	1	2	3 or more
1986-1997	5 (36)	4 (29)	5 (36)
1998-2004	11 (58)	7 (37)	1 (5)

Source: PRC Project Officers.

Division of Labor and Leadership Positions (Document Review)

PRCs' staff lists (from budget documents and the PRC information system [IS]) and organizational charts provided data on faculty and leadership staff at each PRC (Table R-7). Each PRC validated its list, and only the most common leadership positions are included.

Table R-7. Number of Faculty or Staff in Each Leadership Position and the Number of PRCs Having that Position

Position type	Number of faculty or staff	Number (%) of PRCs
Center principal investigator or director	33	33 (100)
Deputy director (involved in research)	14	14 (42)
Center administrator or managing director (non-research)	16	16 (48)
Principal investigator of core research	40	33 (100)
Evaluator	31	28 (85)
Community liaison	12	11 (33)
Communication and dissemination lead	20	18 (55)
Training and education lead	19	17 (52)
Collaborations and partnerships lead	5	5 (15)

Source: Fiscal year 2007 PRC core budgets, fiscal year 2006 PRC IS, organizational charts, and leadership staff lists provided by PRCs.

Using the PRCs' leadership lists and associated resumes or curriculum vitae, the evaluators inventoried academic degrees, disciplines, and ranks of faculty and staff (Tables R-8a and R-9). Table R-8b is an expanded version of Table R-8a and includes the frequency of educational disciplines (Appendix H).

Table R-8a. PRCs' Leaders by Educational Attainment

Position	Highest graduate degree					
	MD	PhD	DrPH	Other doctoral-level degree	Master's-level or other graduate degree	No graduate degree
Center principal investigator or director	11	21	1	0	0	0
Deputy director (involved in research)	0	6	2	0	5	1
Center administrator or managing director (non-research)	0	1	0	0	9	6
Principal investigator of core research	7	27	2	3	0	1
Evaluator	1	21	3	1	5	0

Source: Faculty and staff resumes.

Table R-9 lists the academic rank of each of these leaders. About two-thirds of center PIs and half of core research PIs are full professors. About one-third of administrators are non-faculty.

Table R-9. PRCs' Leaders by Academic Rank

Position	Academic rank				
	Full professor	Associate professor	Assistant professor	Adjunct/ research faculty	Non-faculty staff
Center PI or director	23	7	3	0	0
Deputy director (involved in research)	0	3	4	3	4
Center administrator or managing director (non-research)	0	1	1	2	12
PI of core research	16	6	14	2	1
Evaluator	4	8	6	7	6

Position names may not match faculty and staff titles.
Source: Faculty and staff resumes.

Using the PRCs' leadership lists, the evaluators identified patterns of oversight for key PRC activities. The PRCs engage in five main activities, which are outlined in the cooperative agreement and reflect the PRC Program's logic model (Appendix A): research, evaluation, training and technical assistance, collaboration and partnerships, and communication and dissemination. Although many PRCs assign roles by the five activities, others have a single position in charge of two or more activities. The following areas of overlap are the most common:

- Research with evaluation
- Training and technical assistance with collaboration and partnerships
- Communication and dissemination with collaboration and partnerships

Other terms used by several PRCs to describe activities similar to training and technical assistance and collaboration and partnerships are "education," "capacity building," and "community relations and outreach."

Community Committees in PRCs' Organizational Structures (Document Review)

Community committees are integral to the PRCs. The committees are intended to represent the PRCs' partner and core research communities and provide a community perspective on PRCs' activities. Evaluators used the PRCs' organizational charts and other documents to characterize the committees' relationships with PRCs' academic leaders and noted whether the committee serves in an advisory or leadership capacity. The evaluators characterized the role as "leadership" for community committees situated on an organizational chart at the same level as the center director or PI, or if they were described in applications, progress reports, or other reviewed documents as having a role equal to that of the PRC's academic leaders in most, if not all, PRC activities. The evaluators identified the role as "advisory" when the community committees were described in documents as providing input, advice, or feedback on one or more PRC activity (i.e., core research). Most PRCs (79%) are organized so that community committees have an advisory role; 21% of the PRCs are structured so that the community committee and academic partners have equal roles in centerwide activities and decisions. While these data reflect an organizational structure, they may not reflect the actual level of community committee input.

PRC Organizational Structures (Academic Interview Respondents—Interview Guide 3)

Interviews with academic representatives also helped describe several aspects of the PRCs' organization. Of the nine PRCs represented in these interviews, five were established before 1993.

The PRCs greatly varied in how they operated within their academic institutions and with their core research communities. The following themes emerged from the interviews and are discussed below:

- The importance of a staffing structure that supports a PRC's administrative functions as well as research functions.
- The importance of active community engagement in the PRC.
- Location of the PRC in relation to the community and the academic institution.
- The importance of communication across the PRC.

Staffing Structure of the PRC

Respondents described a struggle between attending to PRC-related administrative duties and engaging in research and with the community. Most respondents reported finding effective ways to manage this struggle. A few respondents described staffing structures that clearly delineated administrative duties as separate from other PRC functions, such as research and community engagement. These PRCs had permanent support staff whose responsibilities included grant administration, information system (IS) reporting, and other administrative responsibilities; these staff freed researchers and academics (who also may have had teaching responsibilities) from serving as administrators. One respondent provided an example in which administrative support staff were important to the PRC:

I think it's been helpful …to have the business office and the administrative offices here with the projects. I think it definitely helps with efficiency and communication.

Another respondent described a PRC that was hiring permanent support staff for administrative, evaluation, and biostatistical support. This respondent noted that supporting investigators in this way led to increased efficiency at the PRC and attracted more interest across the academic institution in conducting research through the PRC.

Community Engagement

Respondents were not asked about community engagement in the discussion of organizational structures, however some respondents described the level of community engagement and where the community sits in terms of the organizational model as a key aspect of the structure or organization. A few respondents mentioned the importance of maintaining or achieving a balance between academic and community involvement, noting that this balance was sometimes an evolving process.

A few PRCs had to work to build productive relationships with their communities. Other PRCs had preexisting ties with their community partners, and these respondents described organizational models centered on the PRC's engagement with the community. For example, one PRC capitalized on its capacity to carry out research with the community by obtaining funding from other sources when PRC core dollars were scarce.

One respondent said that being the only organization working with a particular community enabled the researchers to develop a close working relationship with the community. However, this respondent also noted that the PRC's ability to efficiently carry out research was severely restricted because of challenges at the community level. A couple of challenges noted were community partners' limited access to transportation and child care. This respondent suggested that the PRC's experience might be a lesson to other research centers in terms of criteria for choosing a core research community (e.g., not working with communities in which the need is great but the infrastructure or capacity to conduct research is limited).

Physical Location of the PRC

Respondents reported that the physical location of the PRC is an important aspect of how the PRC is organized and that it has implications for how the PRC interacts with its host institution and its community. One respondent described how the PRC moved from a location that was central to the academic institution to one that was central to the community. The respondent said that being in the academic setting was conducive to communication among researchers but that the PRC was somewhat isolated from the community, which created a gap that was hard to bridge. The PRC's physical move into the community enhanced its working relationship and ties with community partners, but reduced academic interactions:

> I think…where we're located is an issue…. It's not like you walk down the hall and talk to people next to the water cooler. That doesn't happen. So, you have to make a conscious effort to make connections and so on. So, those kinds of…accidental connections with colleagues, where you run into them on the street or coming out of a lecture or something like that, don't happen as often or as much.

One respondent highlighted the importance of keeping PRC staff and research faculty connected. This respondent noted that the PRC had been consolidated in one office building (it was originally separated as research and administrative offices). The respondent stated,

> One of the challenges that we have had through the years has been that our administrative offices have mostly been separate from our research team offices. So, we had a little bit of a complexity with just the spatial difference with getting communications. For example, a lot of people on the administrative team or…in the business office really didn't know the people on the research teams. There was just sort of a disconnect.

This respondent also described how once the offices were combined, communication and efficiency increased.

Communication

A few respondents said communication was critical to a PRC's structure. These respondents noted that communication was important both internally and externally, and they talked about putting mechanisms in place to facilitate communication:

> We found that people…didn't know the work of the other research teams. They knew their projects very well and their project team, but they really weren't aware of the other projects and the expertise of other research teams. And so, one of the things that we have done is really try to improve our communications, both with people internal to the PRC…as well as externally. I think we do a lot of very good work here, but I don't think we do a really good job of communicating that work.

Another respondent said the PRC addressed some internal communication issues by holding regular meetings to keep staff and faculty members informed of all activities taking place across the PRC. These meetings not only informed PRC members but also created a record for reporting purposes. The respondent stated,

> Individual components have their meetings, but we have a monthly what we call the all-[PRC] meeting, and each person who is in charge of one of those areas fills out a template that says what activities they've been engaged in in the last month. If there are any action items for consideration, there are action items down there. And so, everybody knows what everybody else is doing and [is] kept up to date.

Characteristics of the PRCs' Partner and Core Research Communities

The partners at each PRC defined "community" to describe how it applied to their center. PRCs had both partner and core research communities. The partner communities were those in which the PRCs intended to have an overall impact and in which PRC activities took place (e.g., training, evaluation, or other activities). The core research communities were those in which PRCs conducted their core research project. Characteristics such as distance between the community and the PRC's academic institution, racial or ethnic identity, and socioeconomic status differed among the communities. This section describes characteristics of both the partner and core research communities.

Number of Partner Communities by Geographic Characteristics

A total of 66 PRC-defined partner communities existed within 322 counties and 26 states. The number of communities each PRC defined ranged from 1 to 12 (mean = 2 and median = 1). Most PRCs worked within the state in which their center's academic institution was located. These PRCs may have partnered with community members from a particular neighborhood or region of the city; across a single city or county; or across multiple cities, counties, or parishes. For example, one PRC's partner community was defined by areas from which its partner school districts drew students (comprising two towns). Two PRCs' partner communities were statewide, and one PRC partnered with two entire states (Table R-10).

Table R-10. Number of PRCs by Geographic Description of Partner Communities

Description	Number
City region or neighborhood	7
City, town, or county	10
Multiple cities, towns, counties, parishes, or state region	9
Statewide or multiple states	3
Counties in multiple states	1
Tribal organizations or regional Indian reservations	2
Ethnic population throughout the United States	1

Source: U.S. Census 2000, fiscal year 2004 PRC applications, fiscal year 2007 PRC Work Plans, and fiscal year 2005 PRC Progress Reports.

Most PRCs work in rural or urban areas, and several work in more than one type of area (Table R-11).

Table R-11. Number of PRCs by Partner Communities in Specific Geographic Areas

Geographic area	Number
Rural	21
Urban	19
Suburban	10
U.S.-Mexico border regions	6
Tribal organizations	6
Frontier	4

Source: U.S. Census 2000, fiscal year 2004 PRC applications, fiscal year 2007 PRC Work Plans, and fiscal year 2005 PRC Progress Reports.

Each PRC provided data on the travel distance between its academic institution and its farthest partner community (Table R-12).

Table R-12. Maximum Travel Distance Between PRCs' Academic Institutions and Partner Communities

Unit	Distance		
	Range	Mean (SD)	Median
Miles	0–1,765	179 (335)	75
Hours	0–25	2.63 (4.42)	1.42

Excludes 1 PRC whose community is throughout the entire United States.
SD = Standard deviation.
Source: Travel distance calculated using Google Maps (http://maps.google.com/).

Partner Communities by Demographic and Socioeconomic Characteristics (Document Review)

To collect demographic data on the 66 PRC-defined partner communities, the evaluators matched each community to geographic units (e.g., census tracts, counties, towns) for which standard and demographic data are collected. The match identified 153 geographical units. The evaluators identified 135 geographically defined communities in which PRCs conduct their core research. Most of the core research communities overlap with or are a subset of the partner communities, but some are not located within the partner community. The evaluators also included core research control or comparison communities if the core research design included plans to conduct an intervention (delayed or concurrent alternate) in these communities.

Demographic Makeup (Document Review)

The total population of communities in which the PRCs' core research takes place exceeds 32 million (Table R-13).

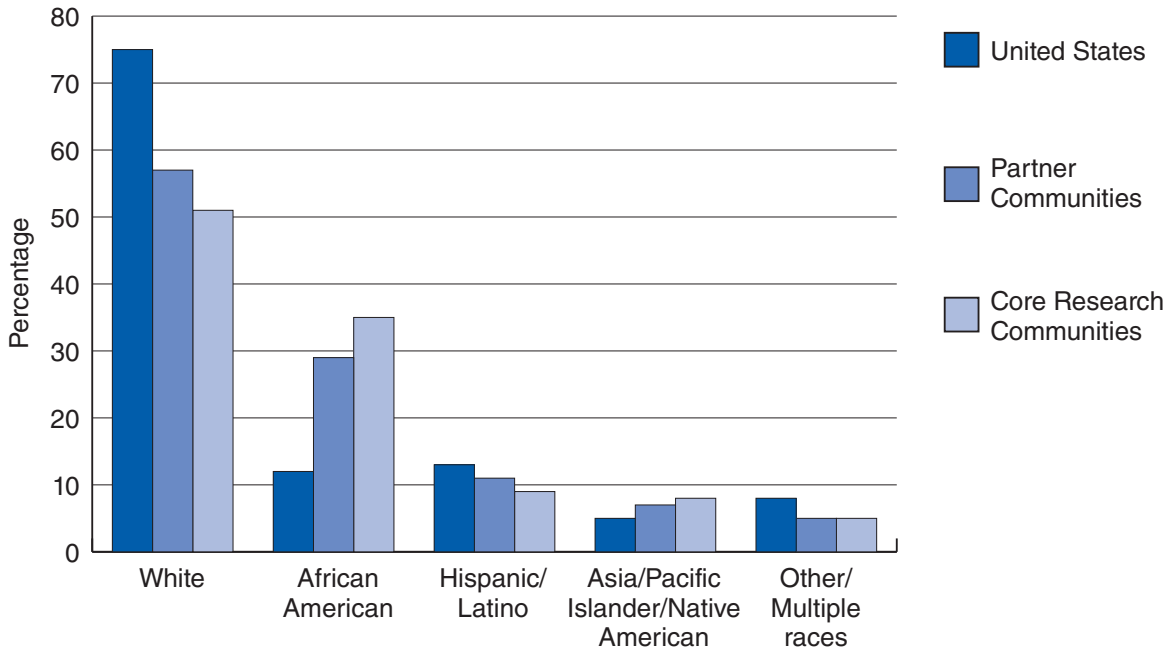
Table R-13. Population of PRC Partner Communities (N = 146) and PRC Core Research Communities (N = 128)

	Number of people			
Type of community	**Total**	**Range**	**Mean (SD)**	**Median**
Partner	40,997,416	781–9,519,338	280,804 (1,203,886)	16,050
Core research	32,174,410	781–9,519,338	251,363 (1,081,530)	18,766

Data were missing for 7 partner and 7 core research communities associated with 3 PRCs.
SD = Standard deviation.
Source: U.S. Census 2000.

Many PRCs focus their activities on populations that are underserved, have low income, or have more health risks than the national average. Figure R-4 and Table R-14 (Appendix H) show the racial and ethnic distribution of the PRCs' communities. On average, the proportion of African Americans, and of Asians, Pacific Islanders, or American Indians, was higher in the PRCs' communities than in the United States as a whole.

Figure R-4. Percentage of PRC Partner Communities (N = 147), PRC Core Research Communities (N = 129), and the United States by Race or Ethnicity

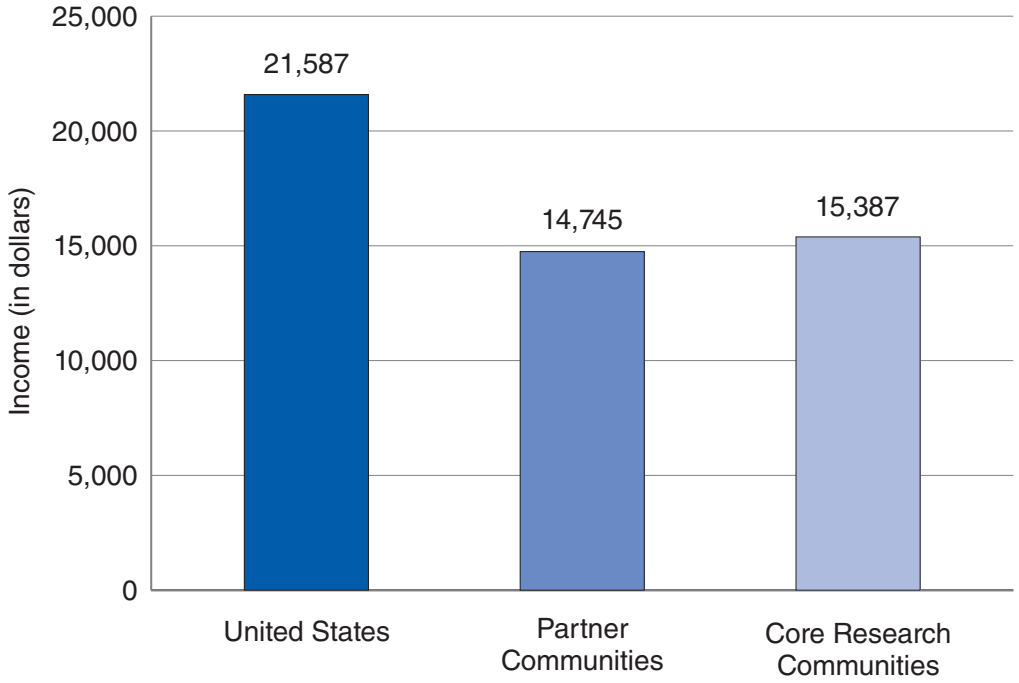


Data were missing for 6 partner communities and 6 core research communities associated with 3 PRCs.
Source: U.S. Census 2000.

Socioeconomic Makeup (Document Review)

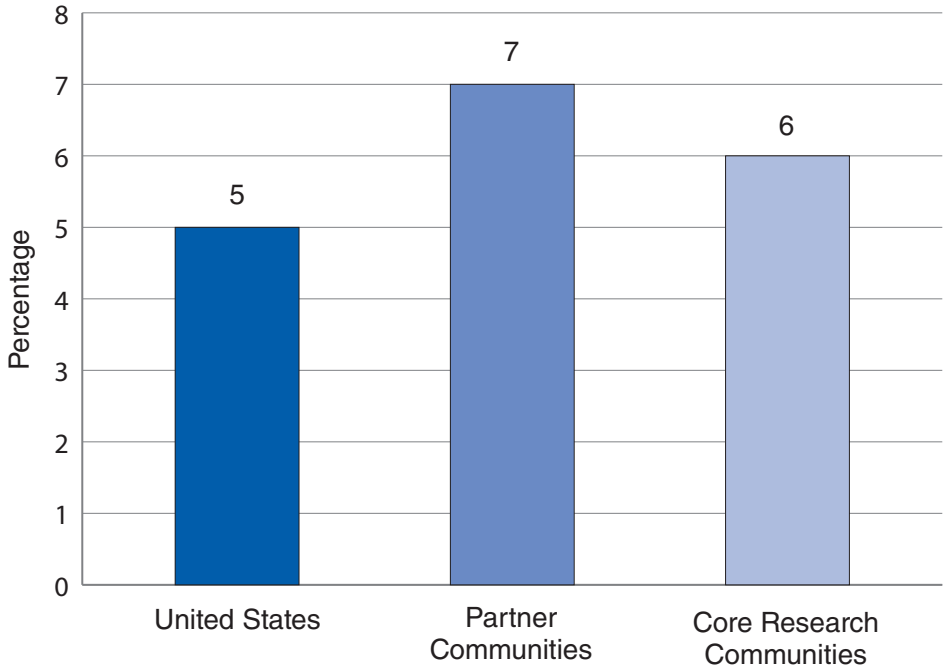
The mean per capita income of PRC communities is lower (by about one-third) than the U.S. average (Figure R-5; Table R-15 [Appendix H] also shows the range and median). Across all the PRCs' communities, 80% have a mean per capita income that is lower than the corresponding state and national averages (data not shown). Similarly, as shown in Figure R-6 and Table R-16 (Appendix H), PRCs' partner and core research communities have higher unemployment rates, on average, than the U.S. average.

Figure R-5. Mean Per Capita Income for PRC Partner Communities (N = 134), PRC Core Research Communities (N = 119), and the United States



Data were missing for 19 partner communities and 16 core research communities associated with 5 and 4 PRCs, respectively.
Source: U.S. Census 2000.

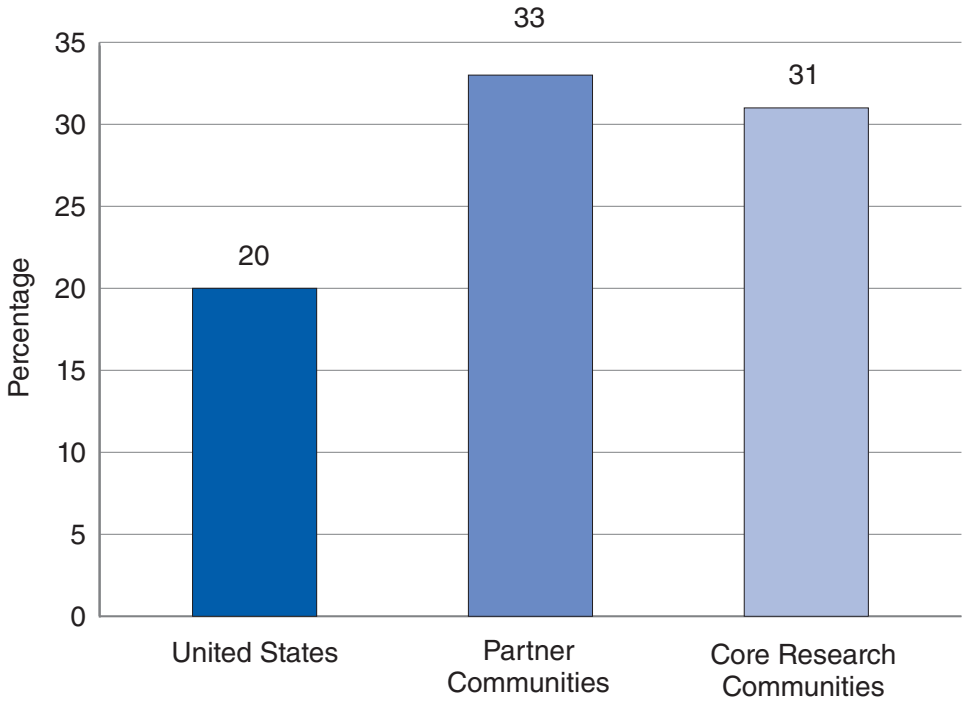
Figure R-6. Mean Unemployment Rate for PRC Partner Communities (N = 136), PRC Core Research Communities (N = 118), and the United States



Data were missing for 17 partner communities and 17 core research communities associated with 5 PRCs.
Source: U.S. Bureau of Labor Statistics 2005 County and State Data Tables for all but 4 partner and core research communities for which U.S. Census 2000 was used.

On average, the proportion of the PRCs' partner and core research communities with persons over 25 years old lacking a high school diploma is greater than in the U.S. population (Figure R-7; Table R-17, Appendix H).

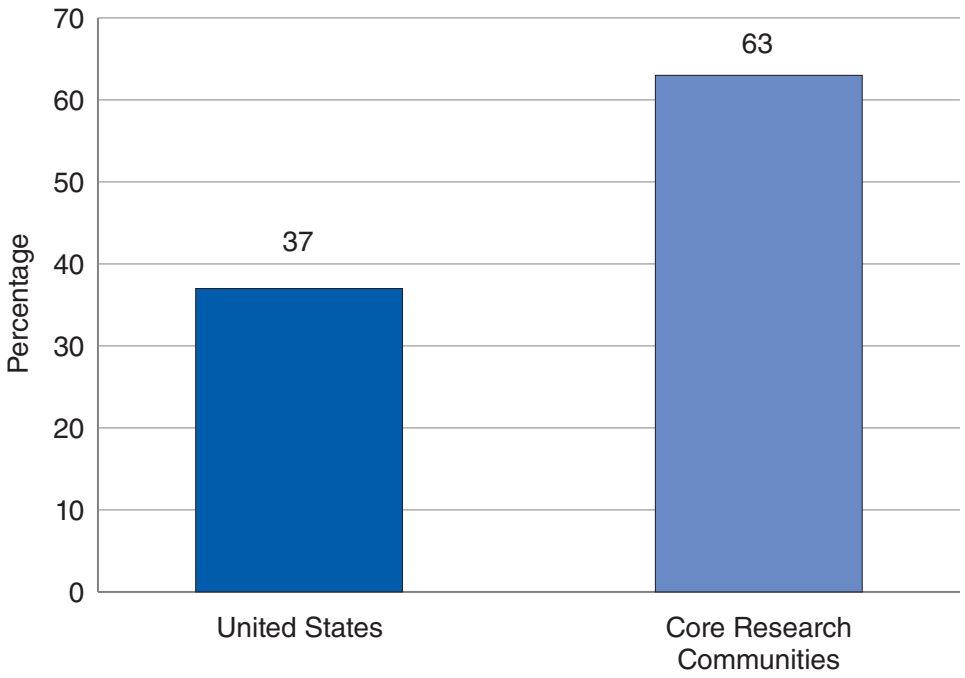
Figure R-7. Mean Percentage of Persons Age 25 and Over Without a High School Diploma for PRC Partner Communities (N = 132), PRC Core Research Communities (N = 116), and the United States



Data were missing for 21 partner communities and 19 core research communities associated with 7 PRCs.
Source: U.S. Census 2000.

Seventeen PRCs conduct core research or some aspect of their core research in schools. The evaluators identified 64 geographically defined core research communities associated with these schools or school districts. In the communities for which data were available, the percentage of students eligible for free or reduced school lunch ranged from 20% to 95%, mean = 63% (Figure R-8). The U.S. average is 37%.

Figure R-8. Mean Eligibility for Free or Reduced School Lunch for PRC Core Research in Schools (N = 53) and the United States



Data were missing or incomplete for 11 core research communities.
Source: National Center for Education Statistics. Data Tables, School Year 2004-2005.

Organizational and Community Characteristics Study

Discussion

This section discusses three overarching topics: resources, infrastructure and organization, and characteristics of the partner and core research communities.

PRC Resources

- All PRCs receive core dollars from CDC to cover costs associated with the five key activities of research, evaluation, training and technical assistance, collaboration and partnerships, and communication and dissemination.
- Factors that influence a PRC's ability to stretch those dollars include cost of living in the city in which the PRC is located and support provided by the academic institution in which the PRC is located.

Cost of Living

- The cost of living, which varies across PRCs, may influence both the attraction and retention of faculty and staff.
- PRCs located in cities with one and one-half times the cost of living in other locations may find a large proportion of their budget allocated to faculty and staff salaries. However, those PRCs may be better able to attract faculty and staff because they are generally located in desirable, high-density cities.

Academic Institutional Support for PRCs and CBPR

- Academic institutions demonstrate support for PRCs in many ways, including reducing indirect cost rates, providing resources, and offering public recognition or credit to a PRC for its work.
- Data on indirect cost rates provide some information about the fiscal challenges and opportunities of PRCs. The hypothesis is that PRCs with lower indirect cost rates have more money available to carry out the work of the PRC. However, a negotiated indirect cost rate or even the actual indirect cost rate might not provide an accurate estimate of resources available to conduct work at a given PRC. For example, an academic institution might return some of the dollars taken through indirect costs; another might provide financial support for faculty, staff, or students; yet another might provide administrative or other infrastructure support.
- A few PRC academic representatives expressed dissatisfaction with the level of support and recognition they receive, and they suggested the academic institution supported the PRC out of convenience rather than true commitment to the PRC or to CBPR.
    - CBPR is an evolving field, and academic institutions may have few models on which to base their support for and interest in expanding this type of research.
    - While many academic institutions enthusiastically support CBPR in theory, some have trouble translating this support into practice.

Recommendations

- PRCs could share strategies on budgeting and on faculty and staff recruitment and retention.
- The PRC Program office could help identify and share activities PRC leaders use to gain institutional support for CBPR.
- The types of resources (such as financial, equipment, supplies, and technical support) each academic institution provides its PRC should be assessed to help understand both the availability and variability of resources and their effect on the center's budget.
- PRCs need to better communicate and promote their activities within their academic institutions, which could help elevate the importance of their activities and garner support for CBPR.

PRC Infrastructure and Organization

This study revealed the organizational structures PRCs use to carry out their activities. The results show that leading a PRC involves much more than being the principal investigator of research activities. In addition to conducting research, PRC leaders contribute to the development and sustainability of academic-community partnerships and to the coordination of research with communication and dissemination, training, capacity building, and evaluation activities. Additionally, a PRC's organizational structure may provide the mechanism for accomplishing the key activities of the academic-community partnership.

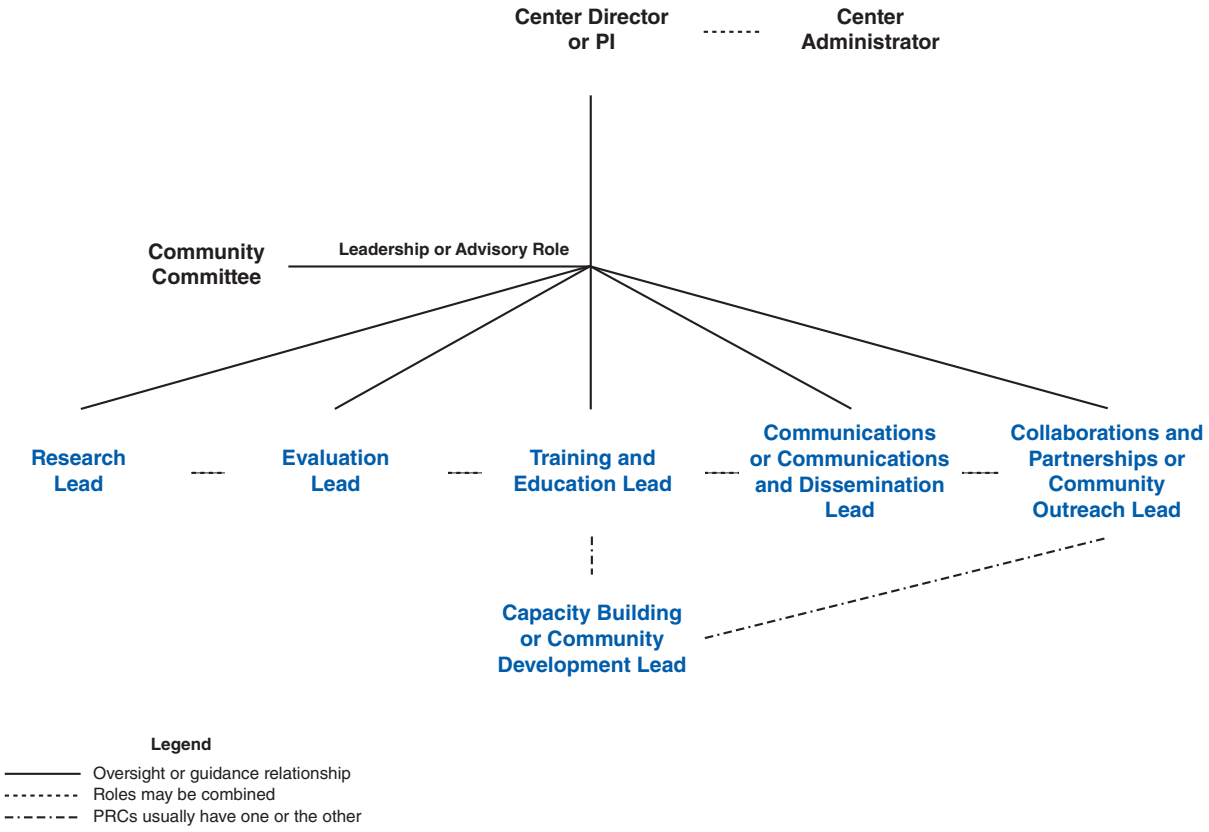
Staffing and Leadership

- Across PRCs, the document review revealed both diversity in staffing structures and similarities in division of labor.
- A theme that emerged from the interviews concerned the value of having support staff responsible for administrative functions, such as PRC IS data entry and grants administration. Respondents from PRCs that have administrative staff, who free academic staff from administrative responsibilities, spoke less about such challenges interfering with research. One interviewee suggested PRCs may want to commit faculty or staff to community liaison, evaluation, or biostatistical support responsibilities. Many PRCs have designated these roles as leadership positions.
- The document review revealed that the PRCs' faculty and staff represent many disciplines. Most of the leaders were trained in public health and related fields (epidemiology, health education, and behavioral sciences), and many other professional fields were represented (psychology, sociology, social work, law, education, and anthropology).
    - All center PIs and directors and all but one PI of a core research project hold doctoral degrees. Most of these people are full professors or associate professors.
    - Other leaders have a range of graduate degrees and academic ranks, which may make PRCs a productive venue for training junior faculty.

PRC Organizational Models

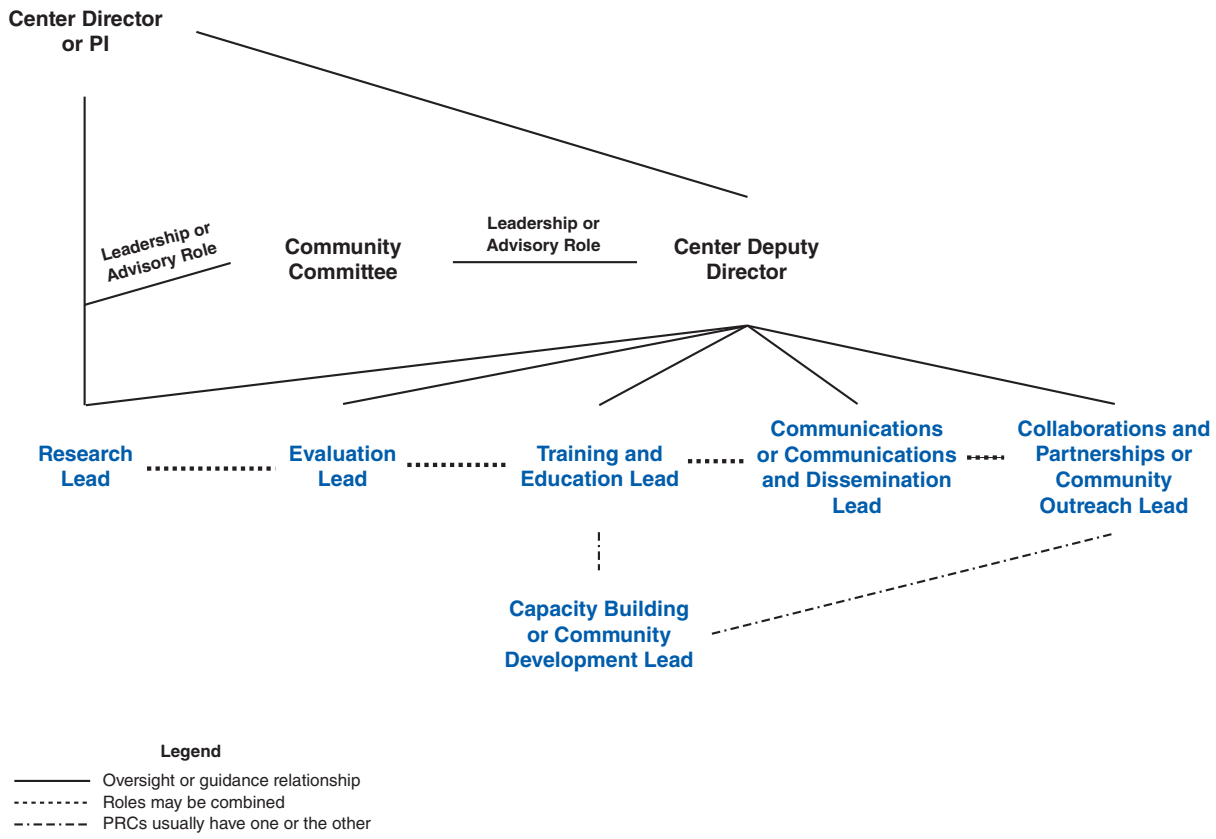
- Based on data related to staffing, division of labor, and leadership structures, three models of organizational structure emerged (Figures R-9a through R-9c).
  - All three models include leadership positions for the five key activities that PRCs engage in (research, evaluation, training and technical assistance, communication and dissemination, and collaboration and partnerships).
  - A solid line denotes a direct reporting relationship, a dotted line indicates that sometimes the two positions are filled by a single individual, and a dashed line indicates that PRCs have either one or the other.
- In all models, the level of community committees' involvement in research and other activities differs.
- In the Center Director Model (Figure R-9a), the PRC has leadership positions for each of the five key activities. The center director or principal investigator either has direct oversight of the five units or supervises a person or committee responsible for each activity. The community committee plays either a leadership or advisory role. There may be an administrator who provides administrative leadership to the overall PRC.

Figure R-9a. Center Director Model



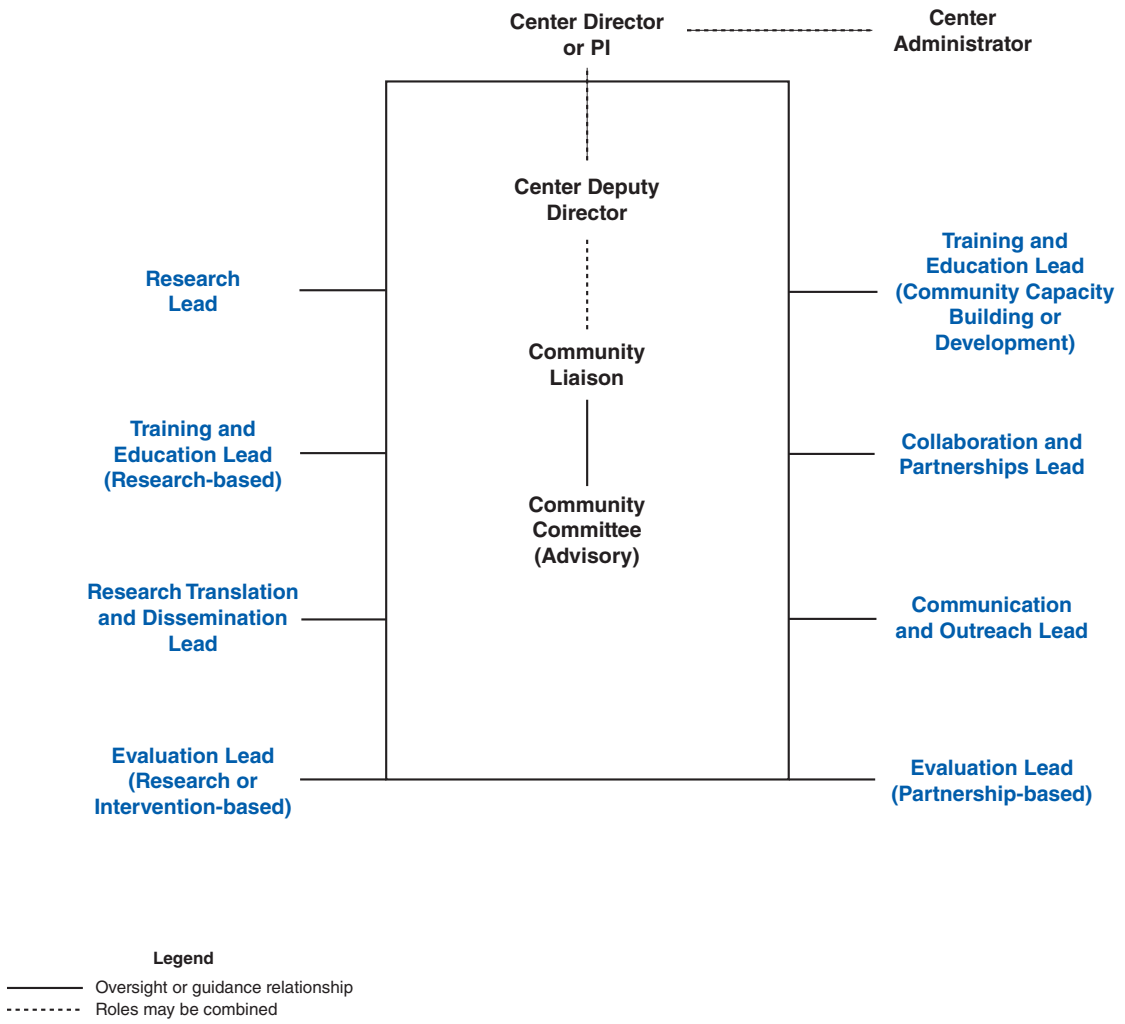
- In the Center Deputy Director Model (Figure R-9b), the deputy director provides direct oversight of the five key activity leaders. The center director or principal investigator is involved primarily in core and other research, and less involved in the overall management of the center. The deputy director serves as either an administrator or a manager of activities including research (as a principal investigator or co-principal investigator of a PRC's core or other research project). In this model, the community committee plays either a leadership or advisory role to the overall PRC through a link to the deputy director or the core research project.

Figure R-9b. Center Deputy Director Model



- In the Research and Community Organizational model (Figure R-9c), PRCs generally have two main categories of activities—one for research and one for community and partner engagement. The leadership positions are specific to each category, and a community committee or community liaison links the two categories and may act as an advisor for the research.

Figure R-9c. Research and Community Organizational Model



PRC Organizational Variation

- This study showed that the five key activities often overlap, that PRCs emphasize different activities, and that the role of the community committee differs.
- Figure R-10 provides an example of how these variables could be represented for the five key activities.
  - The size of each circle represents the level of emphasis placed on an activity; larger circles represent an activity to which a larger proportion of PRC and partner resources are allocated. In Figure R-10, the circles are about the same size, indicating an equal emphasis on all activities.
  - The intersection or overlap of the circles depicts the level to which the activities are integrated. In Figure R-10, evaluation, communication and dissemination, and research interact but evaluation activities are not integrated with collaboration and partnerships and training.
  - The different shades of the circles indicate different levels of community committee involvement in each activity. In Figure R-10, dark blue indicates substantial community involvement; a lighter shade shows less involvement.

Figure R-10. Example of the Five Key Activities of the PRCs by Three Variables

The variables are resource allocation (size of circle), integration (overlap of circle), and level of community involvement (shading of circle).

Recommendations

Macro makes the following recommendations about PRCs' infrastructure and organization:

- PRCs could remove the primary responsibility for administrative activities from researchers, to allow increased efficiency and help attract researchers from across the university to conduct research through the PRC.
- Future evaluation could clarify the representativeness of the organizational models, explore how PRCs structure themselves to engage communities and partners, and determine how the key activities relate to and support research.
- Future evaluation could create a Venn diagram for each PRC, which would likely produce 33 unique models of organization and help understand the similarities, differences, and benefits of different organizational structures. This analysis could reveal how PRCs structure themselves.

PRC Partner and Core Research Communities

The data on the PRCs' partner and core research communities show the breadth of the communities.

Geographic characteristics

- The PRCs have extensive reach into the U.S. population and a wide variety of communities, no matter how the word is defined.
- The data suggest potential challenges to PRCs, such as conducting research with communities located far from the PRC offices or conducting research with a very large or diffuse community.

Sociodemographic characteristics

- The PRCs' partner communities include largely poor and underserved populations. These communities had a higher percentage of African Americans, Asian or Pacific Islanders, and American Indians than the overall United States and a lower percentage of Hispanics; however, the PRC data were from the 2000 census. As of July 1, 2006, an estimated 15% of the nation's population was Hispanic. Between 2000 and 2006, Hispanics accounted for one-half of the nation's growth, at a growth rate of 24.3%—almost four times that in the total population (6.1%).[1]
    - Across the partner communities, the mean per capita income is about 30% lower than the U.S. average, and the unemployment rate is 20% to 40% higher.
    - The PRC partner communities have a higher percentage of persons 25 years of age and older without a high school diploma than the U.S. average.
    - Among PRCs conducting research in schools, the partner communities have a high percentage of children eligible for free or reduced lunch.
    - As low-income and undereducated persons are at high risk for increased morbidity and mortality, these data show that the PRCs are addressing health promotion and disease prevention in populations likely to have a disproportionate burden of disease.

Recommendations

Macro makes the following suggestions for further understanding research communities:

- Future evaluation could assess how the distance from a PRC to its partner community or how working with a large or diffuse community affects the resources the PRC requires to successfully partner with the community.
- A map showing the states and communities in which PRCs conduct research might help partners grasp the program's breadth and reach.
- Because the racial and ethnic makeup of the nation continues to change at a rapid rate, assessing the racial and ethnic makeup of PRCs' communities will be important to ensuring appropriate attention to minority health issues. Future evaluation could use 2010 census data for comparison.
- Describe the health focus of the PRCs' research across the partner communities.

References

1. Hispanics in the United States [PowerPoint]. Washington (DC): U.S. Census Bureau; 2008 [cited2008 Sep 10]. Available from: http://www.census.gov/population/www/socdemo/hispanic/hispanic_pop_presentation.html

Academic–Community Partner Interaction Study

Results

This study focused on answering the question, "How do PRC researchers and their communities interact to develop, implement, evaluate, and disseminate the core prevention research project?" The question was designed to capture information on approaches to community-based participatory research (CBPR). Results from this study provide data to answer the following overarching evaluation questions: How is CBPR implemented across PRCs? How are communities and partners engaged in the PRCs' activities? How does participation in the PRC Program build community capacity? Data from other studies and indicators will supplement this study's findings.

PRCs must balance the benefits of engaging communities in research (e.g., increased relevance, effectiveness, and feasibility of interventions; increased collaboration among partners having diverse skills and knowledge to solve complex issues) and the challenges associated with research partnerships between academic institutions and communities (e.g., conflict over different perspectives, assumptions, values, and beliefs of the partners; a historically inequitable distribution of power and control among researchers, community members, and others in the partnership).[1]

This study describes the following elements:

- Community partnerships and committees.
- Capacities of community committees.
- Types of participation in core research by community committee members and key partners.
- Academic and community partners engaging in CBPR.
- Community involvement in the PRCs' research over time.
- Perceived benefits and challenges associated with being in the PRC network, as viewed by academic representatives.
- Perceived benefits and challenges associated with being in the PRC network and in the National Community Committee (NCC), as viewed by community committee respondents.

The text notes when the results came from document review (data from all 33 PRCs) or interviews (data from nine PRC representatives per interview guide; the interview guide number is specified).

Community Partnerships and Committees

Determining the Core Research Community (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Interviews with nine academic representatives and nine community committee representatives (from the same nine PRCs) provided information on how PRCs determined their core research communities.

Academic Respondents

The academic respondents shared a variety of ways in which the academic representatives of their PRCs first came together with their core research communities. A couple of respondents noted that the academic institution's history of conducting research within a community before the existence of the PRC was a major factor in determining the research community. According to a few respondents, the faculty members wanted to extend or enhance research already under way with a partner community,* and the mission and agenda of the PRC served as a way to achieve that objective. A few other respondents mentioned that the community selected had a unique infrastructure, provided an opportunity to engage in research in new and different ways, or had a particular need that was not present in other surrounding communities or that was not being addressed by other PRCs.

A couple of respondents noted that academic institutions were interested in working with communities that had both particular health needs and the capacity to carry out activities without heavy involvement by the institution. For example, one respondent stated,

> [The community] already had a common priority to us…and they really had the capacity to carry out programs and involve diverse stakeholders in the process.

Most academic respondents reported that faculty members and the partner communities jointly decided during the preparation of the PRC grant application to build on research already being conducted in the community. A few academic respondents from PRCs that did not have a prior relationship with the research communities indicated that several communities responded to a request for potential projects and collaborations, and then the PRC chose a community because it had an established, ongoing project to bring to the collaboration.

Community Committee Respondents

Most community committee respondents said their involvement in the core research stemmed from their having leading roles on various boards and committees in the community, which the PRC knew about. A couple of respondents noted they were interested in working with the PRC because the PRC already had partnerships with community entities (e.g., community groups, social gatekeepers).

* The partnering communities referred to by the academic respondents reflect only their partner communities.

Community Committee Descriptions (Document Review)

All PRCs are required to have at least one community committee. The PRC Program allows flexibility in how the PRCs define the role of community committees, but the committees generally provide guidance and local expertise to a PRC overall and about the core research. The PRC's community committee is expected to have guidelines that lay out principles of how the academic and community partners work together. As part of the document review, the evaluators abstracted the committees each PRC listed in the Community Committee sections of the PRC IS.†

Regarding overall center community committees, two PRCs have more than one and one PRC does not have any, yielding a total of 35 such committees. Three of these committees have 501(c) (3) status, a tax law provision that grants exemption from federal income tax to various charitable, non-profit, religious, and educational organizations. The number of members on the 35 committees ranges from 4 to 43, with a mean of 21 (data not shown).

PRCs also have other types of community committees or subcommittees through which they gain community input on PRC activities. Across the 33 PRCs, the document review identified an additional 57 community committees (Table R-18). These committees are specific to a project, a community, or content; three are youth advisory committees.

Table R-18. Distribution of Community Committees, by Type

Committee type	Number of PRCs	Number of committees
Overall center community committee	32	35
Project-specific committee (core research only)	10	15
Community-specific committee	4	8
Content-specific committee	3	4
Youth advisory committee	3	3
Communication committee	1	1
Scientific committee	2	2
State or national committee	4	4
Subcommittee	3	12
Other committee	6	8
TOTAL		**92**

Source: PRC Information System, fiscal year 2006.

† Some PRCs listed committees that do not represent community perspectives (e.g., a scientific committee).

Community Committee Meetings (Document Review)

Nearly three-quarters of the center community committees meet quarterly or more frequently (Table R-19).

Table R-19. Number and Percentage of Overall Center Community Committees by Frequency of Meeting (N = 35)

Frequency	Number (%)
Semiannually	4 (11%)
Three or four times per year	3 (9%)
Quarterly	16 (46%)
Monthly	5 (14%)
Every other month (six times per year)	5 (14%)
Other	2 (6%)

Source: Documents submitted by PRCs.

Of the 35 overall center community committees, half (17) meet at a location in the community, while the others meet either at the academic institution or alternate locations between the community and the academic institution (Table R-20).

Table R-20. Number and Percentage of Overall Center Community Committees by Location of Meeting (N = 34)

Location	Number (%)
In the community	17 (50%)
At the academic institution	10 (29%)
Alternate location or location between community and academic institution	6 (18%)
By telephone	1 (3%)
Unknown	1 (3%)

Source: Documents submitted by PRCs.

Core Research Committees (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Interviews with academic and community committee representatives provided information on community committees related to core research.

Academic Respondents

Most academic respondents said they had a community committee or advisory board for their PRC's core research projects. Most academic respondents characterized meetings with their community partners as frequent and beneficial to collaboration and communication of objectives, challenges, and resolutions. The range in frequency of "key working" meetings included monthly, every other month, quarterly, and semiannual. Most respondents reported that formal meetings were convened in person, and that informal communication, which was more common, occurred either by telephone or in person. In a few instances, respondents reported occasionally meeting via Web or video conferencing.

Most academic respondents noted that many of their meetings with community partners occurred at a venue in the community; only one respondent said that meetings were held at the academic institution. Another respondent reported that meetings occasionally took place at a geographically central location. The presence of academic representatives varied. Most respondents reported that, on average, the percentage of academic members of the committee who attended meetings ranged from 75% to 100%. A couple of respondents said that attendance by academics ranged from 25% to 50%. Most respondents also noted that the academic presence at the meetings ranged from two to four persons. One respondent reported that the academic presence at the meetings was by invitation only.

According to some academic respondents, the persons responsible for setting the meeting agendas included community committee directors and co-directors. A couple of respondents reported that meeting agendas were the responsibility of various community committee representatives. A couple of respondents noted that the development of meeting agendas was a collaborative effort shared by community partners and the academic institution.

A couple of academic respondents indicated that the PRC director, community committee director, or both chaired meetings, and that the person who facilitated the meeting varied based on the meeting type (e.g., subcommittee, community advisory board, full partnership). However, most respondents stated that the responsibility for facilitating meetings belonged to a community committee representative (e.g., community board chair or co-chair, executive board director).

Community Committee Respondents

Similar to the academic representatives, most community committee respondents said that formal meetings were held in person. In a few instances, respondents reported meeting via teleconference. Most respondents said that many in-person meetings occurred at a facility located in one of the partnering communities. Most community committee respondents said it was easy for them to attend meetings, as long as they received advance notice. A couple of community respondents said the distance and timing of the meetings sometimes posed a challenge.

Most community committee respondents reported that the committee did not meet without academic representatives present. However, a couple of community committee respondents reported meeting on their own on a monthly basis and with all members, including academic representatives, on a quarterly basis.

Most respondents said that, on average, the percentage of community committee members who attended meetings ranged from 75% to 100%, and most said that representatives' commitment to participate was high. One respondent shared that high participation was especially true when community representatives had opportunities to provide input on current or prospective research. According to most respondents, community representatives' collective commitment was steady over time.

Community Committee Guidelines (Document Review)

Of the 35 overall community committees, 33 had written guidelines, and one PRC's overall community committee was in the process of developing guidelines when the document review was conducted. Thus, the evaluators reviewed 33 sets of guidelines to determine whether the guidelines included information on communication procedures, voting procedures, term commitments for committee chairs, and meeting attendance requirements (Table R-21).[‡] Six PRCs posted their guidelines on their Web sites, and three posted community committee meeting minutes.

Table R-21. Number and Percentage of Overall Community Committee Guidelines that Included Specific Elements (N = 33)

Element	Number (%)
Communication procedures	24 (73%)
• E-mail	7 (21%)
• Postal mail	6 (18%)
• Conference calls	3 (9%)
• Web site	5 (15%)
• In-person meetings	23 (70%)
• Other (e.g., newsletters)	3 (9%)
Voting procedures or amendments to the guidelines	17 (52%)
Term commitment for members	12 (36%)
Term commitment for committee chairs	17 (52%)
Term commitment for past committee chairs	7 (21%)
Meeting attendance requirements	17 (52%)

Source: Overall community committee guidelines.

[‡] Guidelines for other types of committees were not included in the document review.

Guidelines for Community Representative Input on Core Research (Community Committee Interview Respondents—Interview Guide 3)

Interviews with community representatives provided information about guidelines that address community input on core research. Most respondents noted that their community committees had either formal and written or informal and unwritten guidelines that described how representatives should provide input. These guidelines outlined how multiple committees interact and defined their roles with regard to such tasks as reviewing or revising the current research agenda, being involved in PRC activities, or accepting new research opportunities. One respondent said,

> [Guidelines] are used as a process in making decisions.… So, if someone were to e-mail me and say, "How do I get an abstract submitted, and what is the process for that?" then I can go to those guidelines and that's a starting place.

Some community committee respondents stated that the guidelines clearly outlined the purpose of different committees, how leadership should be established, when information was going to be disseminated, and whether a publication would result from the work. A few respondents said that their guidelines were being reviewed and revised. A couple of other respondents noted that being interviewed about the presence of governing guidelines prompted them to consider formalizing their informal, less detailed guidelines. One respondent, whose partnership did have guidelines, stated,

> The guidelines for collaboration were very open and inclusive of community members doing as much as possible to keep them informed at all times and involved. But some of the specifics…like how long each member will be on…how to determine the leadership, those things are still in the process of evolving.

A couple of respondents said that the mission statement of the National Community Committee (NCC)[§] served as a set of governing principles in that it provided a general sense of what their PRC's community committee interest should be in the long term. The NCC comprises community representatives from each PRC's local community committee and is one of six subcommittees that help lead the PRC Program in setting standards and policies and in making recommendations for research and other program activities.[2]

A couple of respondents new to the core research project or the partnership did not know whether their PRCs had formal guidelines for community input. Also, a few community committee respondents noted that no formal orientation process occurred specifically on guidelines or principles for the partnership. One respondent, who reported that his or her PRC had guiding principles, said that the partners were confused about the extent and level of input expected from community committee members, and at what stage and in what capacity community committee members should provide input to the core research project. This sentiment was also expressed by a few other respondents whose partnerships did *not* have formal guidelines.

[§] "The National Community Committee is dedicated to helping build capacity in communities within local PRCs that were not traditionally involved in the planning, development, and evaluation of prevention research initiatives."[3]

Capacities of Community Committees (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

Academic respondents reported many examples of skills, resources, capacities, and assets that their community committees contributed to the core research project, evaluation, and training activities.

All respondents cited the same two examples of capacities. One was the community committee members' ability to facilitate trust of and community buy-in to research activities, including their ability to recruit research participants. The other was community committee members' effective communication with various community groups.

Most academic respondents also noted the following examples of the community committee members' capacity: conduct focus groups and develop and distribute surveys, disseminate results within the community, and increase the cultural relevance of programs, surveys, products, and materials.

Most academic respondents said that the community committee members' experience as long-term residents in the research community, and their access to venues for conducting the research, positively enhanced the core research projects. All academic respondents also described several specific resources provided by the partner community that affected research, such as providing a reliable knowledge base about the community culture and environment, sharing access to the community and its leaders, and offering access to a pool of potential employees.

Community Committee Respondents

Most community committee respondents noted that building relationships in the community and identifying or accessing the desired study population were among the most useful and significant skills that the community committee contributed to the core research project. The respondents provided additional examples of skills, some of which were similar to those described by the academic respondents:

- Assisting with focus group activities (e.g., recruitment).
- Disseminating information.
- Planning events.
- Assisting with designing programs and developing surveys, products, and materials that were culturally relevant to the community.
- Communicating the implications and findings of the research to the community, explaining the research purpose, and providing cultural sensitivity.

Community committee respondents also noted resources and experiences that members contributed to research. As did the academic respondents, all community committee participants stated that one of the community committee members' most valuable resources was their experience as long-term residents in the research community. One community committee respondent thought that the only valuable resource community committee members had to offer was their experience living in a low-income community. Most community respondents said that community committee representatives provided the following resources: access to venues, knowledge

of current events, understanding of the community culture and environment, and knowledge of local issues related to implementation of research in the community. Other resources mentioned by a few respondents included providing food to or incentives for research participants, devoting their personal (unpaid) time to the research, and providing access to leaders in the community who could serve as speakers and representatives during meetings or conferences led by the academic institution.

When asked to think beyond the community committee about resources the overall partner community provided to the PRC, similar to the academic respondents, almost all community committee respondents said the most valuable resource was the means to build relationships with individual people and different entities within the community. For example, a couple of respondents noted that community partners provided space or facilities for in-person partner meetings that occur in the community, reducing the cost burden to researchers. However, one respondent noted that the partner community did not have resources to provide to the PRC, stating, "Why would they?…We're talking about the poorest population in the nation." Other key resources that community committee respondents said partner communities provided include space for research activities, office space for PRC staff in the community, community member time to plan events and participate in research-related activities, and recruitment of research participants.

Types of Participation in Core Research by Community Committee Members and Key Partners

Community Committee Member Participation in Core Research (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

Almost all academic respondents reported that the community committee representatives were actively involved in the core research in some way. Only one respondent said the PRC was just beginning its research but expected the community to be involved. The respondents did not offer many examples of participation in the entire research process, noting that representatives seemed to be confident and comfortable about being involved in only specific steps of the research process. A couple of respondents said that representatives were involved in developing and implementing research, developing survey tools and materials, and interpreting and disseminating results. In these cases, the academic partners were responsible for data analysis and the initial interpretation of the data. The one respondent just beginning the core research project expected the community committee would provide space to carry out different aspects of research implementation. The same respondent said the PRC was not the "perfect model," but that community committee members might be part of implementation, evaluation, and analysis.

Most academic respondents reported that their PRCs tried to ensure that community committee representatives provided input to the core research via informal and formal processes. Some of these processes included making sure that community committee representatives served as internal peer reviewers and that they were present throughout the institutional review board process. One respondent noted that the academic institution required researchers to inform community partners of any new projects under consideration before any such work could begin. Respondents also said that quarterly meetings took place as needed to keep community committee members informed about challenges to the core research project.

Some academic respondents noted that community committee representatives were active on research teams and present at all executive committee meetings, which were attended by all the PRC subcommittees' chairs or leaders. A few academic respondents also described holding formal meetings with the community committee representatives to review, revise, or update research objectives as well as to plan specific activities associated with each objective.

Community Committee Respondents

Like the academic respondents, most community committee respondents reported a high level of community committee involvement in the core research process except during data analysis. Most community committee respondents thought that the desire and commitment to be involved could be attributed to interest in the research project and concern that the intervention is implemented to their approval.

A couple of respondents said that community representatives were involved in developing and implementing the research; developing survey tools and materials; interpreting and disseminating data; and, to a much lesser extent, data analysis.

Key Partner Participation in Core Research (Academic Interview Respondents—Interview Guide 2)

Academic Respondents

The evaluation team asked academics about the involvement of PRCs' main partners, other than the community committee, in core research. Some respondents said their key partners contributed important resources to implementing the core research. These partners included community-based organizations, faith-based organizations, academia, health departments, schools, not-for-profit organizations, and hospitals. Members of these groups may or may not have served on the community committee, but some key partners contributed more to the core research than most community committee representatives.

Some respondents reported that key partners, specifically those not serving on a community committee, provided logistical support for a research project. Most respondents stated that key partners provided staff, resources, and technical skills related to producing materials (e.g., CD-ROMs, videos). Also, key partners acted as liaisons between the academic institution and the community, by relaying changes in the community that could affect the core research. One respondent commented that key partners worked solely behind the scenes as advisors and silent supporters of the mission and objectives of the research project. One respondent did not characterize any of the partners as key, saying instead that all partners played different and valuable roles on different committees and at different points in the research process.

Academic and Community Partners Engaging in CBPR

To conduct CBPR, academics and community members need to communicate about research projects. Challenges and conflicts can arise when working through concepts such as scientific rigor, community expectations, research timelines, and university-community history. This section describes the PRCs' experiences in balancing these issues.

Group Processes That Help or Hinder the Partnership (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

The academic respondents described challenges and conflicts for academic–community committee partnerships related to core research projects. A few respondents said the most difficult partnership challenges were related to research, specifically the nature and logistics of the work.

A couple of respondents noted that challenges occurred when core research project objectives might not be realized during the funding cycle. One respondent remarked,

> How do we get the funding agencies to realize that…we're working hard here, even though it doesn't look like there is anything that's been done yet?

Another respondent said that although the partners were five years into the funding cycle they had just begun working on the core research because of changes to the research topic and objectives. A couple of respondents noted that research progress was challenged when partners disagreed about the research products or surveys slated for distribution in the community.

For most academic respondents, the most difficult challenges or conflicts were interpersonal. Some academic respondents described or alluded to interpersonal challenges related to ethnicity or race and due to an unintentional lack of cultural sensitivity on the part of academic members. As one respondent stated,

> I think most of the conflicts...tend to be interpersonal—the hardest ones tend to be interpersonal. I think some of them…tend to be ethnic, racial related, a lack of sensitivity sometimes. And it's not maliciousness…it's an insidious kind of being unaware and insensitive.

Most academic respondents described the following facilitators: meeting frequently and having an agenda to address challenges and concerns, being patient, and insisting that a community representative be present at every executive or administrative committee meeting to ensure the involvement of multiple people in decision-making throughout the process.

When asked what methods were used to reach consensus and make decisions, some academic participants mentioned reviewing the bylaws of the PRC and community committee with all partners and meeting with all constituents to develop a strategy that considered all perspectives. Most academic respondents also mentioned the need to meet frequently and address conflicts or challenges as they occurred. One academic respondent stated,

> …we've gone through conflicts before, [and] one of the things we realize is [that] face time is so critical. …if there are conflicts or disagreements…one of the methods of resolving that is to spend more time in the community, to spend more time talking about our ideas to help each other understand where we're coming from.

Moreover, a few respondents reported that their respective partnerships operated on a consensus model and that, therefore, resolving conflict was a responsibility shared by the directors, program facilitators, community committee members, and the community liaison. However, most respondents said that the PRC director was often ultimately responsible for trying to resolve issues, challenges, or conflicts.

Community Committee Respondents

For most community committee respondents, most of the challenges or conflicts around core research projects were related to cultural differences. The partners had to acknowledge and overcome the differences between the academic culture and the community culture. Some community committee respondents said community partners had difficulty moving beyond their perception that the academic institutions seemed distanced from the community. One respondent offered,

> I think that the universities in the beginning have certain aloofness…so you have to get through that. [Community representatives] needed the university to give up its being aloof and be welcoming to the community…and [for] the community committee…to be willing to hang in there and make it happen because if we had said "oh, they're too aloof," and we walked away, then [we] would both be losers. The community would [lose] university resources, programs, and educational opportunities…the university would lose…enriching their lives, enriching their programs, [and] the enrichment [of] knowing another group of people can give to the work that [they] do.

Also related to cultural differences, a few respondents said it took time to address and alleviate the community's distrust of research or even the mere mention of the word.

Other difficulties described by community committee respondents were related to factors beyond the researchers' or community partners' control. One respondent noted the difficulty of working with schools in a community where governmental politics affected the demographics and retention of the research population. For example, while conducting a study, a policy change resulted in some children from the project's study population being bused to different counties. The change affected the human and fiscal resources needed for the research. A couple of respondents described a challenge related to staffing in the community because of location (e.g., distance, rural setting), and a couple of other respondents noted difficulty tapping into the research population during specific times of the year (e.g., holidays).

Most respondents said that facilitators to working with universities included being open to learning from and about partners and being willing to change an approach slightly to meet everyone's needs. All respondents noted the following facilitators: increasing the number of informal meetings; sharing personal experiences; developing additional methods and modes for communication; and maintaining flexibility regarding activities, such as changing surveys, products, research protocols, or agendas. One respondent said that to help facilitate relationships, the partners developed an orientation packet describing the history and progress of the partnership and distributed it to people new to the project, especially academics.

Community committee respondents also described some methods used to reach consensus and make decisions, including bringing people on all sides of an issue together to discuss and address the problem in an open forum. Other methods included reviewing guidelines to ensure that the decision-making processes were clearly delineated and appealing to a board of directors who made decisions and brought the group to agreement.

Most respondents said that their partnerships operated on a top-down model, in which the PRC director was ultimately responsible for resolving issues, challenges, or conflicts. However, a few respondents said that, to resolve conflict, subcommittees were the first to provide recommendations to the full community committee. The community committee then would take the recommendations to a meeting with the academic partners at which all members would be present.

Some respondents stated that the party primarily responsible for resolving conflicts depended on the problem; as one respondent said,

> I think if it's an issue that has to do with the science…then there's no question that…our principal investigator and our deputy director…guide our process. But if the issue is more related to something with the research and the gathering of the [data], we pretty much offer our own ideas for how to resolve the issues and then work that out with the [academic partners].

Another person said that community committee members tended to work with the lead person on the intervention (not the PRC director) in addressing conflicts during small working group sessions. This person noted,

> It's interesting though, when we end up at…an advisory meeting and the director is there, we tend to go to the director [to resolve conflicts]. But I'd say more of the day-to-day work is the lead person that we're meeting with.

A few respondents were hesitant to characterize their difficulties or challenges as conflicts because they felt that conflict was too strong of a word. One respondent stated,

> I think everybody's goal [is] the same, but I don't think everybody agrees on how to get there.

Discussing Scientific Rigor with Community Partners (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

Academic respondents were asked whether and how the partners had discussed the need for scientific rigor in the core research. Most respondents stated that the topic had been discussed, especially to ensure that appropriate methods were used to carry out the research. These discussions usually occurred over a series of meetings or retreats. One academic representative reported benefits of discussions:

> I think we have learned through discussion around research…why/how it can be valuable to design core research proposals…together. That definitely had an obvious and immediate positive impact. In our case…you design it with [the community], explaining the rigor, the need for it, explaining case-controlled design, for example. It is an opportunity to educate on research design. And so, that's worked very well.

A couple of respondents noted that the academics sometimes needed a creative research design to facilitate a process that would soon benefit the community while maintaining the rigor of the research. One respondent noted that as a result of discussions on scientific rigor, the academics realized the benefit of engaging community partners throughout the research process to avoid the need to revamp the research design, content, and language of products used in the community. Another respondent noted the importance of,

> Thinking about how you do research and in as rigorous a way as possible, while also maintaining the integrity of what the community cares about….

One respondent noted tension between academic and community partners when the community did not accept the need for a control group and forced the academics to consider alternatives. The community did not want people to receive nothing for their involvement in a study, no matter the reason. According to one respondent, academic partners must think of ways to think creatively about comparison groups.

Community Committee Respondents

Most community committee respondents said that their PRCs had discussed scientific rigor (either formally or informally) in addressing the approach to the core research projects. One respondent remarked,

> I think the PRC has been clear about the guidelines they have to follow…they're real aggressive about that, being true to the evaluation process [and] the guidelines they have to operate in. And I think they've done a much better job of explaining that so that partners can understand what [is] needed.

A couple of respondents commented that a fair amount of this discussion occurred during the early stages in the research process, such as during the design of the study. One respondent shared the following:

> In the [community committee] meetings, there are university updates…going over the research tool, why certain things are asked a certain way, what they're using in getting it started. And as there have been suggestions that have come up at inappropriate times, to change the tool, that's been brought to the table and…they explain why changes are not going to be made at this time.

Some respondents said that to maintain scientific rigor, academic partners had put forth the effort to involve the community in every step of the research process by getting feedback and openly sharing information. The representatives said they preferred to be involved in this way, rather than having the academic representatives implement all or parts of the study and then seek community members' feedback afterward.

Learning Through Community Involvement in Research (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

All academic respondents said both academic and community partners learned something as they engaged in the research together. Most respondents reported that the academic members learned, and continue to learn, how to talk about research in the community without offending community members or calling to mind negative historical associations related to research in underserved communities. A few respondents noted that they learned what it truly meant to be participatory. One respondent stated,

> We've learned how to better involve the community in all steps of the process, from kind of talking through research design to talking through…the instrumentation and getting community input on that too…. We're not just interested in getting an academic paper and publishing...we really are…wanting to help build the resources and the capacity of the community.

A few respondents commented on the importance of acknowledging the presence, impact, and role of racial issues, subtle racism, and historical factors in research. Individual respondents stated that academic partners learned how to keep research rigorous while honoring community concerns and interests; that effective and frequent communication facilitates trust and understanding; to be aware of, and sensitive to, other cultural experiences and perspectives; and to enhance the involvement of the community throughout the research process. One respondent learned about time:

> I think I've learned a little bit about the idea that maybe we need to go a little slower sometimes…but especially when you are interacting with people who are different than you on [many] different levels.

Most academic respondents believed that the community had learned about and learned to accept the academic culture, the research process, and how the research products could benefit the community. A few respondents noted that the community saw academic researchers who were committed to improving the health and development of the community. One academic respondent stated that the community partners learned how to take advantage of the resources of the academic institution by contributing community skills and resources that benefited the institution. Some academic respondents believed the community and its constituents enhanced their self-efficacy, confidence, and voice within the partnership.

Community Committee Respondents

All community committee respondents stated that both community and academic partners learned throughout the research process. Most of these respondents spoke of cultural exchange between the parties. As one respondent described,

> It's a different world…they're urban, we're rural…it is different… even as it comes to food…. There were times where we did a meeting in our community… and they served bagels, and [some community] people had never eaten bagels before. Bagels. And those are things that we would never get to experience if it hadn't been for a reason to get together.

Most respondents believed the academic partners learned about interpersonal and cultural factors. The academics learned to be receptive to collaboration with community groups, to be open to input (e.g., revising research tools to suit community needs), and to value the community's experiences and perspectives as valid and integral to enhancing the applicability and scientific rigor of the research. One respondent said that saying, "I am challenging the process and not the personalities," was a way to approach collaboration to facilitate learning between community and academic partners.

According to a few respondents, community representatives learned that the researchers were committed to improving the health and development of the community. For example, one respondent stated,

> The community has learned that everybody who is in a university isn't a stuffed shirt…I like to think that the people at the university and some of the other partners have learned to be more welcoming of the opportunity to partner with community groups. You can get to have a working relationship with…institutions in your community that [have] resources to offer the community…so it's a win-win situation.

A few respondents also said community representatives learned that patience is the key to seeing research through to completion—that research takes time and is fundamentally about relationships. The respondents also remarked that community representatives noticed how communities benefited from capacity-building efforts. One respondent stated that members now take a more confident, self-efficacious role in the early stages of the research, and this respondent viewed this change as a direct result of the exchange of information between the academic and community partners. Respondents also said they learned to leverage community resources in return for resources of the academic institution and to appreciate that research can positively affect the community.

Community Involvement in the PRCs' Research Over Time

Changes in Core Research Due to Community Involvement (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

The evaluators asked academic respondents to describe how core research changed over time because of the community's involvement. Most respondents reported that their access to the research population had increased, and some noted that the research was more beneficial and translatable to the community. Some respondents said the research was more community-driven and less academically driven. Most academic representatives described community involvement in the core research as highly participatory, scientifically rigorous, and often driven by the community and supported by the academic institution.

Community Committee Respondents

Some community committee respondents said that the partners had to make changes to initial data collection instruments because they were too long, the questions were too broad, or some of the wording was inappropriate for the study population. A couple of other respondents who worked in schools noted that they had to eliminate some measures from a survey that "started some uproar" in the community. A couple of respondents said they could not answer this question because the core research project was just beginning.

Evolution of Community Involvement in the PRCs' Research (Academic and Community Committee Interview Respondents—Interview Guides 2 and 3)

Academic Respondents

Most academic respondents reported an overall increase in community involvement in various research endeavors over time. A few respondents described community involvement as having become more participatory, hands-on, and equal to the involvement of the academic partners. A few academic respondents noted that the community had taken on more self-directed, autonomous roles throughout the research process. One respondent noted that,

> Some projects are driven by the community and [the academics] just help them. So it's… their idea and we just help them develop an evaluation plan, and so then they are more involved than we are.

When asked about the reason for the change in community involvement, a couple of respondents stated that it was the academics' need to make the research relevant and acceptable to the community and the community's desire to be included. A few respondents stated that encouraging community members to provide input and to take on particular roles (e.g., by hiring them as health advocates or data collectors) also increased community involvement. One academic

respondent stated that the community's insistence on becoming a full partner contributed to the increase in involvement. According to this respondent, the community members learned to use their skills, resources, and experiences to take advantage of the resources of the academic institution.

According to a few respondents, the increase in community involvement could also be attributed to the amount of time spent building relationships and rapport between the academic and community partners. One respondent said the change was originally driven by the community, and then the academic institution began to recognize the benefit of community involvement in research. Another respondent commented on the benefits community involvement can bring to the university and the researchers:

> [Academics] understand there's value in giving back to the community for the university. And they also understand the value that it helps bring in other grant money and eventually publications are happening, and we are on the map in other ways because of it.

Most academic respondents also noted that the increase in involvement was due to increased community confidence in the community members' own skills, abilities, and capacities. Only one respondent stated that the change in community involvement was driven primarily by the academic institution.

All academic respondents indicated that the level of community involvement was determined by the type of research or when it was conducted. One respondent said the community members tended to become more involved when they were the ones primarily running a project (with some academic institution assistance) such as developing an evaluation plan or analyzing data. A couple of respondents stated that community involvement depended on where the project was in the research process; for example, one respondent said that the community was more involved during recruitment and survey design than during analysis and report writing.

Another academic respondent noted that the community wanted to be involved in intervention research and activities that occurred in the community instead of analytic aspects of research, such as quantitative analysis. A few respondents also reported that community partners tended to be more welcoming of, and therefore more involved in, research when a needed health service was provided while the research was conducted (e.g., offering a type of free health care along with taking blood samples for research data). One respondent noted that the community became less involved during secondary analysis of large national data sets. The reason offered was that such research did not require intense involvement from the community, whereas ongoing research occurring locally required community members to be active.

Academic respondents noted that the community tended to be more involved in research when they could see the immediate benefits of the intervention or program, such as identifiable changes in the community. One respondent stated,

> [The communities] understand and appreciate the need for data and evidence-based work… but…what motivates them is that they want to be involved in creating a better community.

Most academic respondents reported that the academics' commitment to involving the community in research had increased, and they described this as a positive change. A couple of respondents noted that increasing communication and building trust helped mediate initial clashes between academic and community cultures. One such culture clash mentioned by some of the academic respondents was that of timing and deadlines. For example, one respondent shared the following:

> In the university culture in which we operate, when it takes a long time to get some of this [community-based work] done, that's inconsistent with us having to crank out publications and do our research.

This academic respondent indicated that community members expected researchers to set aside enough time to keep the community partners actively involved throughout the project, irrespective of deadlines.

Another respondent noted that some academics were initially afraid of interacting with the community. Once they got over their fear and began working with community members, however, their appreciation for the community's contributions increased. Thus, because of an increase in the learning that had occurred for the academic partners, they remained steadfast in their commitment to including the community in research.

Community Committee Respondents

Most community committee respondents reported an increase in involvement over time and described the research as an ongoing, collaborative process. According to a few respondents, the increased involvement could be attributed to the amount of time spent facilitating trust between the partners as well as enhancing the community's understanding of the benefits and processes of research. One respondent said,

> We had a lot of that in the beginning…from the days of distrust, [us asking] 'You're going to do research? What kind of research? What kind of questions are you asking and who are you giving it to?' But then we got to know that the questions were…not information that would identify anyone or that it was not something designed to be negative….

Most respondents also shared the sentiment of one respondent, who stated,

> I think that the participation on the part of the community has increased…. We went from sort of being spoon-fed information to being full partners…. Full participation meant not just looking at and commenting on a program that's designed or a research project that is already designed, but actually making input into…them.

Some community committee respondents noted that community involvement was dependent on where the project was in the research process. A few respondents noted that their communities wanted to be involved when they could have direct input into the intervention strategies selected and how the research was implemented. One respondent said his community representatives tended to be more involved when they assumed full responsibility for significant tasks in the research process.

Most community committee respondents described a positive change: an increase in the academics' commitment to involving the community in research. A couple of respondents also noted that increased communication and trust-building helped to enhance and nurture the academic commitment to involving the community in core research activities.

Perceived Benefits and Challenges Associated With Being in the PRC Network, as Viewed by Academic Representatives (Interview Guide 4)

Benefits of Being in the PRC Network

Academic respondents unanimously described their PRCs' participation in the national PRC network as a benefit. Almost all respondents agreed that PRCs' collaboration and interaction with each other—both across centers and disciplines—was a vital aspect of the national partnership. The benefit respondents most often cited was the pooling of expertise. In some cases, the sharing of expertise was described as filling specific gaps on core or other research projects, as explained by one respondent:

> … we have a collaboration with a study that's a three-[PRC] study…and we're covering a broad range of risk factors for kids. And so, our [PRC] doesn't have expertise in every area, but we're collaborating with two other [PRCs]. And so, within the three [PRCs], that covers the areas of expertise.

Other respondents described a knowledge base through which the PRC network supports and advances the field of prevention research. One respondent referred to the PRC network as a "national brain trust":

> …academia is an information-based enterprise, and this access to a national brain trust… facilitates good work, the adoption of best practices, and exchange of innovations that we all find very helpful. I certainly do.

Respondents also cited practical advantages to participation in the PRC network. Most respondents discussed the benefits of collaboration on research grants, professional networking opportunities—especially through participation in the thematic research networks, and access to different structural or organizational models from which to draw. With regard to this last benefit, one respondent noted,

> The difficulty in developing…a PRC within a school of public health is that we frequently don't have good models for how to structure the administrative processes and/or administrative organization. So, another benefit is understanding…how other PRCs are operating and what issues they deal with and how they address them.

This respondent, from a comparatively recently funded PRC, also mentioned the benefit of being able to turn to the PRC network for the experience and expertise of older PRCs that had dealt with issues similar to its issues. Some respondents also made this point with regard to models for working with communities, noting that the way other centers conducted CBPR and worked with community partners served as examples. One respondent thought that partnership examples were one of the most valuable aspects of involvement in the national network:

One of the greatest things that happens is just our regular gatherings where you find out what people are doing in detail and see how they're working with their community partners, and you just get a lot of ideas about different ways of working with your community partners, of developing projects, of implementing things, disseminating things.

Respondents saw the PRC network's funding mechanism as an advantage, noting that CBPR could be a slow and difficult process and that very few funders reliably supported this type of research. A few respondents saw the PRC network's 5-year funding cycle as recognition and

understanding of CBPR. One respondent went further to say that it was precisely the PRC Program office's understanding of the importance and nature of CBPR that enabled the PRCs to conduct this type of research, noting that the long-term core funding facilitated the development of partnerships between research centers and their communities. The long-term funding helped create an environment in which communities could have confidence that researchers would be with them on a long-term basis and an environment in which researchers could focus on the community rather than having to find funding every one or two years and then move to a new project or community.

A few respondents noted that an additional benefit of participation in the national program was the status gained for their centers from their association with the PRC network. These respondents said that membership in the PRC network afforded them some measure of validation for the type of research they conduct.

Challenges of Being in the PRC Network

The challenge most frequently expressed was the administrative aspects associated with being a PRC. Most respondents said the reporting requirements related to the PRC information system and their attempts to comply with a "one size fits all" standard were difficult. A few respondents noted, however, that the requirements were not unexpected, acknowledging that "all money comes with some strings attached."

Respondents also described the challenge of insufficient funding. Most respondents thought that their core awards were inadequate to realistically meet the expectations of the funding announcement. A few respondents noted that funding had not kept pace with inflation, nor had it matched the amount of funding originally intended for individual PRCs. Respondents believed that these perceived shortages could disproportionately affect PRCs that could not effectively attract funds beyond the core funding (i.e., through special interest projects or other external grants) and that such shortages were particularly challenging to PRCs that did not have sufficient infrastructure or institutional support to compete with other PRCs for additional funding. One respondent said that these perceived shortages seemed to have posed a challenge to obtaining additional funding and increasing capacity; this had been difficult for the PRC to overcome.

A related issue mentioned by respondents from new PRCs was initial mistrust of them by PRCs who saw their addition as a challenge to the overall availability of funds. However, these respondents said that mistrust quickly subsided once the new PRCs became integrated into the network and effectively became "part of the family."

Two other funding-related challenges cited by a couple of respondents included insufficient funds to take full advantage of networking opportunities within the PRC network and insufficient personnel resources for administrative support.

Respondents also noted that some challenges went hand in hand with benefits—particularly collaboration among the PRCs. Some respondents talked about the operational challenges and hazards of cross-PRC collaboration; trying to convene groups or facilitate long-distance communication could be cumbersome and inefficient, especially for the thematic research networks. One respondent recommended increased efforts and support to facilitate communication across the network. Although they highlighted collaboration and communication as challenges, most respondents said that they still viewed these areas as benefits.

Benefits of and Challenges to Core Research

Respondents did not differentiate much between benefits to their PRCs from participation in the PRC network and benefits to their core research. However, the few respondents who did mention benefits specific to their core research emphasized the following: collaboration among PRCs, access to outside expertise that directly benefited the core research, and the sharing of best practices among PRCs on both methodology and subject matter.

A few respondents said that funding for their core research simply would not exist were it not for the PRC Program and that the program's emphasis on funding innovative CBPR gave researchers the opportunity to pursue topics and methods that would otherwise be hard to get funded.

Isolation was the challenge to the core research most commonly cited. Some respondents stated that their core research was isolated from other work being done across the PRC network and that they were, therefore, unable to learn from others about their subject matter, population, or methodology. Respondents also found a lack of resources for getting assistance from outside experts or advisors. One respondent described the difficulties faced in working with the community and thought that the core research suffered from a lack of guidance or even official guidelines on how to engage a particular community. Questions that arose from this experience included what to do when community goals and the goals of the CDC differed and how to report potentially sensitive or disconcerting data to community partners, such as negative evaluation results.

Another challenge that a few respondents mentioned was trying to balance core research needs with other activities resulting from engagement in the PRC network. Some respondents said that participation in networking and collaborative activities (such as thematic research networks, SIPs, meetings, travel, or reporting) sometimes drew resources and attention away from the core research.

One respondent described struggling with the impression that CBPR was perceived and applied differently across PRCs and was still a work in progress. In the words of this respondent,

> I think the single thing that does stand out is the core research project is…the flagship venture of each PRC, and therefore most recognizable as a representation of what we stand for. And what we stand for is community-based participatory research, [therefore] the criteria defining CBPR becomes extremely important there. And one of the challenges in applying those criteria is that they must be embraced by this very diverse national network. And frankly, those defining criteria for the very things PRCs are supposed to be about are still a work in progress.

Benefits of and Challenges to Individual Researchers

Most respondents said that the PRC network gave them opportunities for professional development, including strengthening their research skills and widening their experience through collaboration with other researchers and PRCs.

A couple of respondents said their involvement in the PRC network increased their understanding of public health, how other academic institutions and public health institutions operated, and ultimately, how they and their research contributions fit into the field.

A few respondents talked about professional advancement by their involvement in PRC activities and the benefit of acquiring knowledge, expertise, leadership experience, and learning of potential funding sources. For example, one respondent shared,

> [That] working with folks at CDC…and the missions that the PRC Program office has taken on…are so consistent with my professional values…I can't even put it into words. And it's impacted my skill level, but also I would say confidence. It's had a big impact on my confidence as a leader. Working with, being mentored by some wonderful leaders has…impacted me more in terms of leadership than it has in terms of research.

A couple of respondents noted that the PRC Program funds pilot research that otherwise might not get funded. Respondents mentioned that pilot studies allowed researchers to pursue new subject areas, publish journal articles, and develop relationships with communities. One respondent referred to the core research as a springboard for his or her career. A few respondents described the personal gratification they gained from working with communities, and they noted how valuable it was to them as researchers to stay true to their own core principles and beliefs.

In terms of challenges, respondents consistently identified the administrative and bureaucratic burdens associated with being a PRC as the biggest challenge. Most respondents thought that their time and energy were disproportionately consumed by these responsibilities, which prevented them, in some cases, from being more involved in rigorous research. One respondent described his role as having changed from conducting research to attending meetings and becoming more or less an administrator. A few respondents also found that the time spent on collaborative activities with other PRCs was overly burdensome and compromised their ability to focus on their own research.

Some respondents reported that they did not perceive any challenges to their involvement in the PRC network.

Benefits of and Challenges to Academic Institutions

Academic respondents made several observations regarding the benefits to academic institutions involved in the PRC network. Specifically, several respondents mentioned the tension that has existed between academic institutions (or researchers) and communities, and they commented that housing a PRC provided an opportunity to address and alleviate that tension and to establish or rebuild trust that might have been damaged in the past. As one respondent observed,

> The PRC network is a great tangible manifestation of that commitment to atone for the transgressions of the past. So, it provides infrastructure to do the right thing and the productive thing, to really advance the agenda of public health as well as to embrace the new philosophy about what public health research should look like.

Many respondents saw the PRCs as an advantage to the academic institutions' public relations. They stated that being part of the PRC network provided their academic institution with some prestige. The PRC also provided opportunities to work with communities and an avenue to contribute to the "new age of public health" and the development of the participatory research field.

Some respondents stated that housing a PRC generally provided an additional source of revenue to an academic institution through the leveraging and procurement of additional research dollars. A few respondents noted that academic institutions and schools of public health benefited from the enhanced capacity to conduct CBPR and from the connections established with other PRCs.

Respondents mentioned a few potential challenges to academic institutions housing a PRC, including the potential financial burden that a PRC might impose. This burden could stem from insufficient funding by the PRC Program, a lack of PRC capacity to obtain additional funding,

or administrative costs. In some cases, an academic institution was expected to "pick up the slack" and help fund the PRC when a funding shortage occurred or when the PRC was burdened by administrative duties, reporting, and budgeting. Thus, the challenges were to both the academic institution and the PRC.

Benefits of and Challenges to the Development of Additional Research

All respondents reported that the PRC network contributed to the development of additional research. They thought that the PRC Program was important to the development of new models of CBPR by allowing for both long-term projects and pilot research and by encouraging new research through thematic research networks and other SIPs. One respondent described the PRCs as having a friendly, competitive atmosphere that increased the expectation for innovation and quality research.

The only challenge to additional research reported related to funding shortages. A few respondents mentioned that limited funds did not allow for continuing some PRC research beyond the pilot phase. However, most respondents could not think of any ways in which the development of additional research was hindered by the PRC network, and in fact, they thought that such development was helped by the network.

Perceived Benefits and Challenges Associated With Being in the PRC Network and in the PRC's National Community Committee, as Viewed by Community Committee Respondents (Interview Guide 5)

All respondents for this topic are members of the PRC's National Community Committee (NCC).

Degree of Interaction

The respondents reported varying degrees of interaction with other PRCs. A couple of the respondents said they had interacted with only one other PRC each year, and some respondents reported interacting in some capacity with all 33 PRCs each year. The types of interaction included electronic communication (e.g., e-mail, information on PRCs' Web sites), conference calls, and in-person meetings. Some respondents reported participating in monthly or quarterly meetings of the NCC either in person or via conference calls. A few respondents discussed attending retreats and regional functions. Affiliation with the NCC resulted in most respondents participating in NCC-related activities and attending annual meetings. Some respondents reported that participation in the NCC entailed frequent interaction with other PRCs.

Benefits of and Challenges to the Community of Being in the PRC Network

All respondents thought that they benefited from and learned from their participation in the PRC network. Some respondents stated that they developed an awareness and understanding of the mission of the PRC Program. A couple of respondents gained an appreciation for the effort required to build partnerships and educate a community about health issues. Respondents also said that the opportunity to learn from and about the backgrounds and experiences of others in the PRC network was important. As one respondent noted,

> Just being able to appreciate the differences and really getting to the place where you understand that your way is not the only way, and not necessarily the best way, is important.

Respondents enjoyed learning about CBPR and thought that learning about participatory research was an important piece of knowledge acquired through their involvement in the PRC network.

One community respondent said:

> I've gained a better understanding of CBPR and a better understanding of my role as a community member in helping to shape and mold what that community participatory research looks like in my community.

One respondent said that CBPR would not continue without a CDC mandate to use the methodology.

Respondents thought that communities benefited from the PRCs' research agendas and the dissemination of products developed through the PRCs' research projects. A few respondents said the most common community benefit was the relationships established between the PRC network and the communities. Another benefit expressed by a few respondents was the exposure to research, the research process, and the exchange of ideas between researchers and community members. One respondent, talking about the NCC, stated,

> When new members come…they're not quite sure what's happening or what [the NCC] is all about. But as they become more and more familiar with it, they can see the benefit of being a part of this group, not only with their own project but also the chance to have input to what's happening on a national level.

A couple of respondents talked about the ability to leverage the community's resources for the needs of the academic institution and vice versa. A couple of respondents also noted the benefit of an increased capacity to obtain grant funds for other community health needs as a result of interacting with PRC researchers.

Regarding challenges, one respondent said a challenge for the community was attempting to stay involved and have time to devote to PRC-related issues and projects. Another challenge was the scientific language used by the researchers. A couple of the respondents described the learning curve necessary to understand the research process, and one described how communicating about research at a level understood by the community members could be challenging.

> A challenge is the complexity of the research and how do we bring that down to sort of a talking point for the community.

Benefits of and Challenges to Community Involvement in PRC Research

Community members described benefits to the research projects from involvement in the PRC network. A few respondents noted that being able to bring resources from the community to the projects was helpful. One example shared was of a community representative who was able to work with an employer to submit a grant to support some of the PRC's research. Another benefit noted was the exchange of ideas between researchers and practitioners.

One respondent stated there were no challenges to the research as a result of community involvement, while some respondents said that funding was a major challenge. One respondent thought that funding had not caught up with the practice of CBPR, and another thought that not enough money was available for special trainings or community projects.

A few respondents noted that trust was a challenge particularly when community members are unable to see benefits from participation due to the lack of immediate change. One community respondent explained,

I think the challenges are in people understanding what they're doing, that it's not going to take away from the community, that it's not going to hurt the community.

A few community respondents stated that a challenge was uncertainty about whether the resources should reside with the academic institution or the community. A few respondents stated that obtaining researchers' buy-in to work collaboratively with community representatives presented a challenge.

Overall, community representatives believed that community involvement in the PRC network made a substantial positive change to the research projects. Most respondents mentioned that the most important changes stemmed from informing the researchers about what is important to the community. A couple of respondents thought that changes to the research projects included focusing on CBPR, increasing the engagement and involvement of community members, and sharing information with and learning from other PRCs.

Benefits of and Challenges to Community Involvement in the Development of Additional Research

Most respondents stated that additional research was developed at their PRCs as a result of community involvement in the PRC network. A few respondents mentioned that because community representatives were affiliated with the PRC, they were eligible to apply for SIPs.

A few respondents did not think that involvement in the PRC network hindered development of additional research. However, one respondent said that the background work and needs assessments required to propose a research project would be extensive and time-consuming and could hinder the desire to develop additional research. A few respondents discussed the community demand for research and the resulting difficulty of responding to all the community's needs. One respondent stated,

> At the end of the day, the reality is [that] the high demand for the research to be done and disseminated back into the community cannot be met.

Community respondents talked about how additional research was beneficial to the community. They stated that the increase in community research generated partnerships, grant opportunities, and other research projects. Community representatives noted the development of additional research also provided more opportunities to learn from the work that other PRCs were involved in and increased resource-sharing between the community and the PRC.

Benefits of and Challenges to Community Involvement in Community Relationships

Relationship-building between community members and the PRC researchers is an ongoing effort. All respondents thought that the relationships between their communities and academic institutions strengthened over time as a result of the community's involvement in the PRC network. Most respondents said the greatest change in regard to relationship-building was the continued development of an open and involved relationship among the academic members of the PRC, the community representatives, and the community as a whole. One respondent said,

> It really is like a family. You ask about their grandkids. You know about the rest of their lives aside from work.

Other specific examples of benefits the respondents shared included expanded partnerships with a collaborative perspective, improved relationships, and enhanced trust.

Regarding challenges, one respondent mentioned that the initial lack of trust between the partners made it difficult to work together. A few respondents said that keeping motivated throughout the research process is sometimes difficult, particularly when progress is slow. Another challenge stated was negotiating dissemination strategies between community representatives and researchers.

Benefits of and Challenges to Involvement in the National Community Committee

One benefit of NCC involvement expressed by a few respondents was the comfortable relationships established among the NCC representatives and the PRC researchers. A few community representatives noted valuing the evaluation and research abilities of the researchers. A couple of respondents spoke about the opportunity for growth both personally and for their community organizations. Some respondents cited the opportunity to gain knowledge of national research and then pass those opportunities on to their communities.

For most respondents, the challenges of NCC involvement concerned funding—particularly trying to take advantage of funding opportunities given that they thought they lacked knowledge of how to successfully pursue research funding. Other challenges expressed by some respondents were dealing with competing priorities, meeting communication demands, and keeping people engaged in multiple, time-consuming projects. One respondent did not see any challenges as a result of being involved in the NCC.

The respondents also discussed benefits experienced by other people in the community as a result of the NCC's work. A couple of respondents mentioned access to nationwide research, training, networks, and collaborative activities. Other benefits to the community included the building of relationships and the leveraging of PRC resources. The challenges mentioned included rewording scientific information so that community members could understand it. They also expressed the challenge to communities of staying involved in the research of PRCs—both in terms of interest and time.

Academic–Community Partner Interaction Study

Discussion

This section discusses five overarching topics identified through the study: (1) community committees and guidelines, (2) learning from the process of CBPR, and (3) benefits and challenges of being in the PRC network.

Community Committees and Guidelines

- PRCs varied greatly by the number of community committees they had and by individual committees' structure, role, and level of involvement in PRC activities. Some community committees included subcommittees, and others represented a perspective other than that of the partner community (e.g., some PRCs have scientific advisory committees).
- The evaluators did not find a consistent level of detail on the committees other than the overall community committees, which did not allow a full description and comparison of all committees across PRCs.
- Agreed-upon fundamental principles, processes, and objectives were important to developing and nurturing successful partnerships.[3] Nearly all PRCs had formal, written guidelines for collaboration with their overall community committee.
    - Communication procedures, voting procedures, term commitments, and meeting attendance requirements were the most common elements included in the guidelines reviewed, and were present in 46% to 65% of the guidelines.
    - Some guidelines also included information on the timing and duration of meetings, the structures in place to facilitate feedback by members, the persons expected to be part of the partnership or committee, and an election process for committee chairs. Other topics included roles and responsibilities, the way leadership is established, and the timing of information dissemination.
    - The partners frequently had community meetings during which guidelines or principles of interaction were reviewed or discussed, which suggests that open communication was a priority. This priority was cited as a key principle by the Community-Campus Partnerships for Health board of directors.[4]
    - Guidelines, either explicit or implicit, were part of an organization's structure or culture.[5] The PRCs' community partnerships were at different stages of development, and new community committee representatives did not always know about formal, explicit guidelines describing how they could provide input to the core research. Nevertheless, these respondents reported understanding how to give input and make decisions related to the core projects.

Recommendations

Macro has four main recommendations concerning community committees:

- Further evaluation, particularly an in-depth examination across all PRCs, would be needed to fully describe the breadth, structure, and role of committees at all PRCs. Such a review would provide in-depth information on the activities in which the committees are involved, the mechanisms or structures in place to facilitate involvement, and the level of involvement in activities.

- PRCs should share committee guidelines with new community and academic partners as part of an orientation process.
- The PRC Program office, in collaboration with the PRCs and the National Community Committee, could develop recommendations for PRCs on elements to include in the guidelines that established PRCs find helpful.
- PRCs should be encouraged to share their guidelines with each other to facilitate learning from each other's experience.

Learning from the Process of CBPR

This study explored various aspects and processes of CBPR at PRCs that facilitated research. Issues included scientific rigor, culture and context, trust, capacities of communities in CBPR, and changing perspectives over time.

Research and Scientific Rigor

Respondents reported that time spent explaining research terms and concepts as well as steps of the research process was important to community committee members' understanding of the project and to enhancing their capacity to provide meaningful input.

- Community members who were informed and involved throughout the research process tended to understand the importance of and necessity for certain steps and generally support the research protocol and agenda. They could convey this information to the broad community in a meaningful way.
- Community committee members tended to provide the most input when the study was an intervention design because they could contribute to survey development, data collection, and dissemination of results, and they could see the results of their efforts.
- Some discussions of scientific rigor were difficult when community committee representatives did not have experience with research design and evaluation. The discussions included explanation of research terminology, such as randomized trial and research incentives. Respondents said that some research practices, such as not offering an intervention to participants in a control group, were unacceptable to community members and that researchers had to consider alternatives.
- These discussions were time consuming and, at some PRCs, could contribute to delay in the development and implementation of research designs that are scientifically rigorous and agreeable to all partners. Such delays could contribute to a project not to be completed within a funding cycle.
- Discussion should occur early in the partnership, while objectives are being laid out, so that progress will not be impeded and various pitfalls can be avoided.

Culture and Context

Both the community and academic representatives must understand each other's culture to facilitate the research.

- Interpersonal relationships helped both community and academic partners understand and appreciate each other's culture and ways of getting things done, but they could also be a source of tension, conflict, or challenge.
- Community committee respondents described needing to acknowledge and overcome the differences between the university culture and the community culture. They learned about the research process, that presenting data and publishing results were necessary to research, and that the results could benefit their community.
- Both community and academic respondents said that informal meetings, frequent communication, and sharing personal experiences contributed to the partnership, particularly in repairing damage from past research in the community.

Trust

Both academic and community respondents repeatedly mentioned trust as important to the partnerships and agreed that building trust requires time and dedication.

- Respondents said frequent meetings and other opportunities to interact helped build trust.
- Respondents said that community committees facilitated trust between the overall community and the researchers.
- Academic respondents reported their appreciation for the PRC Program's 5-year funding cycles, which afforded them the time to build the trust essential to successful CBPR.

Capacities of Communities in CBPR

Both academic and community respondents described similar resources and assets that community members brought to the PRC and the research project, including

- Facilitating communication between academics and community groups.
- Facilitating trust or buy-in of the research agenda as it relates to the community-at-large.
- Providing critical input on the development of culturally sensitive and relevant materials.

Community members also provide practical resources to the PRC, including venues for meetings, organizational skills, and personal or unpaid time to be involved in research activities.

Changing Perspectives Over Time

Most academic and community respondents noted that in the beginning of their partnerships, community representatives were skeptical of community research.

- Over time, community members' understanding of research and scientific rigor increased, which reduced their initial frustration or fear of research.
- Ongoing discussions, opportunities for input and collaboration, and interactions with the researchers helped community representatives become open to and comfortable with research, working with academics, and the length of time quality research takes.
- Researchers gained an appreciation for the value of community input to research.

Recommendations

- Academic partners need to be patient when explaining the terminology and steps of the research process to community committee representatives or the community at large.
- Academic and community partners must discuss their respective cultures at the beginning of the study design and remain open-minded about the importance of scientific rigor throughout the research process.
- Community partners should be involved early and frequently in the research to help ensure it proceeds in a timely manner.
- The academic and community partners are in a unique position to share lessons learned. Future activities could include developing tools on how to educate community partners on research concepts and academics on cultural sensitivity.

Benefits and Challenges of Being in the PRC Network

Both researchers and community committee members discussed benefits and challenges to being part of the PRC Program.

Benefits

- Both academic and community committee respondents believed that membership elevated the status of the centers and communities among their peers.
- Academic respondents appreciated the PRC Program's commitment to CBPR and their own ability to collaborate with researchers across the PRC network.
- Community committee respondents appreciated their increased knowledge about research and improved capacity to pursue other resources from academic institutions.

Challenges

- Academic respondents were challenged by administrative aspects associated with being a PRC and inadequate core funding awards for realistically meeting the expectations of the funding announcement. Funding issues could limit PRCs' ability to fully implement the research or other activities originally planned or desired, take full advantage of PRC networking opportunities (such as working with other PRCs on SIPs), or hire sufficient personnel.
- Community committee respondents were challenged by the level of commitment required. For many community members, involvement was voluntary and above and beyond their actual jobs. In many cases, members received little or no compensation for their service.

Recommendations

Academic respondents provided suggestions for the PRC Program office on funding guidance, development of tools, and increased opportunities for networking across the PRCs. Macro agrees with these suggestions.

- Provide guidance related to funding and allocation of resources, specifically on the percentage of the award that might be applied toward administrative aspects of the PRCs' work.
- Develop tools or templates to help PRCs become efficient with administrative tasks such as entering data into the IS.

- Establish sessions during national meetings that emphasize interaction and the exchange of ideas among participants (as opposed to presentations) as well as other mechanisms for sharing throughout the year, such as Web conferences.
- Support or develop mechanisms that facilitate communication across the network.

Community respondents also provided a suggestion for the PRC Program:

- Have activities that increase the opportunities for community members to interact across PRCs and collaborate on grants.

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Core Research Study

Results

This study focused on answering the question, "What are the varieties, goals, and contextual factors of the core prevention research being conducted by the PRCs?" Results from this study provide some data to answer the following overarching evaluation question: What does the PRC Program contribute to public health practice and policy by conducting prevention research to develop and disseminate effective and translatable public health interventions? PRC Program indicator data will supplement the data reported here for this question.

The PRC Program's main focus is the core prevention research that each PRC conducts during its five-year funding cycle. This study assessed the 2004-2009 core research portfolio through looking at all PRCs' core research projects as follows: project selection, research type and methods, relationship to *The Guide to Community Preventive Services*[1] (The Community Guide) and ecological model, implementation, and integration and sustainability. Findings result from information garnered in a document review. Appendix D lists data sources used to answer each question for this study.

As described in the methods, the 33 PRCs conduct 55 core research projects. One primary core research project from each PRC was selected for this study. For most data tables in this study, the unit of observation is a core project, but for some, it is a component or phase of a core project, and the total number of units may be more than 33. Definitions for research terms used in this study are provided in Appendix I.

Project Selection

Selecting the core project

The evaluator identified groups of people involved in determining each PRC's core research project (Table R-22). At all 33 PRCs, faculty, staff, and community partners (including each PRC's community committee) helped define the core research projects. Additional partners were involved at all but one PRC. Most PRCs (24) included two or more additional partners in the process of determining their core project.

Table R-22. Groups of People Involved in Determining the Core Research Project, by Number of PRCs (N = 33)

Group	Number
PRC faculty or staff	33
Community partners (including PRCs' community committees)	33
Additional partners	32
• Neighborhood	14
• City	14
• County	12
• Regional	23
• State	13
• National	3
• University	14

Source: Fiscal year 2007 PRC IS and fiscal year 2004 PRC applications.

The evaluator also identified data sources considered in making the decision to focus on a particular research project. All PRCs reviewed community assessments and national and state health goals. Twenty-nine (88%) PRCs used specific data sources, such The Community Guide or local compilations, to guide their decision. Eight (24%) PRCs explicitly stated that their research is intended to fill a gap in the scientific literature.

Thirty-two (97%) PRCs explained the links between their PRC's health priorities, its research agenda, and the choice of core research projects. One PRC without an explanation changed its core research project two years into the funding cycle.

Relationship of core research to previous research

All PRCs built on existing research to develop their core research projects, and most (88%) did so by adding components to the research (Table R-23). Twenty-two PRCs based their current core research project on research previously conducted by their own PRC, while seven PRCs based theirs on other research. Core research projects at four PRCs are based on both their own and other research.

Some core research projects may have added several new components; for example, study populations in a different county, an additional method of data collection or analysis, or an added setting such as a worksite. Overall, 18 PRCs added one new component, six PRCs added two, four PRCs added three, and one PRC added nine. Four PRCs did not add any (data not shown).

Table R-23. Number of PRCs Whose Core Research Project Built on Previous Research by Component Type Added (N = 33)

Component type	Own PRC's research (22 PRCs)	Other research (7 PRCs)	Both (4 PRCs)	Total (33 PRCs)
Geographic location	5	3	3	11
Method	5	2	1	8
Racial or ethnic group	4	2	1	7
Intervention component	3	1	2	6
Goal or outcome variable	3	1	2	6
Setting	3	2	3	8
Age group	1	1	1	3
Other	7	3	1	11

Source: Fiscal year 2004 PRC applications.

Research Type and Methods

The core research projects assessed a wide variety of outcomes (Table R-24). Nearly all (31) projects assessed health behaviors, 20 assessed attitudes, and 20 assessed skills. More than one-third of core research projects measured environmental outcomes. While 88% of core projects assessed more than one outcome, nearly half (48%) addressed four or more outcomes.

Table R-24. Number of PRC Core Research Projects by Primary Outcomes (N = 33)

Primary outcomes	Number of core projects
Health behaviors	31
Attitudes	20
Skills	20
Knowledge	15
Environmental change	12
Morbidity	12
Policy change	4
Mortality	1

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Research type

Regarding the type of core research, 21 (64%) PRCs conducted intervention research only and 4 (12%) conducted determinant research only (Table R-25). Eight PRCs identified more than one type of research for their core research projects and included a combination of determinant, intervention, dissemination, or evaluation research. None of the PRCs' core research was dissemination only.

Table R-25. Number of PRCs by Type of Core Research Project (N = 33)

Type of research	Number of PRCs
Determinant	4
Intervention	21
Determinant + Intervention	1
Intervention + Dissemination	2
Intervention + Evaluation	1
Determinant + Intervention + Dissemination	4

Source: Fiscal year 2007 PRC IS and fiscal year 2004 PRC applications.

Research design

The research design for core research projects varied across PRCs; 25 PRCs used a single design, and eight (24%) PRCs used multiple designs, depending on the phase or component of the project. Of the eight PRCs that used multiple designs, seven used two designs, and one used four designs, resulting in 43 designs across PRCs (Table R-26). Of the 43 designs, 21 were quasi-experimental. Four of eight randomized trials were group randomized trials.

Table R-26. Number of PRC Core Research Project Phases or Components, by Research Design (N = 43)

Research design	Number of phases or components
Case control	1
Case studies or case series	1
Cohort or longitudinal	4
Cross-sectional	2
Quasi-experimental with control or comparison group	14
Quasi-experimental without control or comparison group	7
Randomized trial	8
Surveillance-based secondary studies	1
Other	5

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Sampling strategies

Nearly half (48%) of the 33 PRCs used more than one type of sampling strategy, which reflected different phases or components of the core projects. The 33 core research projects used 52 sampling strategies.

Table R-27. Number of PRC Core Research Project Phases or Components by Sampling Strategy (N = 52)

Research design	Number
Convenience	19
Purposive	15
Random*	13
Clustered randomization	2
Complete census	1

*Includes random-digit-dial telephone surveys.
Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Most (82%) PRCs provided documentation of sample size power calculations. Of the six PRCs that did not, three explained that the sample size is too small, and three did not provide an explanation.

Participant recruitment

PRCs used many strategies to recruit participants for core research projects, often using multiple strategies for the same project (Table R-28). The most common recruitment strategy was to collaborate with the PRC's community committee, which alerted community networks, organizations, or individuals about participating in core research projects. Strategies such as word of mouth and community event presentations were used at 18 (55%) and 16 (48%) PRCs, respectively. Recruitment at training events was less often used by the PRCs.

Table R-28. Number of PRCs by Recruitment Strategies for Core Research Projects (N = 33)

Strategy	Number
Help from PRC community committee	21
Posters, flyers, or newsletters	18
Word of mouth	18
Community event presentations	16
Local newspaper articles	12
Recruited by community health workers	12
Contacted the school system to recruit students	8
Radio or cable television public service announcements	8
Web sites	8
Partners' (other than the PRC Community Committee) mailing and contact lists	8
Contacted health care providers or clinics to recruit patients	7
Roster of all individuals in the community	6
Training events	4

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Data collection methods

Nearly all PRCs (97%) used mixed data collection methods for their core research projects (Table R-29), and one PRC collected quantitative data only. Nearly all (94%) PRCs used three or more data collection methods in their core projects, and 17 PRCs used five or more data collection methods (data not shown).

Table R-29. Number of PRCs by Data Collection Method Used in Core Research Projects (N = 33)

Method	Number
Survey instruments	32
Participant and key informant interviews	25
Focus groups	19
Participant, community, organization, or school observations	16
Anthropometric measures (e.g., height and weight)	15
Document review	8
Medical assessments	8
Participants' self-tracking	7
Captured and reported electronically	6
Computer-assisted interviews	5
Geographic information system (GIS)	5
Cognitive interviews	3
Content analysis	2
Other	10

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Development of survey instrument questions

PRCs used a wide variety of survey instruments in their core research projects, including standard surveys such as those from the Behavioral Risk Factor Surveillance System (BRFSS) and validated scales developed by other researchers. However, PRCs may have worked with populations or on health issues for which standard surveys had not been designed. In those situations, PRCs modified or adapted existing surveys (or individual questions) or created a new survey entirely. In addition, PRCs that collected data through surveys may have used more than one survey instrument for their core project.

For the 32 PRCs that collected data through surveys, the evaluator assessed whether survey questions were newly developed, standard, or modified, or used a combination of all types (Table R-30).

Table R-30. Number of PRCs by Type of Questions Used in Core Research Survey Instruments (N = 32)

Type of question	Number
Newly developed by PRC	2
Standard	2
Modified by PRC	1
Newly developed + Standard	6
Newly developed + Modified	3
Standard + Modified	10
Newly developed + Standard + Modified	8

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Field-testing, pilot-testing, and reliability and validity testing of survey instruments

Of the 32 PRCs that collected data through survey instruments, 28 field- or pilot-tested their instruments. Of the four PRCs that did not pilot test their survey instruments, two reported that such testing was not applicable (one used a standard survey, and one used a survey previously developed by an external partner for the community). The other two PRCs did not provide any information about testing of their survey instruments.

Of the 32 PRCs that collected data through survey instruments, 19 reported reliability data and 19 reported validity data. Although these are not the same 19 PRCs, some overlap occurs between the two groups. One PRC reported not testing the instrument for reliability. Two PRCs reported that reliability and validity testing were not applicable for their instruments. Ten PRCs did not provide any information related to reliability testing, and 11 PRCs did not provide any information related to validity testing.

Relationship to *The Guide to Community Preventive Services* and the Ecological Model

Relationship to The Community Guide

The Community Guide summarizes what is known about the effectiveness, economic efficiency, and feasibility of certain interventions designed to promote community health and prevent disease.[1] Intervention strategies within particular health topics are designated as "Recommended," "Insufficient Evidence," or "Recommend Against." Systematic reviews have been completed for 16 health topics (e.g., cancer, diabetes, nutrition, physical activity, mental health, worksite) and others are planned for the future.

Of the 33 core research projects, 29 were interventions, and most of the projects had multiple components, resulting in a total of 39 intervention research components. Each component was assessed to determine its correspondence to The Community Guide topics and recommendations (Table R-31). Nine intervention components (reflecting eight PRCs) addressed issues designated by The Community Guide as "Research questions for further study" (data not shown). No PRCs conducted intervention research listed as "Recommend Against."

Table R-31. Number of PRC Intervention Research Components Applied to The Community Guide Designations (N = 39)

Designation	Number
Recommended	9
Insufficient evidence	4
Recommend against	0
Topic area addressed but intervention strategy not reviewed	13
Review in progress	4
Review planned	4
Topic area not addressed	5

Source: Fiscal year 2004 PRC applications, fiscal year 2006 PRC progress reports, and www.thecommunityguide.org.

Relationship to the ecological model

The ecological model is a theoretical framework that allows for analysis of social environments across multiple levels and contexts. Urie Bronfenbrenner's *Ecological Systems Theory* (based on the individual, the environment, and the interactions between them) has four factors or levels of influence: intercultural, community, organizational, and individual.[2] McLeroy and colleagues adapted Bronfenbrenner's ecological model for health promotion programs.[3]

The evaluator condensed McLeroy's five-level ecological model into three levels for analysis; intrapersonal and interpersonal factors were collapsed into the first level (Individual), and institutional and community factors were collapsed into the second level (Group); public policy is the third level (Policy and Environmental). Fourteen PRCs addressed both Individual and Group levels in their core research projects, and 13 PRCs addressed all three levels in their core projects.

Table R-32. Number of Core Research Projects by Level of an Ecological Model Addressed (N = 33)

Level	Number
Individual	3
Group	2
Policy and Environmental	0
Individual + Group	14
Individual + Policy and Environmental	1
Group + Policy and Environmental	0
Individual + Group + Policy and Environmental	13

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, and PRC site visit reports.

Implementation of Core Research Projects

Core research projects were assessed to determine if each PRC's project was similar in scope to the project originally proposed in its application. At the time of data abstraction, the PRCs were three years into their five-year funding cycle. Most PRCs were conducting either the project proposed (48%) or a very similar one (42%). Three PRCs were not conducting the proposed project. One PRC changed its core project due to changing priorities in the community; one changed because it was not approved by its community's institutional review board (IRB); and the other PRC changed after a natural disaster affected the original research community.

A review of the 2004 applications demonstrated that 30 PRCs had included a proposed timeline and three PRCs did not. At three years, the most recent annual and interim reports and project

officers' information about activities accomplished provided an updated status for each project. A comparison between the proposed timeline and activities accomplished by mid-fiscal year 2007 demonstrated that 18 projects were on schedule and 12 were not. One-third of the projects not on schedule were delayed to extend the recruitment process to ensure the research projects had enough participants. Other reasons for a project's delay included but were not limited to staff transition, natural disasters (e.g., flooding and hurricanes), and expansion of the scope of the core project.

The status of each core project was also assessed to determine completion of project activities (Table R-33). All PRCs had identified their core project's focus; drafted the research design; assessed health needs and issues of the study population; specified the issues, priorities, study population, and study design; and obtained community partner support for the design. Thirty-two PRCs had developed the intervention or project, study instruments, and other study materials. The interventions had been tested and implemented for 26 of 29 intervention projects. Data collection was in progress for 30 projects as was data analysis for 19 of these projects. One-third of the PRCs had reported and shared information and data about their core research.

Table R-33. Number of PRCs that Completed Specific Core Research Project Activities (N = 33)

Project activity	Number
Identification of focus	33
Draft research design	33
Assessment of health needs or issues	33
Specify issues, priorities, study population, and study design	33
Obtain additional community partner support for the study design, after initial approval	33
Develop the intervention or project, instruments, and other materials	32
Test intervention and monitor intervention delivery (for the 29 intervention research projects)	26
Data collection	30
Data analysis	19
Reporting about research	11

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, PRC site visit reports, and PRC project officers.

Integration and Sustainability

For the 29 PRCs conducting an intervention, the evaluator assessed plans for sustaining and integrating the intervention into the community. Some evidence of sustainability and integration activities came from document review; however, most PRCs provided this information during the data validation process. The evaluator looked for descriptions of activities such as "training to increase community support," "working toward sustaining environmental and policy changes over time," and "supporting our community committee in finding resources to sustain research activities in the future." Sixteen PRCs use a community health worker (CHW) model (also called community health advisor or *promotora* model) for their intervention research projects. The CHW model is particularly effective when working with low-income, vulnerable, traditionally underserved populations, and may increase a community's ability to sustain an intervention.[4] Thirteen PRCs provided training on grant writing for community committee members or intervention participants, 12 provided evaluation training, and nine provided training on program planning. All training was specific to the core project.

Table R-34. Number of PRCs Showing Evidence of Integration and Sustainability of the Intervention, by Type of Activity (N = 29)

Activity	Number
Use a CHW model	16
Provide training on grant writing	13
Provide training on evaluation	12
Provide training on program planning	9
Provide training on leadership and capacity	6
Create a toolkit or manual for intervention implementation	5
Provide training on media advocacy	5
Build community networks and coalitions	3
Improve policy or environment	3

Source: Fiscal year 2004 PRC applications, fiscal year 2008 PRC work plans, fiscal year 2006 PRC progress reports, PRC site visit reports, and PRC project officers.

Document review showed that 24 of 33 PRCs either had acquired or had plans to acquire additional funding to expand core research in the future. Of the 24 PRCs, 4 had plans to acquire additional funding, 15 had already done so, and 5 had both acquired funding and had plans to acquire more. No information about additional funds for core research was available for nine PRCs.

Core Research Study

Discussion

Highlights

This section summarizes key findings related to selection of the core research project, research project design and methods, project relationship to The Community Guide and the ecological model, and implementation of the research project.

Project Selection

- At all 33 PRCs, community partners (including each PRC's community committee) helped determine the core research topics. The PRCs used data from community assessments and other local data sources to inform the core research focus.

Design and Methods

- The community-based participatory approach to research has been described by some scientists as not as scientifically rigorous as other research approaches.[5] However, 20 of the 29 PRCs that conducted intervention research used either randomized trials—a design that can provide the most compelling evidence of a cause-effect relationship—or quasi-experimental studies using control groups—the next most rigorous design in terms of ability to deal with bias.[6]

- Twenty-one PRCS used quasi-experimental designs and conducted intervention research either alone or in combination with another research type. To fully assess efficacy, intervention research necessitates a rigorous design. Of these 21 PRCs, 14 used control or comparison groups and 7 did not. Intervention research without the use of control or comparison groups may not be as rigorous as those with controls; however, the lack of controls may be appropriate in some research projects. For example, nearly half of the seven projects without control or comparison groups were pilot studies and could include control or comparison groups in a full-scale intervention project.

- Nearly all (97%) PRCs' core research projects used both quantitative and qualitative methods. Use of data from both types of methods produces strong, defensible results.[7] Qualitative data can help support, explain, and frame quantitative data.

- Of the 32 PRCs that used survey instruments to collect data, 22 modified survey questions or entire survey instruments, usually to make the surveys applicable to a partner community. Such modification, particularly when influenced by a CBPR orientation, may enhance research quality because the measures are most appropriate for a particular population, setting, or community.[5]

- Almost all PRCs field- or pilot-tested survey instruments; over half (19) reported reliability or validity testing. When working with diverse communities, tailored instruments (with respect to nuances of language, meaning, and experiences) are essential to ensure that the data are a valid representation of a particular community.[8] Also, when standard instruments are tailored or modified, the original reliability and validity may not remain for the modified instruments, and it is important to re-establish both reliability and validity.[7]

- The most common method of recruiting participants for PRC core research projects was collaboration with the PRC community committee, whose members tapped community groups and organizations. Similarly, other PRC partners helped recruit participants by providing access to mailing lists, contact lists, and community links.

- At 16 PRCs, community members were involved in research as community health workers (CHWs). These CHWs participated in delivering interventions and share responsibility for recruiting participants and collecting data. The CHW model is particularly effective when working with low-income, vulnerable, traditionally underserved populations. This model also may increase a community's ability to sustain an intervention.[4]

Relationship to The Guide to Community Preventive Services and the Ecological Model

- Of the nine PRCs whose intervention components were recommended by The Community Guide, all core projects built on research from that PRC. Eight of the nine added at least one new component. The new components (e.g., applying the intervention strategy to a new racial or ethnic group, or adding a new setting, goal, or outcome variable to the intervention) helped test the recommended strategy in new situations and added to the evidence base. However, one PRC that conducted research recommended by The Community Guide did not add any new components and may have been repeating strategies already known to be effective.
- Thirteen PRCs were testing intervention strategies that were not part of a systematic review for a topic of The Community Guide. This finding suggests that some PRCs were expanding the knowledge and evidence base for public health interventions by testing new approaches.
- Four additional PRCs were testing strategies designated as having insufficient evidence, which suggests that some PRCs were actively working to fill known gaps in the research literature on effective strategies.
- All the above points, along with the fact that no PRC was testing a strategy recommended against, suggest the PRCs were testing interventions in new settings or new ways.
- Almost half (14) of PRCs included policy and environmental factors in their core research projects. These PRCs recognized the importance of these factors' influence on health and behavior.

Implementation

- Most PRCs' core projects were the same or very similar to the projects originally proposed and difficulty in participant recruitment was one of the main reasons for a core project delay. The five-year funding cycle helped PRCs have adequate time to engage the community in the research process and be flexible in implementing the research.
- All 29 PRCs that conduct interventions engaged in activities to promote sustainability and integration of research, most often through training for community members. The additional four PRCs that conducted determinant research engaged in sustainability and integration activities as well.

Recommendations

Macro draws the following recommendations from the core research study results:

- PRCs should be encouraged to use instruments that have demonstrated reliability and validity or to assess the reliability and validity of the instruments for their study population.
- Future evaluation might examine the level of community involvement in all core research projects, including the determination of research project topics, the role of CHWs, and research participant recruitment.
- Future evaluation could review the relationship of PRC research to new systematic reviews conducted for The Community Guide.
- Because this study evaluated the status of core research projects at three years into the 5-year funding cycle, the study did not assess research results. Future evaluation should explore results—for example, the extent to which the results are enriched by being culturally relevant to the research community, and the strength of the results in relationship to research designs.

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Training, Technical Assistance, and Mentoring With Community Partners Study

Results

This study focused on answering the question, "What is the diversity of PRC training,[*] technical assistance (TA),[†] and mentoring[‡] with communities and partners?" Results from this study provide some data to answer the following overarching evaluation question: What does the PRC Program contribute to public health practice and policy by training the public health workforce? PRC Program indicator data will supplement these results.

As part of the Congressional mandate for the PRC Program, PRCs are expected to conduct training and provide technical assistance and mentoring for researchers, public health practitioners, students, and community members. A catalog of PRCs' training programs (http://www.cdc.gov/prc/training/index.htm) shows that activities include training for large national programs, training for local health departments or community-based organizations, or training tied to research activities (such as training for community health advisors). In addition, PRCs often provide technical expertise to local organizations and community members as they implement their own prevention research. Further, communities and public health partners provide training and technical assistance to academics at PRCs to help make their research practice-based and community-oriented.

Data from this study is the result of telephone interviews with selected PRCs (Appendix F, Interview Guides 6 and 7). Throughout both sets of interviews, the respondents had difficulty distinguishing between training and TA when responding to questions. The interviewer provided definitions both at the beginning of the interviews and during interviews as needed.

Findings that answer the study question are provided in the following two sections:

- Diversity of PRCs' training with their community partners
- Diversity of PRCs' TA with their community partners

[*] Training is defined as transferring knowledge, skills, and competencies to people who are in a position to use what they have learned

[†] Technical assistance is defined as providing "guidance, support, and expertise to an identified group or agency as the group works toward a desired outcome."[2]

[‡] Mentoring is defined as "a sustained relationship and partnership between two people, one of whom is more experienced than the other in which the 'more experienced person' or mentor offers encouragement and support to increase the self-confidence and skills of the 'less experienced person' or mentee."[3]

Diversity of PRC Training With Community Partners

Identifying and Reaching the Audience for Training

Recipients of Training

Training recipients included a wide range of persons and groups. One respondent trained medical residents, graduate students, and fellows, and another trained health professionals, faculty, and community partners. One respondent indicated that training is for the community committee and Youth Advisory Board members and collaborators "who might be directly involved in a research project with us."

Location of Audiences

A few respondents noted that their PRCs' training reached local, national, and international audiences. Some respondents reported the audience was located in a geographic area such as a county, city, state, or region within the United States, and one respondent reported that the audience was located throughout 26 family housing developments.

Nature of and Rationale for Training

Types of Training

The types of training varied by PRC and by intended audience. Two respondents reported training public health practitioners; one PRC was about to implement evidenced-based public health training and the other is implementing health literacy training. Additionally, one respondent reported training the PRC's community advisory network on new adolescent health research; two PRCs reported training their community committee on evaluation, and one of these PRC respondents also trained the community committee on conducting needs assessments, obtaining funding, and conducting community surveys. Other types of training reported by individual PRCs included training community residents on lifestyle modifications and healthy living practices, training older volunteers to help their peers develop and maintain physical activity, and training staff on conducting focus groups.

Purpose of the Training

Some respondents indicated that the purpose of training was skill-building. One PRC reported,

> The purpose of training our [community committee] representatives…is to give them a broader background in behavioral and social science applications for their community organizations and for improving the health and well-being of residents.

Other purposes identified by individual respondents included training people to be interventionists, training residents to be community health advocate leaders, and disseminating "scientific-based evidence about risks and protective factors" for adolescents.

Identification of the Training Need

Respondents identified training needs in two main ways: (1) by conducting surveys to assess training needs and (2) by responding to requests for training. For example, one respondent noted,

> Working with our [community committee], we have done some surveys with them to assess their training needs and have periodic and ongoing training with them. We have also assessed the training needs of our local staff here….We have done a survey across the country with other PRCs and then also with the [National Association of] Chronic Disease Directors.

Another respondent commented,

> …occasionally, we receive requests from people to support them in meeting specific training needs. Another [method] is that we have a large number of partners and…we will be working on projects [together] and the training needs become apparent…, and then the third way that we become aware of these training needs is through direct assessment of people that we work with. We want to do a project and we recognize that additional training will be real helpful to them.

Frequency of Training Activity

Training activities are both ongoing and newly developed. For example, one respondent stated,

> We have been training in evidence-based public health and other areas for quite some time. [But] this core research project has brought a new set of training activities to our program.

Similarly, another respondent stated,

> We have a 30 year history of training and educational activity in our host division. But when the PRC came on the scene, it really provided a fresh impetus for bringing new people into the process and conducting new research and developing new perspectives.

Community Partner Engagement in Training

Involvement of Community Partners

Some respondents noted that community partners became involved in training activities by volunteering or by being solicited. One respondent stated,

> Our [community committee] members generally are very active and engaged and put themselves forward pretty quickly to help with different projects.

A couple of respondents noted that community partners were solicited for training activities via flyers, advertising, and polling at meetings to determine topics and logistics.

Role of Community Partners

All respondents indicated variety in community partners' roles in developing, providing, or evaluating training activities. Partners were involved in train-the-trainer activities, conceptualizing training, providing funding and space, actively involving community advisors at forums, developing and implementing training curricula, recruiting participants, identifying topical areas at community committee meetings with PRC researchers, and establishing training goals and objectives. One respondent noted,

> It is just an iterative process [community partners' involvement in establishing goals and objectives]. They might come up with the idea [for training], and we help flesh it out, or we might come up with the idea and they help us flesh it out.

Enhancement of Community and PRC Capacity through Training

Skill-Building for Community Partners

Across the nine PRCs, there was wide variation in PRC training for building skills and knowledge among community partners. Both the PRCs' core research focus and the community committees' training needs influenced the types of training. Respondents from two PRCs mentioned training related to grant writing, and two other PRCs provided training on motivational interviewing. Other skill-based trainings performed by individual PRCs included developing social marketing plans, conducting focus groups, and conducting community assessments.

Skill-Building for PRC Staff

Some respondents indicated that the community implemented trainings to increase or develop skills among PRC staff. Trainings included developing "culturally sensitive, culturally competent health education curricula [for] the schools," understanding the roles of staff at community organizations, and working with local communities. As a follow-up, these respondents were asked how PRC staff identified and conveyed their training needs to the community. One respondent mentioned that PRC staff identified their needs informally, while another respondent indicated that PRC staff identified their training needs through surveys and needs assessments.

Institutional Value of PRC Training Activities

Most respondents mentioned institutional support and value for their training. For example, one respondent stated,

> It's our research function to see the extent to which these training activities and this…model is effective…it's really the heart of what we're doing. So this isn't peripheral for us, it's central.

Another respondent pointed out that the PRC was featured in the dean's report and the university's annual research report in "two articles about the [PRC's]…health advocacy program," which included training.

Most respondents said they had adequate space for training at their institutions and that community partners provided space as well. Some respondents said they had someone designated to provide training, some noted that staff were hired to provide training as needed, and some noted that need for training staff still existed at the time of the interview.

A couple of respondents pointed out that their institution's support for training activities included rewarding faculty through honoraria. A few respondents said training activities were not valued for promotion and tenure. For example, one responded stated,

> Training doesn't help you much. In fact, I was told to do less of it.

However, a couple of respondents indicated that training activities were supported for promotion and tenure. One respondent stated,

I can tell you with great confidence that the teaching and the training and the community engaged work we do, including the research, is the kind of thing that we completely document on our dossiers and our CVs. It is the kind of thing that is reviewed and rated and ranked by those appointment, promotion, and tenure committees.

Training Activities and PRC Research

Most respondents stated that the PRC's training activities were related to the PRC's research. One respondent noted,

> We not only integrate training into our research programs but we integrate our research programs back into the training mission….About four or five courses…have content…directly related to the work of [our] PRC.

Another respondent mentioned,

> …a lot of our [PRC's] research involves community-based work…with intervention implementation or training related to policy development.

However, the PRCs also received training requests from community groups related to their interests rather than a particular research project. For example, one respondent provided training on childhood obesity even though it did not directly relate to a PRC research project. Another respondent noted that the PRC's training activities were not related to the PRC's research at the time of interview; however, data from the center's core research would be used in collaboration with the community committee to determine future training activities.

Respondents who answered yes to the question, "Are your PRC's training activities related to your PRC's research?" were asked: "Are these trainings only for PRC staff or are these trainings related to your PRC research for community partners?" Most respondents commented that the training activities included PRC staff and community partners. One respondent noted,

> There are two arms to our trainings. The training we do for our community partners…and then there are thousands and thousands of people we train in [name of topic] and it's not part of our research.

Another respondent stated,

> We haven't yet invited our community partners to monthly seminars in which researchers discuss their current research projects.

Diversity of PRC TA With Community Partners

Process of Delivering TA

Identification of TA Needs and Goals

Respondents shared various ways to identify TA needs and goals of their communities. A couple of respondents indicated a formalized process, such as an assessment of health priority needs and community committee members' completion of a survey. A couple of respondents mentioned that identification of TA needs and goals was informal, based on requests. Those requests were verbal (phone requests) or written (e-mail) and, as one respondent noted,

> …generally, if [community partners] need things, we just provide it for them.

Mechanisms to Track or Monitor TA

A couple of respondents mentioned using databases to track or monitor TA. A couple of other respondents reported that TA was tracked via a written report. One respondent indicated,

> We document our TA efforts as well as evaluate them through our evaluation plan.

A few respondents noted that not all TA is tracked. For example, one respondent said a grid was used to track TA; however, it was not detailed and some things such as phone calls for TA "get lost." Another respondent called the question about tracking and monitoring TA "complicated" because the center had many projects. A couple of respondents noted that their PRCs had no formal mechanism to track or monitor TA.

Evaluation of TA

Some respondents reported that the PRC conducted informal evaluation of TA, one respondent reported formal evaluation, and one respondent indicated that no evaluation takes place. Methods for evaluation included looking at success as measured by additional grants or additional service in the community, checking with the community to see how programs were progressing, doing workshop evaluations, soliciting anecdotal reports from TA recipients, and evaluating change "on an ongoing basis." For example, one respondent stated,

> [The evaluator] kind of does an ongoing watching of the trends. Technical assistance, like anything else, it kind of comes in spurts. She just kind of notes that.

Another respondent mentioned,

> We evaluate [TA] by sending representatives out into the community to basically see how the programs are going….[S]ummary reports are written and they are included in [the] supplemental part of our interim [report] and at the end of the year reports.

Provision of TA by PRC Staff

Some respondents reported that all staff provided TA, but most respondents said that specific staff members were designated to provide TA. Types of PRC staff who provide TA included evaluation directors, research staff, community liaisons, communication staff, principal investigators, community development personnel, or as one respondent described, "anyone who has the expertise and time."

Recipients, Mechanisms, and Frequency of TA

Recipients of TA

Most respondents said they provided TA to numerous partners including individual partners, community and coalition board members, community health advisors (CHAs), nonprofit organizations, community-based organizations, and county health departments. However, one respondent reported providing TA to a specific partner only, while another mentioned only two specific partners. In addition, one respondent stated that TA recipients include people

> …involved in health promotion [and] disease prevention in the communities that we work in…for example, if the health department wanted us to [provide] technical assistance on some project.

Mechanisms to Provide TA

The most common ways to provide TA were e-mail, meetings, telephone, and published guides. A couple of respondents used reports, literature reviews, and workshops. Some respondents mentioned traveling to community committee meetings, sending materials, distributing literature, providing assistance with dissemination projects, developing publications, and in-kind support and services through planning activities.

Institutionalization of the Topic or Skill

Most respondents reported that TA took place on both routine and case-by-case bases. For example, one respondent mentioned that some TA was routinely given with ongoing grants, while other TA was provided to agencies on a case-by-case basis.

Respondents that routinely provided TA to an agency were asked if routine assistance helped institutionalize the topic or skill and thereby allowed for continuation of projects. A couple of respondents noted difficulty in institutionalizing skills acquired through TA because people at the agency moved on to new grants having new demands and that, although the organization recognized what was needed, the PRC assumed responsibility for ongoing TA. For example, one respondent stated,

> Well, [routine TA] has achieved institutionalization at that particular agency, and I guess that is why I was asking about the definition of TA. I don't think that if we stepped away from the project at this point in time that they [name of organization] would be able to maintain the same level of evaluation and data analysis. So I think there is an appreciation, and definitely the communication, for what is needed, but we are still doing the bulk of the work.

Formal Agreements

Most respondents reported that they had formal agreements in place to provide TA, while a few respondents said they had none. One respondent reported a transition from formal to informal TA within the same project; it started with a memorandum of understanding, but the agreement for continued collaboration became informal.

Types of TA

A few respondents reported that their partners knew the types of TA they could receive from the PRC—either tailored or overall support. One respondent stated that partners knew the type of TA they could receive around evidence-based strategies. Another respondent commented that their partners would not refer to their requests for assistance as TA; rather, they viewed the PRC as a resource and contacted the PRC for assistance with projects or tasks.

Frequency of TA for Community Partners

Most respondents reported a range in the amount of time the PRC provided TA to community partners. For example, one respondent indicated 4–8 hours per week, another indicated 5–20 hours per week, and another indicated at least 8 hours per day and two staff members who devoted most of their time to TA. One respondent mentioned that one staff person devoted at least 20 hours per week and other staff provided TA as needed.

Frequency of TA for PRC Staff

A few respondents provided a range or timeframe regarding the frequency with which community partners provided TA for PRC staff. One respondent indicated about five hours per week, while another respondent reported that TA occurs at least monthly to obtain input on topics such as how to design a brochure, how best to reach a specific audience, and how to help the PRC identify contacts. Another respondent mentioned not recently calling on community partners for TA.

Some respondents had difficulty quantifying an answer. A respondent mentioned,

> We are in touch with [community partners] all the time so…it is almost daily.

Another respondent commented,

> We do not quantify it that way because that is integrated as part of our jobs and responsibilities. That is just an integral part of how we do what we do.

Enhancement of Community and Institutional Capacity through TA

Topics or Skills for Community Partners

TA topics varied depending on the PRC's core research project(s) and the needs of its community partners. Most respondents provided TA on physical activity research. A few respondents provided TA related to grant writing, understanding CBPR, nutrition, and evaluation or program evaluation. A couple of respondents provided TA on policy, and a couple of respondents provided TA on skills related to needs assessments.

Topics or Skills for PRC Staff

While a couple of respondents noted there were no topics that their PRC staff or faculty received TA on from the community, most respondents did provide examples. Two respondents mentioned that their PRCs received TA on how the community wanted to see a grant designed, and two respondents reported receiving TA from their community on cultural sensitivity or cultural appropriateness. Other topics identified by individual PRCs included disaster preparedness, effective communication with partners, and community engagement.

Institutional Value of TA

Some respondents reported overall institutional support for TA. One respondent mentioned a university initiative regarding translational research in which the PRC was represented and noted,

> There is a whole section on community engagement….A part of that is a two-way communication, or a bi-directional communication, and I would say that TA is part of that.

Most respondents indicated that their institution did not highly value TA because additional staff would be required to meet TA needs. TA is contingent on resources such as funding, availability of staff, and faculty needs in other areas. One respondent commented, We have got to have the funds…we have to be able to document the funding sources for that.

However, one respondent had an optimistic viewpoint and noted,

> Instead of saying how many [faculty and staff] we added, I think the fact that we did not lose any was absolutely phenomenal….The dean is also supportive. When grants were obtained, the PRC was permitted to hire people…[despite] hiring freezes.

Most respondents indicated that their institution did not highly value TA in relation to promotion and tenure. One respondent was the only tenured faculty at the PRC and reported,

> We are pretty traditional as far as promotion and tenure…if you have an article in the [New England Journal of Medicine], that is certainly going to count more than if I would pick somebody out to do a focus group out in the community.

Another respondent pointed out that the faculty most actively involved in TA were not tenure-track faculty; however, some tenure-track faculty were involved in TA.

Most respondents mentioned that their PRCs had space and equipment for TA, and one respondent indicated access to a public relations group to use for TA if they wished.

Mentoring Relationships Resulting From TA

Most respondents reported that they had mentoring relationships with community partners, but two respondents reported no such relationship.

One respondent reported a reciprocal mentoring relationship on an organizational level with an organization that was represented on the PRC's community committee. This organization works with the PRC's core research project in areas such as grant writing, strategic planning, and evaluation. On an individual basis, a mentoring relationship existed between the PRC principal investigator and a member of the organization regarding implementation of grants. One respondent provided examples of mentoring by PRC staff, which included the director of the PRC working with a school vice-principal, a project leader working with community residents, and the respondent working with state health department staff. Another respondent reported that a PRC staff member mentored a health commissioner on program development and evaluation contracts, among other areas. Another respondent reported a three-year mentoring relationship with an intern.

Training, Technical Assistance, and Mentoring with Community Partners Study

Discussion

Highlights

- The types of training and TA activities varied widely across PRCs and by intended audience.
- The purposes of training and TA are threefold: (1) enhancing public health skills and knowledge for community partners in areas such as program evaluation, needs assessments, and grant writing; (2) enhancing public health skills and knowledge among PRC staff in areas such as cultural competency and cultural sensitivity—e.g., developing school health education curricula, understanding staff's roles at community organizations, and understanding how to work with communities; and (3) training community partners to participate in research projects, such as train-the-trainer or community health worker programs.
- Most respondents quantified training activities, but TA activities occur often and continuously, and some respondents had difficulty quantifying the frequency of TA.
- Institutions provided support for training activities but gave less value to and support for TA.
- Most respondents reported that mentoring relationships existed with communities and partners on an organizational level in areas such as strategic planning and on an individual level in areas such as implementation of grants. The duration of these relationships varied.
- Training and TA recipients included a wide range of persons, partners, and groups and collaborators such as community committee and coalition board members involved in the PRCs' research projects.
- Partner engagement in training and TA depended on the PRC's core research project and needs of community partners. Training was both offered and solicited.
- Institutionalization of skills for continuation of projects and to achieve desired outcomes present challenges for partners. Partner organizations sometimes relied heavily on the PRC's expertise due to lack of institutionalization of skills at the organization or staff moving on to new positions.

Recommendations

Macro makes several observations for future evaluation.

- Future evaluation could assess how training and TA enhance community engagement and increase community capacity.
- Future evaluation could further examine the training and TA provided by communities to academic partners.
- Future evaluation could assess community and public health practice partners' perspectives of PRC training, TA, and mentoring, including perceived benefits.
- PRCs with institutional support for training and TA activities could share how that support came about.

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Overall Discussion, Limitations, and Conclusions

This section highlights several themes across the studies, addresses the limitations of the studies, and provides overall conclusions and recommendations. All recommendations convey Macro's interpretation of the interview comments and data collected for evaluation. The recommendations are addressed largely to the PRC Program office; however, some recommendations concern the PRCs, their academic institutions, and their partners, and such distinctions are made as needed. In the final section, Macro's recommendations for future evaluation are also included.

Overall Discussion

Two overarching themes emerged from the four studies: (1) resources and support for the PRCs and (2) community engagement and research. This section provides highlights of the themes and recommendations related to them, followed by implications for the PRC Program logic model.

Resources and Support for PRCs

The CDC cooperative agreement provides core funding to support the PRCs' infrastructure, research, training, and other activities. While the initial authorization for the PRC Program in 1984 and the 1997 IOM report recommended that each PRC be funded at $1 million per year, no PRC has ever received that level of core funding. The studies provide information about the financial and other resources PRCs receive from CDC and their academic institutions. Funding challenges are also revealed.

CDC Support for PRCs

- Few funding mechanisms support the time- and labor-intensive process of CBPR. The studies demonstrate the importance of having at least five years for the funding cycle and programmatic commitment to this type of research. The program recognizes and understands the nature of PRC research by:
  - Facilitating the development of partnerships among PRCs' academic, community, and public health partners.
  - Creating an environment that increases community confidence that researchers are committed to long-term research activities and can focus on their work with the community without being preoccupied with funding.
  - Allowing the PRCs to spend time on involving the community in research design and participant recruitment.
- Support over multiple funding cycles fosters sustainability, and most PRCs expand on their previous research when developing new research projects. Sustained support allows for the continual development of relationships with communities and other partners, and enables PRCs to build their research over time.
- PRCs believe the level of annual funding is insufficient and creates challenges for high-quality participatory research. Examples of concerns are listed below:
  - Funding, in addition to that provided for basic infrastructure, is needed to engage communities in a meaningful way, provide training for community members, and provide TA on research or non-research topics.
  - Limited monetary support, combined with the time it takes for community engagement, can prolong research activities and thus delay publication of research.

- Many of the PRCs' community partners are located hours away from the centers' academic institution. Substantial resources are used to travel to the research communities, and spending time in the community is essential to building relationships and trust.
- Funds are not always available to adequately support PRCs' administrative activities. The limited funding can mean that researchers need to also manage administrative functions, interfering with the conduct of research.
- The PRCs' academic institutions may be unable to compensate for the lack of resources for core research and related activities.

Recommendations

Given the comments on support summarized above, Macro advises the following:

- Partners of the PRC Program need to advocate for support for the PRCs and for funding sufficient to cover all activities.
- The PRC Program office should recommend that PRCs have staff dedicated to administrative functions so that researchers can concentrate on their research projects.
- The PRC Program office should disseminate information explaining the importance of sustained funding to effectively conduct CBPR, and future evaluation of the PRC Program should include case studies about long-term funding.
- The PRC Program office and the program's advocates should seek to identify effective practices for working with communities and distribute these as recommendations to the PRCs and beyond.

Academic Institutional Support for PRCs

- Support from the host institution can be critical to enhancing a PRC's infrastructure and activities. In the funding announcement for the 2004–2009 funding cycle, indication of institutional commitment (e.g., provision of space and technologic resources) was one evaluation criteria. The studies demonstrated that academic institutions' support often exceeded resources for basic infrastructure but varies across PRCs. Examples of tangible and intangible institutional support for PRCs included:
  - Returned or reduced indirect cost rates, support of faculty time, and stipends for students.
  - Office space, facilities, and information technology support.
  - Acknowledgment of the PRC work with communities through academic institution communication and dissemination materials, such as an article in the school magazine.
  - Space for PRC training and TA.
- A few respondents described academic institutional support for CBPR at the PRC, such as adding a community member to the Institutional Review Board. Several other respondents discussed the benefits of the community partnership to the PRC's host institution, such as rebuilding community trust that had been damaged in the past. Overall most

respondents believed institutional support for CBPR was more in theory than in practice, with only a few respondents able to provide concrete ways their academic institutions demonstrated support for CBPR.

Recommendations

Regarding institutional support, Macro makes two recommendations.

- The PRC Program office should assess and describe the types of institutional resources and support that affect a PRC's ability to successfully implement research and other activities and reach their goals.
- The PRCs should share approaches they have used to communicate about and promote their activities within their academic institutions that have led to increased support and resources.

Community Engagement and Research

Attention to community participation in the PRC Program has evolved over time. The PRCs are now recognized as leaders in the field of CBPR and act as a resource for researchers interested in or implementing CBPR. The studies show how the PRCs and their community partners have embraced the development and practice of CBPR and suggest ways that both the PRC Program office and PRCs can further encourage and facilitate healthy, productive partnerships between academic and community partners.

Activities that Facilitate Community Engagement

Most PRCs engaged community partners in key activities and organized their center and community committee for effective community engagement. Examples include the following:

- Some PRCs had community liaisons or designated staff to coordinate community committees and community research. Having these staff may be efficient in strengthening community partnerships and coordinating community involvement in core research.
- Community committees enabled community members and partner organizations to guide a PRC and its core research project. Evaluation results indicated that one of the most common delays in the core research project resulted from difficulty recruiting study participants. Results also showed that community committees often help with this challenging aspect of research.
- Community committee guidelines provided a mutual understanding of the short- and long-term goals of the partnership and set standards for how members engage, debate, and make decisions.
- Frequent meetings provided PRC partners the opportunity to report progress and discuss needs or concerns.
- When PRCs' research, training, capacity-building, and communication activities complemented each other, working relationships between researchers and community partners could be promoted.

Recommendations

To further facilitate community engagement, Macro makes four recommendations to the PRC Program office:

- Continue to require community committees to facilitate community engagement in PRC research.
- Encourage PRCs to create or further develop formal guidelines and regularly hold meetings for community committees.
- Examine if a PRC's structure is associated with its effectiveness in community engagement.
- Share with PRCs (particularly new PRCs) examples of PRCs' structures, guidelines, and lessons learned around facilitating community engagement.

PRC Research and Community Capacity

- The studies showed that PRCs fulfilled their mandate to work with underserved and vulnerable communities, including low-income, minority, and under–educated populations, at risk for poor health outcomes.
  - PRC communities tended to be socioeconomically disadvantaged, with locations in a variety of geographic areas and variations in population size.
  - Community members often come from disadvantaged communities and brought their life experiences to the academic–community partnership. Their perspectives helped base the research in the realities of the community.
  - Vulnerable communities often had limited infrastructure and financial resources to bring to the partnership.
- The community committee members brought many assets to the research and helped do the following:
  - Build relationships with and provide access to community members.
  - Develop research tools and survey instruments.
  - Recruit research participants.
  - Influence which health priorities were selected and the type of research done in their community.
  - Develop training programs at PRCs and sometimes provide training and TA to the academic partners.
- Community members' involvement in research enhanced their abilities; many PRCs collaborated with community members to sustain community interventions.
  - Community members learned about the research process and how to develop and implement effective health promotion and disease prevention programs.
  - The PRCs provided training and TA for community members who built other community members' skills in behavioral science, social science, and public health. Skills were acquired, such as grant writing, motivational interviewing, developing social marketing plans, and conducting focus groups and community assessments.

- Many PRCs trained community members as community health workers (CHWs) who implemented the research and acted as a liaison between academia and the community. The CHWs helped accomplish research goals while building community capacity.

Recommendations

Additional recommendations from Macro are as follows:

- The PRC Program office should further investigate how PRCs build capacity in their partner communities.
- The PRC Program office also should assess the benefits of and lessons learned from implementing the CHW model in core research projects and how it relates to community capacity-building and CBPR.

Benefits and Challenges of Community Engagement to PRC Research and Researchers

- The data provide numerous examples of how community engagement in research benefits both the PRCs and the researchers.
  - Researchers and community members discussed scientific rigor and developed study designs acceptable to the community. Discussions did not appear to compromise the scientific rigor of PRC research; in fact, more than two-thirds of those PRCs conducting interventions were using research designs with control or comparison groups. These discussions also helped community members understand research and helped researchers serve the community, which could lead to increased research use.
  - Academic partners received training and TA from community members on subjects such as developing culturally competent health education curricula, understanding the roles of staff at community organizations, and working with local communities.
  - Community engagement helped strengthen existing partnerships and generated new ones for research, training, and grant opportunities.
  - Community members were an important resource, particularly for field research.
- PRCs benefited by sharing best practices among PRCs related to specific populations, research methodologies, and specific health promotion or disease prevention topics.
- Challenges to PRC researchers that resulted from working with the community included the following:
  - The time and effort needed to engage community members and learn each other's culture that impacted the timeframe within which the research could be conducted.
  - The need to overcome distrust of research and the work needed to build trust.
  - The difficulty balancing a community's desire for additional research or service with the constraints of a PRC's resources.
  - The difficulty of having regular in-person meetings with community members when communities are far from the academic institution.

Recommendations

Regarding the benefits and challenges summarized above, Macro makes the following recommendations:

- The PRC Program office should look closely at the PRCs' intervention research designs used for CBPR to assess innovation and effectiveness of the designs.
- PRCs need to allow enough time and resources to conduct background work and community needs assessment to ensure that the academic partners understand community issues and concerns before developing a research study.
- PRCs need to learn about a community's infrastructure before considering which community resources may be available and which resources the academic researchers and institution will need to provide.
- Where PRCs have selected communities a great distance from the academic institution, thoughtful planning is needed around how the researchers will establish and maintain the community relationships.

Implications for the PRC Program Logic Model

The national evaluation overall and the studies are based on the main components of the logic model for the national PRC Program (Appendix A). The logic model was first developed in 2002 and 2003. Appendix J describes how results from the studies both confirmed some elements of and informed modifications to the logic model. The 2008 revised logic model is also included in Appendix J.

Limitations

The studies provide substantial information about the characteristics of PRCs, ways in which they engage with communities, the nature of their core research projects, and training and TA activities. However, the processes used to capture these data have some limitations.

- The evaluators conducted interviews with only nine PRC academic or community representatives for each interview topic and thus the results do not necessarily represent all PRCs. However, every PRC was represented in at least one interview, and the selection criteria ensured appropriate representation of interviewees for each topic.
- The document review data represent a single point in time; however, because not all data sources cover the same time period, multiple points in time are represented in the results. In addition, the data are not causal and cannot be used to determine if certain PRC practices led to specific results.
- The 2000 U.S. Census data were the only national demographic data available for all PRC communities at the time of the report. However, 2000 demographic characteristics of some of the PRC communities are likely outdated.
- The data describe general characteristics across the PRCs and are not in-depth case studies for individual PRCs.

Conclusions

Collaborating with community partners and engaging the community are fundamental to CBPR. Basic objectives of the PRC Program are to identify community health issues, develop translatable research, and help communities adopt and sustain changes, thereby improving the lives of persons living in the research communities as well as those living in similar communities.

Even with challenging differences in culture, difficult conversations about research rigor, and fiscal and administrative limitations, the PRCs' work in the period under study reflected the mission, goals, and values of CBPR. The meetings and discussions that occurred during the research process helped both academic and community representatives understand the culture and perspective of the other, bring community realities to the research, and increase the research relevance to the community. The researchers and community members demonstrated ways to compromise with and understand each other. They also showed a commitment to CBPR, to the PRC Program, and to implementing core research that is meaningful to communities and adheres to scientific principles.

Addressing National Evaluation Questions

The studies provide data to answer aspects of the national evaluation questions, as demonstrated below:

What does the PRC Program contribute to public health practice and policy by conducting prevention research to develop and disseminate effective and translatable public health interventions?

Data from both the Core Research and the Academic-Community Partner Interaction Studies demonstrated rigorous research designs as well as community involvement in the research. Many of the core research projects built on previous research or filled gaps noted in The Community Guide and thus contributed to the public health literature and dissemination research. In addition, an outcome of many PRCs' core research projects was to change policy and environmental factors. Further, the level of community involvement appeared to be leading toward research that was directly applicable to the community and had great potential for translation from research to practice.

What does the PRC Program contribute to public health practice and policy by training the public health workforce?

The Training, Technical Assistance, and Mentoring study demonstrated that PRCs both trained and provided technical assistance to communities and public health practitioners on a broad variety of topics and skills. The data also showed that the training and TA are reciprocal; faculty and staff at PRCs are also learning from the communities and partners. Thus, the PRCs contributed to the knowledge and skills base of the public health workforce in many sectors—community, health department, and academia.

How is CBPR implemented across PRCs? How are communities and partners engaged in PRCs' activities, and how does participation build community capacity?

All four studies demonstrated that the 2004–2009 PRC core research projects reflected the PRC Program requirements for community engagement in the projects' development, implementation, and dissemination. The results provided an in-depth look at how PRCs implemented CBPR and demonstrated that academic and community partners worked hard to build relationships so that

the community could provide guidance on core research and other activities while maintaining scientific rigor. Of particular interest is that both academic and community interview respondents had some similar perceptions of learning from the community engagement process. For example, both community and academic respondents said they learned how cultural factors affected relationships and research, that communities learned how to leverage their resources in return for those of the academic institution, and that academics learned how to better involve the community. The studies also showed that structures and processes were in place to facilitate community engagement in PRC research, such as community committees, committee guidelines, and organizational structures. In addition, the studies showed that the PRC core research benefited from community capacity and that such capacity is enhanced through training, technical assistance, and involvement in PRC research.

What are the similarities and differences across PRCs concerning infrastructure, organizational factors, and how PRCs partner with communities and organizations?

The Organizational and Community Characteristics and the Academic–Community Partner Interaction Studies demonstrated that while there were differences across PRCs, there were also many similarities related to infrastructure and organization, available resources, and the ways in which PRCs worked with communities and partner organizations. For example, only three organizational models emerged; an important distinction is whether a PRC leader handled administrative functions, which helped research faculty be efficient with their time. All PRCs structured themselves to accomplish the variety of activities required by the program, often with integration and overlap of the key activities. While the overlap and emphasis varied across PRCs, most had structures in place to facilitate community engagement into research and other activities.

The studies demonstrated the importance of resources and support from the academic institution and the PRC Program to each PRC's organization. In addition, the studies showed that PRCs received support in a variety of ways and were challenged by limited resources. Of interest is the lack of concrete support for CBPR from the academic institutions, although some PRCs did identify a few specific activities of their institution to increase support for CBPR.

Use of Findings and Next Steps

The studies provide data for two main purposes: (1) accountability, so that the PRC Program and its partners can educate others about the program by using systematic evaluation data; and (2) program improvement, so the PRC Program office and the PRCs can change how the program is managed and implemented to address evaluation findings and recommendations.

Macro's recommendations from the studies fall into three categories, as organized below.

Recommendations for Future Evaluation

Infrastructure and Resources

- Assess and describe the types of institutional resources and support that affect a PRC's ability to successfully implement research and other activities and reach its goals.
- Assess how the distance from a PRC to its partner community or how working with a large or diffuse community affects the resources the PRC requires to successfully partner with the designated community.
- Clarify the representativeness of the organizational models, explore how PRCs structure themselves to engage communities and partners, and determine how the key activities relate to and support research.

- Create a Venn diagram for each PRC to help understand the similarities, differences, and benefits of different structures.
- Examine if a PRC's structure is associated with its effectiveness in community engagement.
- Assess the PRC Program indicator data and conduct additional evaluation about the types of resources (such as financial, equipment, supplies, and technical support) provided to each PRC by its academic institution to help understand both the availability and variability of resources and their effect on a PRC's budget.
- Disseminate information explaining the importance of sustained funding to effectively conduct CBPR. Future evaluation of the PRC Program should include case studies about long-term funding.

Community Characteristics

- Use 2010 census data to compare with these results in order to continually assess the racial and ethnic makeup of PRCs' communities and ensure appropriate attention to minority health issues.
- Describe the health focus of the PRCs' research across the partner communities.

Community Engagement

- Conduct an in-depth examination across all PRCs to fully describe the breadth, structure, and role of committees at all PRCs. Such a review would provide in-depth information on the activities in which the committees are involved, the mechanisms or structures in place to facilitate involvement, and the level of involvement in activities.
- Examine the level of community involvement in all core research projects, including the determination of research project topics, the role of CHWs, and the lessons learned from community assistance with research participant recruitment.
- Assess the benefits of and lessons learned from implementing the CHW model in core research projects and how the model relates to community capacity-building and CBPR.
- Explore how PRCs build capacity in their partner communities.
- Identify effective practices for working with communities and distribute these as recommendations to the PRCs and beyond.

Core Research

- Review the relationship of PRC research to new systematic reviews conducted for The Community Guide.
- Explore the results of the core research projects at the end of the five-year cycle to determine concepts such as the extent to which the results are enriched by being culturally relevant to each PRC's core research community and the strength of the results in relationship to research designs.
- Examine the PRCs' intervention research designs used for CBPR to assess innovation and effectiveness of the designs.

Training and Technical Assistance

- Assess how training and TA enhance community engagement and increase community capacity.
- Examine the training and TA provided by communities to academic partners.
- Assess community and public health practice partners' perspectives of PRC training, TA, and mentoring, including perceived benefits.

The next steps for the national evaluation are to assess the program indicator data and look at where the indicator and study data complement each other. Results will be shared with the PRCs and other constituents. Additionally, the recommendations will be used for strategic planning for future national evaluation activities, which will coincide with the next full five-year funding cycle for the PRCs.

Recommendations for PRCs

Infrastructure and Resources

- Share strategies on budgeting and on faculty and staff recruitment and retention.
- Communicate and promote activities within their PRCs' academic institutions, which could help elevate the importance of the activities and garner support for CBPR.
- Share approaches used to communicate about and promote activities within the academic institutions that have led to increased support and resources.
- Move the primary responsibility for administrative activities from researchers, which may allow for increased efficiency and may help attract researchers from across the university to conduct research through the PRC.

Community Engagement

- Share community committee guidelines with new community and academic partners as part of an orientation process.
- Academic partners need to be patient when explaining the terminology and steps of the research process to community committee representatives or the community at large.
- Academic and community partners must discuss their respective cultures at the beginning of the study design and remain open-minded about the importance of scientific rigor and ways to achieve it throughout the research process.
- Involve community partners early and frequently in the research to help ensure it proceeds in a timely manner.
- Allow enough time and resources to conduct background work and community needs assessment to ensure that the academic partners understand community issues and concerns before developing a research study.

- Learn about a community's infrastructure before beginning work to consider which community resources may be available and which resources the researchers and institution will need to provide.
- Determine how to establish and maintain community relationships when PRCs are working with a community that is a great distance from the academic institution.

Training and Technical Assistance

- Share how institutional support for training and TA activities came about.

Over the years they have been funded, many PRCs gained knowledge about organizational structures, working with community partners, and communication and promotion of activities to encourage academic institutional support. Sharing their strategies across the PRC network may help all PRCs establish a successful infrastructure from which they can operate in pursuit of their research aims.

Recommendations for Management of the PRC Program

Infrastructure and Resources

- Provide guidance related to funding and allocation of resources, specifically on the percentage of the award that might be applied toward administrative aspects of the PRCs' work.
- Recommend that PRCs have staff dedicated to the administrative functions so that researchers can concentrate on their research projects.
- Develop tools or templates to help PRCs become more efficient with administrative tasks such as entering data into the IS.
- Partners of the PRC Program need to advocate for support for the PRCs and for funding sufficient to cover all activities.

Collaboration across the PRC Network

- Establish sessions during national meetings that emphasize interaction and the exchange of ideas among participants (as opposed to presentations) as well as other mechanisms for sharing throughout the year, such as Web conferences.
- Support or develop additional mechanisms to facilitate communication across the network.
- Develop and implement activities that increase the opportunities for community members to interact across PRCs and collaborate on grants.

Community Characteristics

- Create a map of the PRCs' reach into the states and communities to reflect the PRCs' work.

Community Engagement

- Develop recommendations for PRCs on elements to include in community committee guidelines that other PRCs find helpful.
- Encourage PRCs to share their community committee guidelines with each other to facilitate learning.

- Continue to require community committees as a way of facilitating academic–community relationships and community engagement in PRC research.
- Encourage PRCs to create or further develop formal community committee guidelines and regularly hold meetings for community committees. Guidelines and meetings enhance the participation of community representatives and the communities at large with which they work.
- Share with PRCs (particularly new PRCs) examples of PRCs' structures, guidelines, and lessons learned around facilitating community engagement.
- Help academic and community partners share lessons learned by identifying or developing tools on how to educate community partners on research concepts and academics on cultural sensitivity.

Core Research

- Encourage PRCs to use instruments that have demonstrated reliability and validity, or to assess reliability and validity of the instruments with their study population.

Many of these recommendations could be considered by the PRC Program office in collaboration with the PRC Steering Committee, National Community Committee, or other groups, and can be used to provide partners with data about the program. The PRC Program office was able to consider many of these recommendations in the development of the Funding Opportunity Announcement for the 2009–2014 funding cycle.[1] Also, the recommendations will be used in developing materials for PRCs' monitoring and guidance.

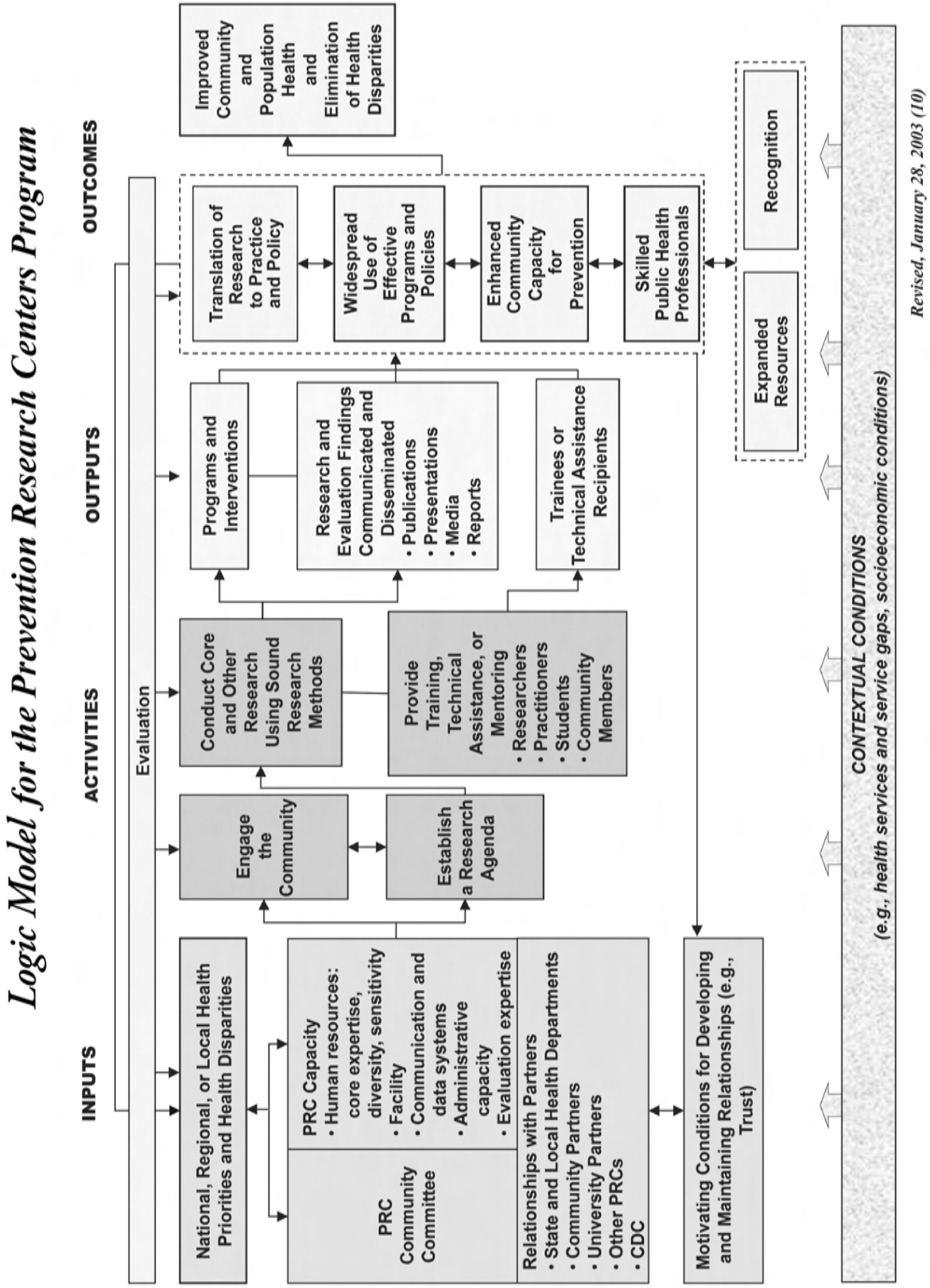
The studies reported here assessed aspects of the program that had never been systematically described before. The results give the PRC Program a basis for future evaluation and program improvements.

References

1. Health Promotion and Disease Prevention Research (U48), RFA-DP-09-001. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008 Aug 1 [cited 2008 Sep 10]. Available from: http://www07.grants.gov/search/search.do;jsessionid = LTTbwrwLjdJjMGVDKKYbvppFv9J24JVqYFPjyh3sQn5w7W23tzks!-285210828?oppId = 18174&flag2006 = true&mode = VIEW

APPENDICES

Appendix A: Logic Model for the Prevention Research Centers Program



Appendix B: Members of the PRC Project DEFINE Collaborative Evaluation Design Team—Phase II, 2004–2008

Geri Dino, PhD
Director
West Virginia University
Prevention Research Center

Katie Barnes
Staff
Migrant Benevolent Association
Member, Community Advisory Committee
University of North Carolina at Chapel Hill
Center for Health Promotion and Disease Prevention

Cynthia Boddie-Willis, MD, MPH
Director
Division of Health Promotion and Disease Prevention
Massachusetts Department of Public Health
Member, National Association of Chronic Disease Directors

David L. Collins (2004–2005 only)
Associate Director of Community Development and Community Liaison
Morehouse School of Medicine
Prevention Research Center

Josefina Olarita-Dhungana
Director
Carson Family Resource Center Healthy Start Program
Member, Community Advisory Board
University of California at Los Angeles/RAND Prevention Research Center

Michelle C. Kegler, DrPH, MPH
Deputy Director
Emory University
Prevention Research Center

Kenneth McLeroy, PhD
Co-Principal Investigator
Texas A&M Health Science Center
Center for Community Health Development

Delores Pluto, PhD
Associate Director
University of South Carolina
Prevention Research Center

Thomas M. Reischl, PhD
Associate Research Scientist and Evaluation Director
University of Michigan
Prevention Research Center

Appendix C: Prevention Research Centers (PRCs) National Program Indicators

Inputs	1. Number of PRC community committee members, by constituency, organization, and perspective 2. Number and full-time equivalents (FTEs) of PRC faculty and staff who are supported by CDC funds 3. Number and type of resources provided by the academic institution to support PRC activities 4. Number of PRC partnerships, by constituency, organization, or perspective; existence of written inter-organizational agreements; and funding status 5. Amount of PRC annual funding, by number of projects and funding source
Activities	1. Number and types of PRC activities in which partners or the community committee are involved. 2. Number of PRC core, special interest, and PRC-affiliated projects, by level of prevention; content, population, and setting focus areas; and (for research projects) research type, design, and study population 3. Number of PRC trainings, by topic, audience, format, and duration
Outputs	1. Number of PRC-tested interventions, by level of effectiveness (promising, effective, or adoptable) 2. Number of PRC publications, by peer-reviewed status; journal; content, population, and setting focus areas; and intended audience 3. Number of PRC presentations, by peer-reviewed status; content, population, and setting focus areas; and intended audience 4. Number and types of PRC interventions that are recommended for use by national agencies or organizations 5. Number of other PRC-produced products, by product type, peer-reviewed status, content focus areas, and intended audience 6. Number of students working with PRCs, by type of work 7. Number of people trained by PRCs, by audience type
Outcomes	1. Number of PRC-tested interventions that are available for dissemination, by method of dissemination, level of effectiveness, and number and types of groups to whom it was disseminated 2. Number of PRC-tested interventions that have been adopted, by number and types of groups that adopted the intervention 3. Number of policy and environmental changes made derived from PRC research, by topic area, level of change, and type of PRC involvement 4. Number of PRC-produced products distributed 5. Number of new prevention grants or contracts awarded to partners or community that were facilitated by the PRC partnership, by purpose of grant, type of PRC involvement, and amount 6. Number of PRC-related recognition awards received, by awarding organization, type of awardee, and purpose of award 7. Number of PRC-related media reports, by type of media, media distribution, and focus of report 8. Number of publications citing PRC work, by journal characteristic

Appendix D: Document Review Database Questions, Response Options, and Data Sources

Organizational and Community Characteristics Study: What are the characteristics of PRCs related to staff, partnering community, organizational and partnership structures, resources, leadership, and institutional environment?

What are the characteristics of the PRCs' academic institutions?		
Database Question	**Categorization Options**	**Data Sources**
• When did the PRC receive initial funding?	• XXXX (YEAR OF INITIAL FUNDING)	• CDC PRC Program Web site
• What type of academic institution is the PRC a part of?	• PUBLIC, NOT LAND-GRANT • PUBLIC, LAND-GRANT • PRIVATE	• National Association of State Universities and Land-Grant Colleges
• Through which school does the PRC receive its funding?	• SCHOOL OF MEDICINE • SCHOOL OF PUBLIC HEALTH	• PRC Web site
• Where does the PRC sit with respect to the School of Public Health or School of Medicine?	• OUTSIDE OF THE SCHOOL • WITHIN THE SCHOOL, AS A SEPARATE CENTER • WITHIN THE SCHOOL, WITHIN ANOTHER CENTER • WITHIN THE SCHOOL, WITHIN A DEPARTMENT	• PRC Web site • University/School Web site • FY 2004 PRC application
What are the resource characteristics of the PRCs?		
Database Question	**Categorization Options**	**Data Sources**
• What is the cost of the living in the city in which the PRC's academic institution is located?	• INDEX (COST OF LIVING, CONSUMER PRICE INDEX)	• U.S. Department of Labor, Bureau of Labor Statistics 2007 Cost of Living Indices
• What is the negotiated indirect rate for the PRC?	• XX %	• FY 2007 PRC core budget
• What is the final indirect cost rate for the PRC?	• XX %	• Calculated based on FY 2007 PRC core budget

What are the faculty and staff characteristics of the PRCs?		
Database Question	**Categorization Options**	**Data Sources**
• How many center directors has the PRC had since it received initial funding?	• X NUMBER OF CENTER DIRECTORS	• PRC Program Officers
• What are the names and titles of leadership positions within the PRC?	• POSITION (NAME) • POSITION (NAME) • POSITION (NAME) • POSITION (NAME) • POSITION (NAME) • POSITION (NAME)	• Organizational charts, FY 2007 PRC core budget, FY 2006 PRC Information System
Data collected for all faculty and staff in leadership positions		
• What graduate degrees (disciplines) does the faculty or staff member have?	• MD_____ (Discipline) • PhD _____ (Discipline) • DrPH _____ (Discipline) • MASTERS OR OTHER _____ (Discipline) • NONE	• Curriculum Vitae
• What is the academic rank of the faculty or staff member?	• FULL PROFESSOR • ASSOCIATE PROFESSOR • ASSISTANT PROFESSOR • NON-FACULTY STAFF MEMBER	• Curriculum Vitae
Data collected for all PRC faculty and staff listed on FY 2007 PRC core budgets		
• What is the faculty or staff member's first and last name?	• _____(first name) _____(last name)	• FY 2007 PRC core budget
• What is the faculty or staff member's title?	• _____ (title)	• FY 2007 PRC core budget
• What effort is allocated to the faculty or staff member on the FY 2007 PRC core budget?	• XX %	• FY 2007 PRC core budget
What are the partnership structure characteristics of the PRCs?		
Database Question	**Categorization Options**	**Data Sources**
• What is the overall community committee's relationship to the PRC?	• Advisory • Leadership	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports • Community committee guidelines/ by-laws

What are the characteristics of the PRCs' partner and core research communities?		
Database Question	**Categorization Options**	**Data Sources**
• How many partner communities are designated by the PRC?	• X Communities	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports
• What are the geographic boundaries of the PRC's partner community(ies)?	• state • city or town • county • multi-city or multi-town, multi-county • neighborhood • other (specify)	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports • PRC Web site
• Does the PRC partner with rural, urban, suburban, or frontier communities?	• rural (yes/no) • Urban (yes/no) • Suburban (yes/no) • frontier (yes/no)	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports • PRC Web site
• How many counties are included in the partner communities?	• X COUNTIES	• U.S. Census 2000 • City, state and county Web sites
• Does the partner community include a border region?	• YES • NO	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports • PRC Web site • U.S. Census 2000 • City, state and county Web sites
• Does the partner community include a tribal organization?	• YES • NO	• FY 2004 PRC application • FY 2007 PRC annual workplan • FY 2005 PRC progress reports • PRC Web site • U.S. Census 2000 • City, state and county Web sites
• What is the farthest distance in time and miles between the PRC academic institution and the partnering community?	• XX Miles; XX Minutes	• Google Maps • FY 2007 PRC core budgets

Data collected for each geographically-defined PRC partner and core research community		
• What is the total population of the PRC's partner or core research community?	• XXXXXXX POPULATION SIZE	• U.S. Census 2000
• What is the racial/ethnic breakdown of the population within the PRC's partner or core research community?	• WHITE XX % • AFRICAN AMERICAN XX % • AMERICAN INDIAN, ALASKA NATIVE, ASIAN, NATIVE HAWAIIAN, OTHER PACIFIC ISLANDER XX % • HISPANIC/LATINO XX % • OTHER OR MULTIPLE RACES XX %	• U.S. Census 2000
• What is the per capita income within the PRC's partner or core research community?	• $XXXXXX	• U.S. Census 2000
• What is the per capita income for the state in which the PRC's partner or core research community is located?	• $XXXXXX	• U.S. Census 2000
• What is the unemployment rate in the PRC's partner or core research community?	• XX.X%	• U.S. Department of Labor, Bureau of Labor Statistics 2005 unemployment statistics
• What is the unemployment rate in the state in which the PRC's partner or core research community is located?	• XX.X%	• U.S. Bureau of Labor Statistics 2005 unemployment statistics
• What percentage of persons under 25 years of age do not have a high school diploma in the PRC's partner or core research community?	• XX %	• U.S. Census 2000
• What percentage of persons under 25 years of age do not have a high school diploma in the state in which the PRC's partner or core research community is located?	• XX %	• U.S. Census 2000
• What percentage of students is eligible for free or reduced school lunch within the PRC's core research community?	• XX %	• U.S. Department of Education, National Center for Education Statistics 2004-2005 data tables

Academic-Community Partner Interaction Study: How do PRC researchers and their communities interact to develop, implement, evaluate, and disseminate the core prevention research project? (What are the approaches to community-based participatory research?)

Across PRCs, how did the community partnership develop and how has it evolved over time?		
Database Question	**Categorization Options**	**Data Sources**
• What is the name of the community committee?	• NAME OF COMMUNITY COMMITTEE	• FY 2006 PRC Information System
• Is this committee a freestanding organization • If yes, is the committee a 501(c)3 organization?	• YES/NO • YES/NO	• Community committee guidelines/ by-laws • FY 2007 PRC core budget • FY 2007 PRC annual workplan • FY 2005 PRC progress reports
Data collected for each community committee		
• What type of committee is the community committee?	• OVERALL COMMUNITY COMMITTEE • PROJECT-SPECIFIC COMMITTEES • COMMUNITY-SPECIFIC COMMITTEES • CONTENT-SPECIFIC COMMITTEE • YOUTH ADVISORY COMMITTEE • SCIENTIFIC COMMITTEE • STATE COMMITTEE • OTHER (SPECIFY)	• FY 2006 PRC Information System
• How many community committees are there?	• X MEMBERS	• FY 2006 PRC Information System
• Were there guidelines developed for this committee?	• YES • NO	• FY 2006 PRC Information System

Data collected for all overall community committee for which there are guidelines		
• Do the guidelines indicate a term commitment for committee chair persons?	• YES (specify) • NO	• Community committee guidelines/ by-laws
• Do the guidelines indicate a term commitment for past committee chair persons?	• YES (specify) • NO	• Community committee guidelines/ by-laws
• Do the guidelines indicate a term commitment for committee members?	• YES (specify) • NO	• Community committee guidelines/ by-laws
• Do the guidelines indicate meeting attendance requirements?	• YES (SPECIFY) • NO	• Community committee guidelines/ by-laws
• Is there information in the guidelines about communication procedures?	• Email (yes/no) • Web site (yes/no) • postal mail (yes/no) • in-person meetings (yes/no) • other (yes/no) (specify)	• Community committee guidelines/ by-laws
• Is there information on voting procedures or amendments to guidelines included in the guidelines?	• yes (specify) • no	• Community committee guidelines/ by-laws
• Are guidelines posted on the PRC's Web site?	• YES • NO • Don't know	• PRC Web site
Data collected for all overall community committees		
• How often does the community committee meet?	• Annual • Semi-annual • Quarterly • Monthly • Bi-Monthly • SEMI-MONTHLY • Other (specify)	• Community committee guidelines/ by-laws • FY 2007 PRC core budget • FY 2007 PRC annual workplan • FY 2005 PRC progress reports
• Where does the community committee meet?	• Community • University • Combination of Community and University	• Community committee guidelines/ by-laws • FY 2007 PRC core budget • FY 2007 PRC annual workplan • FY 2005 PRC progress reports
• Are meeting minutes posted on the PRC's Web site?	• YES • NO • DON'T KNOW	• PRC Web site

Across PRCs, how were the core research projects selected?		
Database Question	**Categorization Options**	**Data Sources**
• Who was involved in establishing the core research project?	• PRC ACADEMICS • COMMUNITY LEVEL PARTNERS • IF ADDITIONAL PARTNERS, CHECK ALL THAT APPLY: • NEIGHBORHOOD • CITY • COUNTY • REGION • STATE • UNIVERSITY	• FY 2006 PRC Information System • FY 2004 PRC application
• What factors influenced the decision to focus on this core research project?	• COLLABORATIVE PROCESS • PRC ACADEMIC INTERESTS AND/OR EXPERTISE • COMMUNITY ASSESSMENT • NATIONAL OR STATE HEALTH GOALS • SPECIFIC DATA SOURCE • OTHER	• FY 2006 PRC Information System • FY 2004 PRC application
• Does the PRC provide an explanation of the linkage between their health priority, their research agenda, and the choice of their core research project?	• YES • NO • NO INFORMATION AVAILABLE	• FY 2004 PRC application
• For those PRCs doing intervention research, where does their research fall in The Community Guide recommendations?	• NOT DOING INTERVENTION RESEARCH • RECOMMENDED • INSUFFICIENT EVIDENCE • RECOMMENDED AGAINST • REVIEW IN PROGRESS • REVIEW PLANNED FOR FUTURE • TOPIC AREA ADDRESSED, INTERVENTION NOT LISTED • TOPIC AREA NOT ADDRESSED • RESEARCH QUESTIONS SUGGESTED FOR FURTHER STUDY	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports

• How does the core research build on previous research?	• BUILDS ON A PILOT STUDY, INTERVENTION, OR OTHER RESEARCH FROM THAT PRC o NEW GEOGRAPHIC LOCATION o NEW SETTING o NEW AGE GROUP o NEW RACE/ETHINC GROUP o NEW 'OTHER' COMPONENT • BUILDS ON A PILOT STUDY, INTERVENTION, OR OTHER RESEARCH FROM ELSEWHERE • NEW GEOGRAPHIC LOCATION o NEW SETTING o NEW AGE GROUP o NEW RACE/ETHINC GROUP o NEW 'OTHER' COMPONENT • DOCUMENTED AS A GAP IN THE LITERATURE	• FY 2004 PRC application
Across PRCs, what are the research designs, goals and settings of the core research project?		
Database Question	**Categorization Options**	**Data Sources**
• What is the research design?	• Case control • Case studies or case series • Cohort / Longitudinal • Cross-sectional • Group randomized trial • Quasi-experimental with control or comparison • Quasi-experimental without control or comparison • Randomized trial • Surveillance-based secondary studies • Other	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• What is the research type?	• Determinant • Dissemination • Intervention • Other	• FY 2006 PRC Information System • FY 2004 PRC application

• What are the goals and primary outcome variables?	• Mortality • LIST Associated outcomes • Morbidity o LIST Associated outcomes • Health behaviors o LIST Associated outcomes • Knowledge o LIST Associated outcomes • Skills o LIST Associated outcomes • Attitudes o LIST Associated outcomes • Policy o LIST Associated outcomes • Environmental o LIST Associated outcomes	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• What level in the ecological model is targeted by the core research project?	• Individual • Group • Policy/Macro level	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
Across PRCs, how are samples defined for the core research project?		
Database Question	**Categorization Options**	**Data Sources**
• What kind of sampling strategy do the PRCs use?	• Random • Convenience • Purposive • Clustered Randomization • Other	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• Does the PRC have a power calculation of sample size?	• YES, provided • NO, explanation given • no information available	• FY 2004 PRC application

• How are participants being recruited?	• Recruitment not discussed • PRC Community Committee alerts community networks, and/or recommends people for interviews • other partners (not the PRC's community committee) alerts community networks, and/or recommends people for interviews • Roster of all individuals in the community • Recruited by Community Health Workers / Community Health Advisors / Promotoras • Word of mouth • Students at a participating school or school where researchers have established relationships • Trainings • Community event presentations • Posters / newsletters • Local news articles • other	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
Across PRCs, what are the data collection tools and strategies for the core research project?		
Database Question	**Categorization Options**	**Data Sources**
• Are the data being collected by quantitative, qualitative, or mixed methods?	• primarily quantitative • primarily qualitative • mixed methods • other	• FY 2004 PRC application

• Which data collection methods are being used?	• Anthropometrics (height, weight, etc) • Content analysis • Data captured and reported electronically (website use, trail counters, accelerometers) • Data captured through self-tracking (pedometers, nutrition logs) • Document review (medical charts, school records, reports, media) • Ethnography • Focus group • Geographic Information System (GIS) analysis • Interviews, cognitive • Interviews, computer assisted (personal - CAPI, self - CASI, telephone - CATI, or handheld - HAPI) • Interviews, key informant or participant • Medical assessments (phlebotomy, screenings, etc) • Observations, participant • Observations, community, organization, or school • Photovoice • Survey instruments or questionnaires • Other	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports

Across PRCs, what are the data collection tools and strategies for the core research project?		
Database Question	**Database Question**	**Database Question**
• If a PRC is using a survey instrument to collect data, is it newly developed, standard, modified, or some other type of survey instrument?	• Newly Developed • Standard • Modified • Other	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• Is there any information about field testing or piloting any parts of any data collection tool?	• YES, provided • NO, explanation given • not applicable • no information available	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports

• Is there any information about testing any parts of any data collection tool for reliability?	• YES, provided • NO, explanation given • not applicable • no information available	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• Is there any information about testing any parts of any data collection tool for validity?	• YES, provided • NO, explanation given • not applicable • no information available	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
Across PRCs, how is the core research project implemented?		
Database Question	**Categorization Options**	**Data Sources**
• Is the PRC doing the same research project as outlined in their application?	• yes • yes, with modifications o if yes, with modification, what are the modifications? • no o if no, what happened?	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• Did the PRC set a timeline for the different stages of the core research project and are they on schedule?	• did the PRC set a timeline? o yes o no o no, explanation provided o no information available • is the PRC on schedule based on their own timeline? o yes o no o no, explanation provided o no information available	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports

• Where is the core research based on the CDC PRC program office recommended timeline?	• Issue identification • Draft research design • Further assessment of health needs/ issues • Specify the issues, priorities, study population, and study design • Obtain additional community partner support for the study design • Develop the intervention, study instruments, and other study materials • Test intervention and monitor intervention delivery • Data collection • Data analysis • Reporting and dissemination of research	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports • PRC Program office general timeline
Across PRCs, what are ways the PRCs plan for sustainability of the core research project?		
Database Question	**Categorization Options**	**Data Sources**
• In what ways are the PRCs increasing community capacity for integration and sustainability of the intervention?	• NOT DOING INTERVENTION RESEARCH • PROVIDE TRAININGS ON GRANT WRITING AND/OR HOW TO ACQUIRE FUNDING • PROVIDE TRAININGS ON PROGRAM PLANNING • PROVIDE TRAININGS ON EVALUATION • PROVIDE TRAININGS ON MEDIA ADVOCACY • USING THE COMMUNITY HEALTH WORKER / COMMUNITY HEALTH ADVISOR / PROMOTORA MODEL • OTHER • NO INFORMATION AVAILABLE	• FY 2004 PRC application • FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports
• Does the PRC have any plans to acquire additional funding to expand core research in the future (outside of PRC program funding)?	• YES • NO • NO INFORMATION AVAILABLE	• FY 2007 PRC annual workplans • FY 2006 PRC progress reports • Site visit reports

Appendix E: Data Sources Used for Document Review

DATA SOURCE	STUDY		
	Organizational and Community Characteristics	Academic-Community Partner Interaction	Core Research
Documents submitted by PRCs			
Application, 2004	X	X	X
Annual workplans & budgets, Fiscal year 2007	X		X
Annual workplans, Fiscal year 2008			X
Progress reports, Fiscal year 2005	X		
Progress reports, Fiscal year 2006			X
Organizational model(s) (PRC IS[1], Fiscal year 2006)	X		
Staff lists (PRC IS, Fiscal year 2006)	X		
Community committee names (PRC IS, Fiscal year 2006)		X	
Community committee guidelines/by-laws		X	
PRC leadership faculty and staff curriculum vitae	X		
Informal "update" documents			X
Project descriptions, (PRC IS, Fiscal year 2007)			X
Research designs, (PRC IS, Fiscal year 2007)			X
Documents from PRC Project Officers			
Conference call notes			X
Site visit summary letters & presentations			X
National Data Sets			
U.S. Census 2000	X		
National Center for Education Statistics (2004–05)	X		
Bureau of Labor Statistics (2005)	X		
Web searches			
PRC Web sites	X	X	X
CDC PRC Program Web site	X		X
University/school Web site	X		
Googlemaps	X		
National Association of State Universities and Land-grant Colleges	X		

Appendices F1 – F7: PRC Program Evaluation Studies Interview Questions

PRC Program Evaluation Study – Interview Questions

Interview Guide 1
Organizational and Community Characteristics Study, Academic Respondents
(Organizational Structure and Resources)

Introduction

Hello, my name is_____ with Macro International, and I'm calling for our scheduled interview. As we mentioned before, our interview should take only about 45 minutes. Is this still a good time to talk? [RESCHEDULE IF NECESSARY, BUT ATTEMPT TO COMPLETE INTERVIEW AT THIS TIME IF POSSIBLE.]

Thank you for taking the time to talk with me about your Prevention Research Center. We have worked with the PRC Program office at the Centers for Disease Control and Prevention, and the Collaborative Evaluation Design team (the national evaluation advisory group) on the national evaluation of the PRC Program. Right now we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is better understand the organizational structures and resources of the PRCs. The series of interviews will help to provide that information in a comprehensive and systematic way. Your participation is critical to this effort, so we really appreciate your taking the time to talk with us.

Before we begin, there are a few points about the interview I would like to share with you. **[READ INFORMED CONSENT.]**

[REQUEST COPY OF ANY DATA COLLECTION TOOLS OR SURVEYS MENTIONED THROUGHOUT THE INTERVIEW.]

First let me ask about the age of your PRC.

1. When was your PRC established?

[IF THE PRC IS 14 YEARS OLD OR MORE (FUNDED WITH 1993 RFA OR EARLIER), PROCEED WITH QUESTION 2. IF THE PRC IS NEWER THAN 7 YEARS OLD (FUNDED WITH 2000 RFA OR LATER), SKIP TO QUESTION 9.]

[FOR OLDER PRCs—14 YEARS OR OLDER]

OK, let's talk about your PRC's organizational structure and how it has evolved over time.

2. How long have you been with the PRC and what is your current role?

3. How many Directors has the PRC had and, on average, how long were the Directors in that position?

4. Please take a look at the organizational chart for your PRC that we sent you earlier. Does this seem an accurate reflection of how your PRC is currently organized?

    - Probe: If not, what is different?

5. What was the organizational structure like when the PRC was initially funded?

6. How would you say the organizational structure is different now?

7. What are critical pieces within your PRC structure?

8. What structures did NOT work over time?

    - Probes: location of the PRC within the university (department or center, etc.), ensuring effective communication, making rapid decisions, ensuring work is appropriately monitored, having sufficient and appropriate staff to complete necessary activities.

[SKIP TO QUESTION 15]

[FOR NEWER PRCs—7 YEARS OR NEWER]

OK, let's talk about your PRC's organizational structures and how it evolved over time.

9. How long have you been with the PRC and what is your current role?

10. How many Directors has the PRC had and, on average, how long were the Directors in that position?

11. Please take a look at the organizational chart for your PRC that we sent you earlier. Does this seem an accurate reflection of how your PRC is organized?

    - Probe: If not, what is different?

12. What was the organizational structure like when the PRC was initially funded?

13. How (if at all) is the organizational structure different now?

14. As you began to develop as a new PRC, what have you found are critical pieces within your PRC structure?

15. What sorts of challenges have you encountered related to the structure of the PRC?

    - Probes: location of the PRC within the university (department or center, etc.), ensuring effective communication, making rapid decisions, ensuring work is appropriately monitored, having sufficient and appropriate staff to complete necessary activities.

[CONTINUE FOR ALL PRCs]

Now let's talk briefly about the indirect rates received by the PRCs around the PRC core funding award.

16. Does your PRC get any indirects back from the core funding award? If yes, what percent would you estimate your PRC gets back?

17. Do you get a reduced indirect from the university for the core funding award?

18. For what sorts of things are you allowed to use the indirects you get back

19. Does the university treat SIPs and other PRC project grants differently in terms of indirects? (For example, do they get better/worse/different indirects back or indirect rates for NIH or SIPs or Robert Wood Johnson grants?)

    If yes, how so?

Thank you. These next questions will address resources the PRCs receive from the school or university.

20. What types of resources does your PRC receive from the university?

Probes: monetary, in-kind support, facilities, staff, services (e.g. IT), etc.

21. How are these resources used by the PRC?

22. Is the university involved in making decisions about the use of the resources?

23. When grants are awarded to your PRC, are there also then displaced faculty salary dollars? [MAY BE MORE LIKELY FOR STATE INSTITUTIONS.]

    - Probe: If so, what entity receives those displaced faculty dollars? (e.g., the PRC, the school or department within which the PRC is located, the faculty member)

24. How does the university credit the PRC when discussing work that occurred under the overall PRC umbrella?

25. Probe: appropriate recognition of the PRC, individual faculty member work with the PRC, shared work with entities within and outside of the PRC, awards, etc.

    - Is there any difference in how the university supports the PRC around the core funding award versus projects funded through the special interest project (SIP) mechanism or other projects? (For example, does the university treat SIPs and other PRC project grants differently in terms of support it provides?)

If yes, how so?

Thank you for your thoughtful responses thus far. We are in the final stage of the interview and there are only a few more questions remaining that deal with university support for community-based work.

26. In what ways has your university demonstrated support for community-based work conducted by the PRC?

    - Probes: (after they share examples of their own) tenure considerations, providing faculty support, etc.

28. What barriers have you found at your university as you have attempted to conduct community-based work?

29. Is there anything else you would like to tell me related to your organizational structures and resources of your PRC that we didn't discuss yet?

Thank you so much for your time. Your participation is very much appreciated and will be critical in helping paint a picture of the ways in which organizational structures and resources aide the work that is conducted by the PRCs.

Interview Guide 2

Academic-Community Partner Interaction Study, Academic Respondents (Community Partnerships, Capacities of Community Committees, And Participation in Research by Community Committees)

Introduction

Hello, my name is_____ with Macro International, and I'm calling for our scheduled interview. As we mentioned before, our interview should take only about 90 minutes. Is this still a good time to talk? [RESCHEDULE IF NECESSARY, BUT ATTEMPT TO COMPLETE INTERVIEW AT THIS TIME IF POSSIBLE.]

Thank you for taking the time to talk with me about your Prevention Research Center. We have worked with the PRC Program office at the Centers for Disease Control and Prevention, and the Collaborative Evaluation Design Team (the national evaluation advisory group) on the national evaluation of the PRC Program. Right now we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to better understand the ways that PRCs work with their communities to develop, implement, evaluate, and disseminate the core prevention research project—in essence, we are hoping to better understand the various approaches to Community Based Participatory Research used across the PRCs. The series of interviews will help to provide that information in a comprehensive and systematic way. Your participation is critical to this effort, so we really appreciate your taking the time to talk with us.

Before we begin, there are a few points about the interview I would like to share with you. [READ INFORMED CONSENT.]

[REQUEST COPY OF ANY DATA COLLECTION TOOLS OR SURVEYS MENTIONED THROUGHOUT THE INTERVIEW.]

First, let's talk about your core research project and core research community.

1. What is the title and focus of your core research project?
   [REFER TO TITLE FROM PRIOR NOTES AND CONFIRM.]

2. What is your role on the core research project?

3. Let's talk about the *community* with which the PRC conducts its core research. First, what is the name of that community with which your PRC conducts its core research?
   [REFER TO COMMUNITY NAME FROM PRIOR NOTES AND CONFIRM.]

4. How did the academic representatives first come together with this community to conduct the PRC's research?

- What drove the decision? Probes: community health needs, previous relationship, etc.

5. Who was involved in selecting the research community?

6. Has the PRC always worked in this research community? If not, what made the PRC change to choose this community?

OK, now I'd like to focus for a while on the community involvement on your core research project.

7. Is there a community committee that participates on the core research project? [IF YES, CONTINUE WITH QUESTION 8. IF NO, SKIP TO QUESTION 25.]

Let's talk about the development of the community committee and how academic representatives' meetings with community partners are characterized.

8. What is the name of the community committee that participates on the core research project?

9. When was the committee formed?

10. Is this community committee the only community committee for your center?

11. Is this committee involved in PRC activities beyond the core research project? If so, in what PRC activities is the committee involved?

12. What kinds of organizations are represented on the committee?

    - Probes: CBOs, academic, health dept, education dept, etc.

13. How often does the community committee meet?

14. Where does the committee meet?

15. How do they meet? In person or by telephone?

16. About what percent of the academic representatives would you say attend the meetings on average?

17. Who sets the meeting agendas?

18. Who chairs or facilitates the meetings?

OK. Now I'd like to talk a little about skills and resources brought by the community committee to the core research project.

19. When thinking about community committee contributions, what skills do individuals on the committee provide?

- Probe: Do they provide skills to help with research, evaluation, or training?

20. What resources do they provide either on their own or through their organizations?

    - Probe: Have they provided resources to help with research, evaluation, or training?

21. Moving beyond the community committee, are there resources you can think of that the overall partner community has provided the PRC?

    - Have these resources been of help with research, evaluation, or training?

OK, now back to the community committee and the focus on the PRC's core research. Let's talk just a little about how the community committee is involved in that work.

22. How would you describe community committee representatives' involvement in the core research across the span of the research process?

    - Probes (request descriptions of how these occur):

      How are they involved in the development of the research?

      - Conceptualizing the project
      - Selecting the project
      - Providing or obtaining funding for the project
      - Establishing project goals or objectives
      - Developing or planning the project

      How are they involved in the implementation of the research?

      - Conducting or implementing project activities
      - Providing space
      - Facilitating collaboration between the center and the partnering community or other partners

      How are they involved in the analysis or use of the research data?

      - Data analysis or interpretation
      - Communicating or educating about project activities and results
      - Developing or disseminating project materials or products
      - Evaluating the project

23. Does the PRC try to ensure that community committee representatives have input into core research? How so?

24. What, if any, challenges has the PRC had in ensuring that the community committee representatives have input into core research?

25. Are there other partners that are involved in core research for the PRC but who are NOT part of the community committee?

    - If yes, who are these partners with whom your PRC works? Can you provide an example of how they are involved?

[NOW SKIP TO QUESTION 43]

OK. Your PRC does not have a community committee that works on the core research project, but let's talk about any community representative(s) involved in the core research and how academic representatives' meetings with these community representative(s) are characterized.

26. Are there any individuals who serve as community representatives and are involved in the core research project?

27. When did the representative(s) begin working on the core research project?

28. What is the role of the individual(s) on the core research project?

29. Is the community representative(s) involved in PRC activities beyond the core research project? If so, in what PRC activities is the individual(s) involved?

30. What kinds of organization(s) does the community member(s) represent?

    - Probes: CBOs, academic, health dept, education dept, etc.

31. How often does the community representative(s) meet with the PRC's academic representatives?

32. Where do the meetings take place between the community representative(s) and the academic representatives?

33. How do they meet? In person or by telephone?

34. About what percent of the academic representatives would you say attend the meetings on average?

35. Who sets the meeting agendas?

36. Who chairs or facilitates the meetings?

OK. Now I'd like to talk a little about skills and resources brought by the community representative(s).

37. When thinking about the community representative's contributions, what skills does the individual provide?

    - Probe: Does he or she provide skills to help with research, evaluation, or training?

38. What resources does the community representative(s) provide either individually or through his or her organizations?

    - Probe: Has he or she provided resources to help with research, evaluation, or training?

39. Moving beyond the community representative(s), are there resources you can think of that the overall partner community has provided the PRC?

    - Have these resources been of help with research, evaluation, or training?

OK, now back to the community representative(s) and the focus on the PRC's core research. Let's talk just a little about how the community representative(s) is involved in that work.

40. How would you describe the community representative's involvement in the core research across the span of the research process?

    - Probes (request descriptions of how these occur):

    - How is the representative(s) involved in the development of the research?

        - Conceptualizing the project
        - Selecting the project
        - Providing or obtaining funding for the project
        - Establishing project goals or objectives
        - Developing or planning the project

      How is the representative(s) involved in the implementation of the research?

        - Conducting or implementing project activities
        - Providing space
        - Facilitating collaboration between the center and the partnering community or other partners

      How is the representative(s) involved in the analysis or use of the research data?

        - Data analysis or interpretation
        - Communicating or educating about project activities and results

- Developing or disseminating project materials or products
- Evaluating the project

41. Does the PRC try to ensure that the community representative(s) has input into core research? How so?

42. What, if any, challenges has the PRC had in ensuring that the community representative(s) has input into core research?

[THE REMAINING QUESTIONS ARE FOR EVERYONE]

I would like to turn here to talk about key partners of the PRC.

43. Are there partners you might call “key” partners that are involved in the core research but who you would say are involved to a much greater extent than most community representatives? What are some examples of what that partner does above and beyond other partners?

Changing gears slightly, let’s talk for a moment about disagreements and the ways that the academic-community committee partnership deals with conflict related to the core research project.

44. Partnerships may have conflict. In some cases, conflict can be disruptive to the progress, research, or partnership of a PRC. In other cases, conflict might be easily resolved. Has your partnership encountered conflict around the core research project?

45. What were your most difficult challenges in working with community representatives or partners and how did you work through the challenges? (Probe if asked: examples may include topical, interpersonal, and/or structural challenges)

46. Are there methods in place for decision-making or coming to consensus?

47. Who usually seems to take responsibility for trying to resolve conflicts? Probes:

    - How has the PRC Director played a role in resolving partnership conflict?
    - How has the community committee chair played a role in resolving partnership conflict?
    - Is there a community liaison? If yes, how has that person played a role in resolving partnership conflict?

Now I’d like to ask a few questions about the overall community’s involvement in the core research. [Note to interviewer – edit down these questions if the topic has been covered already]

48. What are examples of ways you might say the core research has changed over time because of the community's involvement? For example, were there times the university planned to do one thing but the community provided input that changed the approach? Please provide some examples.

49. In research, there is a need for scientific rigor in terms of the approaches used to carry out the work. Has the partnership discussed these issues? In what ways?

    - Probe: Has the need for scientific rigor ever been in opposition to community desires? How did the partnership work through this?

50. What kind of learning has occurred, for both the community and the academics, as you have engaged in the research process together?

Thank you for your thoughtful responses thus far. We are in the final stage of the interview and there are only a few more questions remaining. The final set of questions asks about the ways community involvement in the research has developed and evolved over time.

51. In general, how has the community involvement in the PRC's various research endeavors changed over time? Has it generally increased or decreased?

52. Why do you think community involvement has changed over time?

    - Probes: external factors (CDC funding-driven), internal factors (community- or university-driven)

53. Are there certain times in conducting the research or, perhaps, certain types of research where the community becomes more or less involved? Please explain.

54. Has the academics' commitment to involving the community in research changed over time? If so, how?

55. Is there anything else you would like to tell me related to your community's participation, your community committee, or your core research project that we didn't discuss yet?

Thank you so much for your time. Your participation is very much appreciated and will be critical in helping paint a picture of the ways in which PRCs work with their communities.

Interview Guide 3
Academic-Community Partner Interaction Study, Community Respondents
(Community Partnerships, Capacities of Community Committees, And Participation in Research by Community Committees)

Introduction

Hello, my name is_____ with Macro International, and I am calling for our scheduled interview. As we mentioned before, our interview should take no more than 90 minutes. Is this still a good time to talk? [RESCHEDULE IF NECESSARY, BUT ATTEMPT TO COMPLETE INTERVIEW AT THIS TIME IF POSSIBLE.]

Thank you for taking the time to talk with me about your Prevention Research Center. We have worked with the PRC Program office at the Centers for Disease Control and Prevention, and the Collaborative Evaluation Design Team (the national evaluation advisory group) on the national evaluation of the PRC program. Right now we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to better understand the ways that your community works with PRCs to develop, implement, evaluate, and disseminate the core prevention research project – in essence, we are hoping to better understand the various approaches to Community Based Participatory Research used across the PRCs. The series of interviews will help to provide that information in a comprehensive and systematic way. Your participation is critical to this effort, so we really appreciate your taking the time to talk with us.

Before we begin, there are a few points about the interview I would like to share with you. [READ INFORMED CONSENT.]

[REQUEST A COPY OF ANY DATA COLLECTION TOOLS OR SURVEYS MENTIONED THROUGHOUT THE INTERVIEW]

First, let's talk about the core research project [give name] and core research community [give name].

1. What is your role on the core research project?

2. How did you become involved with the PRC core research?

    - Probes: how university first came together with community, community health needs, previous relationship, etc.

OK, now I'd like to focus for a while on the community involvement on the core research project.

3. Is there a community committee that participates on the core research project? [IF YES, CONTINUE WITH QUESTION 4. IF NO, SKIP TO QUESTION 20.]

4. What is the name of the community committee?

    - Are you a member of the community committee?

5. Does the community committee meet on its own—without university representatives present?

    - Probes: If so, how often do they meet?

    - When the community representatives do meet, how do they meet? In person or by telephone?

6. In what locations does the community committee meet with university representatives?

7. How easy or hard is it for you to attend meetings?

8. About what percent of the community committee members would you say attend the meetings on average?

9. About how many community committee members leave the partnership each year?

10. When members join the community committee, what is the expected commitment for participation?

11. On average, do members tend to meet this commitment?

12. Has the expected commitment changed over time?

    - Probe: If so, in what way?

OK, now I'd like to talk a little about skills and resources brought by the community committee to the core research project.

13. When thinking about community committee contributions, what skills do individuals on the committee provide?

    - Probe: Do they provide skills to help with research, evaluation, or training?

14. What resources does the community committee provide either on their own or through their organizations?

    - Probe: Have they provided resources to help with research, evaluation, or training?

Let's talk briefly about the overall partner community involved with the PRC.

15. Moving beyond the community committee, are there resources you can think of that the overall partner community has provided the PRC?

    - Have these resources been of help with research, evaluation, or training?

OK, now back to the community committee and the focus on the PRC's core research. Let's talk just a little about how the community committee is involved in that work.

16. As much as you are aware of, how would you describe community committee representatives' involvement in the core research across the span of the research process?

    - Probes (request descriptions of how these occur):

    How are they involved in the development of the research?

    - Conceptualizing the project
    - Selecting the project
    - Providing or obtaining funding for the project
    - Establishing project goals or objectives
    - Developing or planning the project

    How are they involved in the implementation of the research?

    - Conducting or implementing project activities
    - Providing space
    - Facilitating collaboration between the center and the partnering community or other partners

    How are they involved in the analysis or use of the research data?

    - Data analysis or interpretation
    - Communicating or educating about project activities and results
    - Developing or disseminating project materials or products
    - Evaluating the project

17. Has the community committee developed any principles or guidelines that describe how representatives should give input into the core research?

    - If yes, what do those guidelines include?

    - How are they used?

18. What challenges has the community committee representatives' faced in being involved in the development, implementation, evaluation, and dissemination of the core research?

19. What has helped the community committee representatives' in being involved in the development, implementation, evaluation, and dissemination of the core research?

[NOW SKIP TO QUESTION 35]

OK. Your community does not have a committee that works on the core research project, but let's talk about any community representative(s) involved in the core research and how academic representatives' meetings with these community representative(s) are characterized.

20. Besides you, are there other individuals who serve as community representatives and are involved in the core research project?

21. What kinds of organization(s) does the community member(s) represent?

    - Probes: CBOs, academic, health dept, ed. dept, etc

22. [ASK ONLY IF MORE THAN ONE COMMUNITY REPRESENTATIVE] Do the community representatives meet on their own—without university representatives present?

    - Probes: If so, how often do they meet?

    - When the community representatives do meet, how do they meet? In person or by telephone?

23. In what locations do the community representatives meet with university representatives?

24. [ASK ONLY IF MORE THAN ONE COMMUNITY REPRESENTATIVE] About what percent of the community representatives would you say attend the meetings on average?

25. [ASK ONLY IF MORE THAN ONE COMMUNITY REPRESENTATIVE] About how many community representatives leave the partnership each year?

26. When individuals become community representatives, what is the expected commitment for participation?

27. On average, are you [IF MORE THAN ONE COMMUNITY REPRESENTATIVE "and other representatives"] able to meet this commitment?

28. Has the expected commitment changed over time?

    - Probe: If so, in what way?

OK, now I'd like to talk a little about skills and resources brought by community representatives.

29. When thinking about community representative's contributions, what skills do you [IF MORE THAN ONE COMMUNITY REPRESENTATIVE "and other representatives"] provide?

    - Probe: Do you provide skills to help with research, evaluation, or training?

30. What resources do you [IF MORE THAN ONE COMMUNITY REPRESENTATIVE "and other representatives"] provide either on your own or through your organizations?

    - Probe: Have you provided resources to help with research, evaluation, or training?

OK, let's talk just a little about how the community representative(s) is involved in the core research project.

31. How would you describe the community representative's [YOUR] involvement in the core research across the span of the research process?

    - Probes (request descriptions of how these occur):

    How are they [YOU] involved in the development of the research?

    - Conceptualizing the project
    - Selecting the project
    - Providing or obtaining funding for the project
    - Establishing project goals or objectives
    - Developing or planning the project

    How are they [YOU] involved in the implementation of the research?

    - Conducting or implementing project activities
    - Providing space
    - Facilitating collaboration between the center and the partnering community or other partners

    How are they [YOU] involved in the analysis or use of the research data?

    - Data analysis or interpretation
    - Communicating or educating about project activities and results
    - Developing or disseminating project materials or products
    - Evaluating the project

32. Have community representatives developed any principles or guidelines that describe how representatives should give input into the core research?

- If yes, what are those guidelines?
- How are they used?

33. What challenges have the community representatives [YOU] faced in being involved in the development, implementation, evaluation, and dissemination of the core research?

34. What has helped the community representatives [YOU] in being involved in the development, implementation, evaluation, and dissemination of the core research?

[THE REMAINING QUESTIONS ARE FOR EVERYONE]

Changing gears slightly, let's talk for a moment about disagreements and the ways that the academic-community partnership deals with conflict related to the core research project.

35. Any partnership is likely to have conflict. In some cases conflict can be disruptive to the progress, research, or partnership of a PRC. In other cases, conflict might be easily resolved. Has your partnership encountered conflict?

36. What were your most difficult challenges and how did you deal with them? (Probe if asked: examples may include topical, interpersonal, and/or structural challenges)

37. Are there methods in place for decision-making or coming to consensus?

38. Who usually seems to take responsibility for trying to resolve conflicts?

39. Probes:

    - How has the PRC Director played a role in resolving partnership conflict?
    - How has the community committee chair [YOU?] played a role in resolving partnership conflict?
    - Is there a community liaison? If yes, how has that person played a role in resolving partnership conflict?

Now I'd like to ask a few questions about the community's involvement in the core research.

40. What are examples of ways you would say the PRCs' core research has changed over time because of the community's involvement? For example, were there times the university planned to do one thing but the community provided input that changed the approach? Please provide some examples.

41. In research, there is a need for scientific rigor in terms of the approaches used to carry out the work. Has the partnership discussed these issues? In what ways?

- Probe: Has the need for scientific rigor ever been in opposition to community desires? How did the partnership work through this?

42. What kind of learning has occurred, for both the community and the academics, as you have engaged in the research process together?

Thank you for your thoughtful responses thus far. We are in the final stage of the interview and there are only a few more questions remaining The final set of questions asks about the ways community involvement in the research has developed and evolved over time.

43. In general, how has the community involvement in the PRC's various research endeavors changed over time? Has it generally increased or decreased?

44. Why do you think community involvement has changed over time?

    - Probes: external factors (CDC funding-driven), internal factors (community- or university-driven)

45. Are there certain times in conducting the research or, perhaps, certain types of research where the community becomes more or less involved? Please explain.

46. Has the community's understanding of the research process changed over time? If so, how?

47. Has the community's commitment to the research process changed over time? If so, how?

Thank you so much for your time. Your participation is very much appreciated and will be critical in helping paint a picture of the ways in which PRCs work with their communities.

Interview Guide 4
Academic-Community Partner Interaction Study, Academic Respondents
(Benefits and Challenges of Being in the PRC Network)

Introduction

Hello, my name is_____ with Macro International, and I'm calling for our scheduled interview. As we mentioned before, our interview should take only about 30 minutes. Is this still a good time to talk? [RESCHEDULE IF NECESSARY, BUT ATTEMPT TO COMPLETE INTERVIEW AT THIS TIME IF POSSIBLE.]

Thank you for taking the time to talk with me about your Prevention Research Center. We have worked with the PRC Program office at the Centers for Disease Control and Prevention, and the Collaborative Evaluation Design Team (the national evaluation advisory group) on the national evaluation of the PRC Program. Right now we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to better understand the perceived benefits and challenges of being part of the PRC network. The series of interviews will help to provide that information in a comprehensive and systematic way. Your participation is critical to this effort, so we really appreciate your taking the time to talk with us.

Before we begin, there are a few points about the interview I would like to share with you. [READ INFORMED CONSENT.]

First, let's talk about how your PRC has been influenced by being part of the overall PRC program.

1. In what ways might you say your PRC benefits from being part of the broader PRC network?

2. How does your core research project benefit from your PRC's participation in the PRC network?

3. What sorts of challenges might you say your PRC experiences as a result of being part of the broader PRC network?

4. What challenges does the core research project experience from your PRC's participation in the PRC network?

5. How much do you contact or collaborate with other PRCs?
   Probes:

   - Do you engage with other PRCs around conducting your research?

   - Do you engage with other PRCs in developing and delivering training?

6. In what ways do you think you as an individual researcher have benefited from being part of the PRC network?

7. In what ways might you think are you as an individual researcher are hindered by being part of the PRC network?

OK, now let's briefly talk about the perceived benefits and challenges the university experiences as a result of the PRC program.

8. In what ways do you think your university has benefited from your being part of the PRC network?

9. How, if at all, is your university challenged as a result of your being part of the PRC network?

Thank you for your thoughtful responses thus far. We are in the final stage of the interview and there are only a few more questions remaining. I'd like to ask now about what you perceive as benefits and hindrances to the development of additional research that may result from your involvement in the PRC network.

10. In what ways might you say additional research has developed (grown or been improved) as a result of the existence of the PRC network?

11. Can you think of ways the PRC network may have hindered the development (growth or improvement) of additional research?

12. Is there anything else you would like to tell me related to the benefits and challenges of being part of the PRC network that we didn't discuss yet?

Thank you so much for your time. Your participation is very much appreciated and will be critical in helping paint a picture of the perceived benefits and challenges of being part of the PRC network.

Interview Guide 5
Academic-Community Partner Interaction Study, Community Respondents
(Benefits and Challenges of Being in the PRC Network and National Community Committee)

Introduction

Hello, my name is_____ with Macro International, and I'm calling for our scheduled interview. As we mentioned before, our interview should take only about 45 minutes. Is this still a good time to talk? [RESCHEDULE IF NECESSARY, BUT ATTEMPT TO COMPLETE INTERVIEW AT THIS TIME IF POSSIBLE.]

Thank you for taking the time to talk with me about your Prevention Research Center. We have worked with the PRC Program office at the Centers for Disease Control and Prevention, and the Collaborative Evaluation Design Team (the national evaluation advisory group) on the national evaluation of the PRC Program. Right now we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to better understand the perceived benefits and challenges of being part of the PRC network. The series of interviews will help to provide that information in a comprehensive and systematic way. Your participation is critical to this effort, so we really appreciate your taking the time to talk with us.

Before we begin, there are a few points about the interview I would like to share with you. [READ INFORMED CONSENT.]

[REQUEST COPY OF ANY DATA COLLECTION TOOLS OR SURVEYS MENTIONED THROUGHOUT THE INTERVIEW.]

First, let's talk about what community members perceive as benefits and challenges to them or their communities about being part of the PRC network. For this interview, when we refer to the PRC network, we mean the overall PRC Program consisting of 33 PRCs along with their partner communities.

1. How much interaction would you say you have had with other PRCs across the country?
   Probes:
   - On about how many occasions per year do you interact with other PRCs?
   - With about how many other PRCs do you interact each year?
2. In what ways have you interacted with these PRCs?
   Probe:
   - Have you interacted through the National Community Committee?

- Have you interacted outside of the National Community Committee?

3 What would you say you have learned or gained as a result of participating in the PRC Network? Please list specific benefits you can think of.

- Probes: (If requested, offer: Have you talked with people from other places? Have you seen ways the work you are doing compared with work being done elsewhere? Others?)

4. What would you say have been benefits of being part of the PRC network for the communities that you and your partners represent?

5. What would you say have been challenges of being part of the PRC network for the communities that you and your partners represent?

OK, now let's briefly talk about things you might perceive as benefits and challenges the research projects have experienced.

6. Can you think of ways your involvement in the larger PRC network has influenced the research projects your PRC conducts?

- Probe: If yes, how?

7. What are some benefits the research projects have experienced as a result of your involvement in the larger PRC network?

8. What are some challenges you would say the research projects have experienced as a result of your involvement in the larger PRC network?

Changing gears slightly, let's focus on the benefits and challenges that might have influenced the development of additional research and other projects in the community.

9. In what ways would you say additional research or other projects has developed (grown or been improved) as a result of you and your community partners' involvement in the PRC network?

10. Can you think of ways your and your community partners' involvement in the PRC network may have hindered the development (growth or improvement) of additional research or other projects?

Now, let's think for a moment about how community relationships with the universities may have been influenced by community involvement with the PRC.

11. How would you say the relationship between the community and the university has changed as a result of your communitys' involvement in the PRC network?

Thank you for your thoughtful responses thus far. We are in the final stage of the interview and there are only a few more questions remaining. The final set of questions asks about the benefits and challenges you perceive of being involved in the National Community Committee.

12. Outside of what we have already discussed about being in the PRC network, are there any additional benefits or challenges you have experienced as a result of being involved in the National Community Committee?

13. What additional benefits or challenges do you think others in your community have experienced as a result of the work of the National Community Committee?

14. Is there anything else you would like to tell me related to the benefits and challenges of being part of the PRC network that we didn't discuss yet?

Thank you so much for your time. Your participation is very much appreciated and will be critical in helping paint a picture of the perceived benefits and challenges of being part of the PRC network.

Interview Guide 6
Training, Technical Assistance, and Mentoring with Community Partners Study, Academic Respondents
(Diversity of PRC Training Activities)

Introduction

Hello, my name is [name] with the CDC Prevention Research Centers' program office, Research and Evaluation team and I'm calling for our scheduled interview. As I mentioned previously, our interview should take between 30-60 minutes. Is this still a good time to talk? **If not, reschedule; however, attempt to complete the interview at the designated time.**

Thank you for taking the time to talk with me about your Prevention Research Center. We, along with Macro International and the Collaborative Evaluation Design Team (the national evaluation advisory group) are collaborating on a national evaluation of the PRC program. Right now, we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to increase our understanding of the diversity of training with communities and partners. These interviews will help provide that information in a comprehensive and systematic way. Your participation is critical to this effort and we appreciate your willingness to participate in this interview.

Before we begin, I want to let you know that the interview will be taped and subsequently transcribed. Is that OK with you? I will be the only person to see the full transcript of the tape. Do you have any questions about the interview process before we begin?

First, I would like to find out about the recipients of trainings conducted by your PRC other than trainings specifically for students.

1. Other than for students, for what audiences do you conduct trainings?

2. Where are those audiences located?

Now I would like to ask about the nature of and rationale for PRC trainings.

3. What types of trainings has your PRC conducted for your community and partners?

4. What was the purpose of the training?

5. How was the training need identified?

6. Was the training newly developed or an ongoing activity?

Now, I would like some information on the engagement of your community partners in training activities.

7. What role do community partners play in developing, providing, or evaluating training activities?
   Probe: (request descriptions of their roles in the following areas):

   Development:

   - Conceptualizing the training activity and method e.g. train-the trainer, web-based trainings, peer-to-peer trainings, training manuals, etc.
   - Providing or obtaining funding for the training
   - Establishing training goals or objectives
   - Developing or planning the training activity

   Implementation:

   - Conducting or providing training activities
   - Providing space
   - Facilitating collaboration between the center and the partnering community or other partners

   Evaluation:

   - Evaluation of the training activity

8. How do your community partners get involved in training activities?
   Probe: Are they solicited? Do they volunteer?

Now, I would like to talk about how community and PRC capacity are enhanced through training.

9. What specific knowledge or skill-building is targeted through PRC trainings for community partners?
   Probe: community assessment: identifying community needs, strengths, and assets; performing CBPR; policy development: establishing goals and strategies; evaluation, or grant writing

10. Has the community implemented trainings to increase knowledge or developed skills among PRC staff?

11. **If yes to Q 10** – How did the PRC identify its training needs and let the community know about these needs?

12. **If yes to Q 10** – Have training efforts fostered the PRC's ability to utilize skills on an ongoing basis?
    Probe: train-the-trainer; peer-to-peer training.

Thank you for your responses thus far. We are in the final stage of the interview and there are only a few questions remaining. The final set of questions asks about the value of PRC training activities overall and if any of the training is tied to PRC research.

13. In what ways does your institution demonstrate its value for training?
    Probe: the provision of space: additional faculty and staff; promotion and tenure policies

14. Are your PRCs' training activities related to your PRCs research? If yes, please explain.

15. **If yes to Q 14** – Are these trainings only for PRC staff, or are there trainings related to your PRC research for community partners?

16. Is there anything else that you would like to discuss related to training activities, community and partner engagement, or institutional support for training that we did not talk about yet?

Our interview has concluded. Your participation is very much appreciated and is critical toward increasing knowledge and understanding about the diversity of training activities with communities and partners. Thank you so much for your time.

Interview Guide 7
Training, Technical Assistance, and Mentoring with Community Partners Study, Academic Respondents
(Technical Assistance Activities and Mentoring Provided by PRCs)

Introduction

Hello, my name is [name] with the CDC Prevention Research Centers' program office,

Research and Evaluation team and I'm calling for our scheduled interview. As I mentioned previously, our interview should take between 30-60 minutes. Is this still a good time to talk? **If not, reschedule; however, attempt to complete the interview at the designated time.**

Thank you for taking the time to talk with me about your Prevention Research Center. We, along with Macro International and the Collaborative Evaluation Design Team (the national evaluation advisory group) are collaborating on a national evaluation of the PRC program. Right now, we are conducting a series of interviews with representatives across the PRCs as part of a special study that will provide a qualitative assessment of the program.

The purpose of this interview is to increase our understanding of the diversity of technical assistance with communities and partners. These interviews will help provide that information in a comprehensive and systematic way. Your participation is critical to this effort and we appreciate your willingness to participate in this interview.

Before we begin, I want to let you know that the interview will be taped and subsequently transcribed. Is that ok with you? I will be the only person to see the full transcript of the tape. Do you have any questions about the interview process before we begin?

First, let's talk about the PRC's process of providing and evaluating Technical Assistance for your community partners.

1. Do your community partners identify for you their TA needs and goals? If yes, how? Probe: needs assessment; request from recipient.

2. Do you have a mechanism to track or monitor TA that you provide? If yes, what is it?

3. Do you evaluate your TA, and if so, how?

4. What PRC staff provide TA?

Next, let's talk about the recipients of TA, the mechanisms used to provide TA, the frequency and type of TA.

5. Which community partners are the recipients of TA?

6. What mechanisms do you use to provide TA?
   Probe: funded projects, consultations, emails, meetings, phone conferences, published guides

7. Is the TA provided routinely or on a case-by-case basis?

8. If routinely, has this routine TA helped provide institutionalization of the topic or skill for continuation of projects and to achieve desired outcomes? If yes, please explain.

9. Are there any formal agreements in place to provide TA?

10. Do your partners know the types of TA they could receive from the PRC?
    Probe: tailored; overall support

11. About how much time per week does your PRC spend providing TA to community partners?

12. About how many times per week, does your PRC call on community partners for TA?

Now, I would like to talk about some of the topical areas for providing TA.

13. What are the topics or skills that you provide TA on for your community and partners?
    Probe: an area of expertise understanding CBPR public health policy development health care delivery

14. What are the topics that your PRC receives TA on from community partners?
    (allow answers that PRC does not receive TA from partners)
    Probe: an area of expertise understanding CBPR public health policy development health care delivery

Thank you for your responses thus far. We are in the final stage of the interview and there are only a couple of questions remaining. The final set of questions asks about your institution's value for TA and mentoring relationships.

15. In what ways does your institution demonstrate its value for TA?
    Probe: the provision of space and communication tools additional faculty and staff promotion and tenure policies

16. Do you have a mentoring relationship with a community partner? By mentoring relationship, I mean "a sustained relationship and partnership between two people, … in which the 'more experienced person' or mentor offers encouragement and support to increase the self-confidence and skills of the 'less experienced person' or mentee." **If yes, please describe it.**

17. Is there anything else that you would like to discuss related to TA activities with communities and partners that we did not talk about yet?

Our interview has concluded. Your participation is very much appreciated and is critical toward

increasing knowledge and understanding about the diversity of TA activities with communities and partners. Thank you for your time.

Definitions:

Training is transferring knowledge, skills, and competencies to individuals who are in a position to use what they have learned.

Technical Assistance (TA) provides guidance, support, and expertise to an identified group or agency as the group works toward a desired outcome.

Mentoring is “a sustained relationship and partnership between two people, one of whom is more experienced than the other in which the ‘more experienced person’ or mentor offers encouragement and support to increase the self-confidence and skills of the ‘less experienced person’ or mentee” (Gray, Gibbons, & Lawrence, 2005, p. 3).

Appendix G: Sampling Criteria Used for PRC Selection for Each Interview Guide and the Corresponding Number of Interviews Conducted

Interview Guide	Criteria				Total number of interviews by organization
	Criteria 1 (n)	Criteria 2 (n)	Criteria 3 (n)	Criteria 4 (n)	
Guide 1 **Organizational structure and resources (9 Academic Respondents)**	PRC funded in 1993 or earlier (n = 5)	PRC funded in 2000 or later (n = 4)			45 interviews conducted by Macro International, Inc.
Guide 2 **Community partnerships, capacities of community committees, and participation in research by community committees[2] (9 Academic Respondents)**	PRC's core research project is intervention and uses a capacity building or Community Health Advisor (CHA) model[3] (n = 3)	PRC's core research project is intervention, without a capacity building or CHA model (n = 3)	PRC's core research project is determinants or other (n = 3)		
Guide 3 **Community partnerships, capacities of community committees, and participation in research by community committees (9 Community Respondents)**	PRC's core research project is intervention and uses a capacity building or Community Health Advisor (CHA) model (n = 3)	PRC's core research project is intervention, without a capacity building or CHA model (n = 3)	PRC's core research project is determinants or other (n = 3)		
Guide 4 **Benefits and challenges of being in the PRC network (9 Academic Respondents)**	PRC funded prior to 1998, and member of a research network (n = 2)	PRC funded prior to 1998, and not a member of a research network (n = 2)	PRC funded ≥ 1998, and member of a research network (n = 3)	PRC funded ≥ 1998, and not a member of a research network (n = 2)	
Guide 5 **Benefits and challenges of being in the PRC network and National Community Committee (9 Community Respondents)**	PRC has a community committee chair active with NCC and active on core research project (n = 9)				

Interview Guide	Criteria				Total number of interviews by organization
	Criteria 1 (n)	Criteria 2 (n)	Criteria 3 (n)	Criteria 4 (n)	
Guide 6 **Diversity of PRC training activities (9 Academic Respondents)**	PRC has training activities with partners related to core or other activities (n = 9)				18 interviews conducted by PRC Program office
Guide 7 **TA activities and mentoring provided by PRCs (Academic Respondents)**	PRC funded prior to 1998 (n = 4)	PRC funded in 1998 or later (n = 5)			

(Footnotes)

1 PRC IS=PRC Information System

2 The topic "Community partnerships, capacities of community committees, and participation in research by community committees" was developed into two interview guides, with different questions for academic respondents and community respondents. One community and one academic respondent were selected from the same nine PRCs.

3 Several PRCs either have a main purpose of the core research project to build community capacity or use CHAs as part of their core research, both of which require a high level of community involvement in the research.

Appendix H: Tables Supporting the Organizational and Community Characteristics Study

Table R-1. Organizational Characteristics of the Prevention Research Centers

Academic Institution	First year funded	Type of academic institution	Fiscal agent	Location of partner community
University of Alabama at Birmingham	1993	Public	SPH	8 counties in the Black Belt Region of Alabama: Perry, Lowndes, Wilcox, Camden, Sumter, Marengo, Monroe, and Dallas 2 towns in the Black Belt Region of Alabama: Peterman and Orville
University of Arizona	1998	Public - Land grant	SPH	2 counties in Arizona: Santa Cruz and Cochise
Boston University	2001	Private	SPH	Residents of Boston Public Housing
University of California at Berkeley	1993	Public - Land grant	SPH	Korean Americans in the United States
University of California at Los Angeles	1998	Public	SPH	1 California county: Los Angeles
University of Colorado	1998	Public	SoM	6 counties in Colorado: Rio Grande, Saguache, Costilla, Alamosa, Mineral, and Conejos
Columbia University	1991	Private	SPH	2 neighborhoods in Harlem, New York: Central Harlem and East Harlem
Emory University	2004	Private	SPH	33 Southwest Georgia counties: Berrien, Wilcox, Ben Hill, Coffee, Seminole, Decatur, Grady, Brooks, Echols, Clay, Early, Mitchell, Randolph, Cook, Thomas, Tift, Lowndes, Dougherty, Quitman, Calhoun, Lee, Crisp, Turner, Worth, Lanier, Colquitt, Sumter, Terrell, Dooly, Miller, Irwin, Baker, and Clinch
Harvard University	1998	Private	SPH	2 states: Maine and Massachusetts
University of Illinois at Chicago	1990	Public - Land grant	SPH	4 Chicago neighborhoods: Chicago Lawn, Greater Lawn, West Lawn, and Gage Park
University of Iowa	2002	Public	SPH	1 Iowa county: Keokuk
Johns Hopkins University	1993	Private	SPH	1 City in Maryland: Baltimore
University of Kentucky	2000	Public - Land grant	SoM	14 Appalachian counties in Kentucky: Breathitt, Perry, Knox, Harlan, Letcher, Laurel, Bell, Jackson, Leslie, Floyd, Owsley, Clay, Pike, and Knott
University of Michigan	1998	Public	SPH	1 Michigan county: Genesee
University of Minnesota	1996	Public - Land grant	SoM	1 city in Minnesota: Minneapolis
Morehouse School of Medicine	1998	Private	SoM	15 neighborhoods or neighborhood planning units in Atlanta, Georgia: Pittsburg, Villa Monte, Villages of Carver, Lakewood Heights, Swallow Circle/Baywood, Polar Rock, Chosewood Park, Perkerson Park, South Atlanta, Betmar LaVilla, Amal Heights, Joyland, High Point, Carver High School, and Thomasville Heights
University of New Mexico	1995	Public	SoM	Rural residents in the Southwestern United States and 3 Native American tribal organizations: Pueblo of Acoma, Pueblo of Laguna, and To'Hajilee Navajo Chapter

Academic Institution	First year funded	Type of academic institution	Fiscal agent	Location of partner community
University of North Carolina at Chapel Hill	1986	Public	SPH	1 state: North Carolina
University of Oklahoma	1994	Public	SPH	1 town in Oklahoma: Anadarko
Oregon Health and Science University	2004	Public	SoM	4 Northwestern U.S. Native American tribal organizations: Umatilla Reservation; Fort Hall (Shoshonne-Bannock) Reservation; Urban Indians of Wichita, Kansas; and Suquamish Tribe, Washington
University of Pittsburgh	2001	Public	SPH	1 county in Pennsylvania: Allegheny
University of Rochester	2004	Private	SoM	Deaf people who communicate in American Sign Language in Rochester, New York
Saint Louis University	1994	Private	SPH	12 counties in Missouri: Oregon, Shannon, Reynolds, Butler, Dunklin, Pemiscot, Scott, Carter, Wayne, Howell, Ripley, and Mississippi
San Diego State University and University of California at San Diego	2004	Public	SPH	South Bay region of San Diego, California
University of South Carolina	1993	Public	SPH	1 county in South Carolina: Sumter
University of South Florida	1998	Public	SPH	5 Florida counties: Okeechobee, Hendry, Collier, Sarasota, and Dade, and 1 county in Kentucky: Lexington-Fayette
State University of New York at Albany	2002	Public	SPH	3 towns in New York: Amenia, Northeast, and Mamakating
Texas A&M University	2004	Public - Land grant	SPH	7 counties in Texas: Grimes, Brazos, Leon, Burleson, Washington, Madison, and Robertson
University of Texas Health Science Center at Houston	1986	Public	SPH	1 county in Texas: Harris
Tulane University	1998	Private	SPH	2 neighborhoods within the Lower Eighth Ward and Upper Ninth Ward of New Orleans, Louisiana: St. Roch and St. Claude
University of Washington	1986	Public	SPH	Southeast Seattle, Washington
West Virginia University	1993	Public - Land grant	SoM	1 state: West Virginia
Yale University	1998	Private	SPH	2 cities in Connecticut: New Haven and Bridgeport

SPH=School of Public Health; SoM=School of Medicine.

Table R-2. Selected Economic Indices for Cities in Which PRCs' Academic Institutions Are Located

Academic Institution	City[a]	Unemployment rate[b] (June 2006)	Average annual pay for city residents[b] (2004)	Cost of living[c]
Texas A&M University	College Station, TX [1]	4.6	27,716.00	**100.00**
University of Texas Health Science Center at Houston	Houston, TX	5.6	44,443.00	**100.00**
University of Oklahoma	Oklahoma City, OK	4.0	32,057.00	**102.86**
University of Iowa	Iowa City, IA[2]	2.7	NA	**103.69**
University of South Carolina	Columbia, SC	6.2	32,619.00	**103.88**
University of Alabama at Birmingham	Birmingham, AL	3.8	37,983.00	**106.76**
University of Pittsburgh	Pittsburgh, PA	4.8	37,589.00	**107.26**
University of Kentucky	Lexington, KY	5.0	34,595.00	**108.22**
Saint Louis University	Saint Louis MO	5.3	38,400.00	**108.42**
Tulane University	New Orleans, LA[3]	7.2	34,320.00	**108.55**
University of Minnesota	Minneapolis, MN[4]	3.5	43,993.00	**108.78**
Emory University	Atlanta, GA	5.0	43,250.00	**109.01**
Morehouse School of Medicine	Atlanta, GA	5.0	43,250.00	**109.01**
University of South Florida	Tampa, FL	3.3	NA	**110.57**
University of Arizona	Tucson, AZ	4.6	NA	**110.93**
State University of New York at Albany	Rensselaer, NY[5]	3.8	NA	**111.64**
West Virginia University	Morgantown, WV	3.6	NA	**112.31**
University of New Mexico	Albuquerque, NM	4.4	34,530.00	**113.47**
University of Rochester	Rochester, NY	4.5	36,605.00	**113.47**
University of Colorado	Denver, CO	4.9	44,568.00	**114.69**
University of Michigan	Ann Arbor, MI[6]	4.4	44,926.00	**114.89**
University of North Carolina at Chapel Hill	Chapel Hill, NC	3.9	45,892.00	**122.24**
University of Illinois at Chicago	Chicago, IL	4.7	45,181.00	**126.92**
University of Washington	Seattle, WA	4.6	43,862.00	**129.45**
Oregon Health and Science University	Portland, OR	5.3	34,259.00	**131.96**
Johns Hopkins University	Baltimore, MD	4.4	41,815.00	**134.00**
Yale University	New Haven, CT	4.5	NA	**137.39**
Boston University	Boston, MA	4.8	52,976.00	**152.32**
Harvard University	Boston, MA	4.8	52,976.00	**152.32**
University of California at Berkeley	Berkeley, CA[7]	4.5	55,793.00	**163.28**
San Diego State University	San Diego, CA	4.2	NA	**164.93**
University of California at Los Angeles	Los Angeles, CA	4.4	43,169.00	**171.23**
Columbia University	New York, NY	4.6	54,571.00	**231.54**

Source: [a]For 8 cities in which PRCs are located, ACCRA Cost of Living data are not available, and the closest city was used instead: [1] Houston, TX; [2] Cedar Rapids, IA; [3] Slidell - St Tammany Parish, LA; [4] Rochester, MN; [5]Syracuse, NY; [6]Detroit, MI; [7]Oakland. CA; [b]U.S. Department of Labor and [c]ACCRA, ACCRA Cost of Living Index, average of the past four quarters ending first quarter 2007.
NA = Not available.

Table R-8b. Key Leadership Faculty and Staff Members' Highest Graduate Degrees by Discipline

Leadership Position	Highest Graduate Degree					
	MD	PhD	DrPH	Other doctoral-level degree	Master's-level or other graduate degree	No graduate degree
Center PI or director	**Total = 11** • Medicine (11)	**Total = 21** • Anthropology (2) • Epidemiology (5) • Exercise science (1) • Health behavior and health education (4) • Health services research (1) • Psychological foundations of education (1) • Psychology (4) • Sociology (3)	**Total = 1** • Nutrition (1)	**Total = 0**	**Total = 0**	**Total = 0**

Leadership Position	Highest Graduate Degree					
	MD	PhD	DrPH	Other doctoral-level degree	Master's-level or other graduate degree	No graduate degree
Deputy director (involved in research)	**Total = 0**	**Total = 6** • Anthropology (1) • Behavioral epidemiology (1) • Behavioral sciences (1) • Biology (1) • Psychology (1) • Public health (1)	**Total = 2** • Health behavior and education (1) • Public health (1)	**Total = 0**	**Total = 5** • Community health education (1) • Early childhood education (1) • Epidemiology (1) • Psychology and organizational development (1) • Public administration (1)	**Total = 1**
Center administrator or managing director (non-research)	**Total = 0**	**Total = 1** Sociology (1)	Total = 0	Total = 0	**Total = 9** • Behavioral science and health education (1) • Community and behavioral health (1) • Counseling psychology (1) • Educational administration (1) • Epidemiology (1) • MA (1) • Maternal and child health (1) • Public health policy and administration (1) • Social work (1)	**Total = 6**

Leadership Position	Highest Graduate Degree					
	MD	PhD	DrPH	Other doctoral-level degree	Master's-level or other graduate degree	No graduate degree
PI of core research	**Total = 7** • Medicine (7)	**Total = 27** • Anthropology (2) • Economics (1) • Epidemiology (7) • Health behavior and health education (6) • Psychology (6) • Sociology (4) • Speech and hearing sciences (1)	**Total = 2** • Health behavior and health education (1) • Public health (1)	**Total = 3** • Educational psychology (1 • Epidemiology (1) • Law (1)	**Total = 0**	**Total = 1**
Evaluator	**Total = 1** Medicine (1)	**Total=21** • Anthropology (2) • Applied biopsychology (1) • Community research and action (1) • Economics (1) • Psychology (5) • Public health and behavioral sciences and health education (6) • Social work and social welfare (3) • Sociology (1) • Sociology and social psychology (1)	**Total=3** • Health behavior and education (1) • Public health (1) • Public health and aging (1)	**Total=1** • Law (1)	**Total=5** • Early childhood education (1) • Management (1) • Public health (1) • Reproductive and child health (1) • Student personnel services (1)	**Total = 0**

Source: Faculty and staff resumes.

Table R-14. Percentage of PRCs' Partner Communities (N=147) and PRC Core Research Communities (N=129), by Race or Ethnicity

Race/ ethnicity	Range		Mean (SD)		Median	
	Partner communities	Core research communities	Partner communities	Core research communities	Partner communities	Core research communities
White	0–99	0–99	57% (31)	51% (30)	63	54
African American	0–99	0–97	29% (28)	35% (29)	23	30
Hispanic/ Latino*	0–89	0–86	11% (18)	9% (15)	3	3
Asian/Pacific Islander/ Native American	0–100	0–100	7% (19)	8% (20)	1	1
Other race/ multiple races	0–49	0–35	5% (9)	5% (7)	2	2

Data were missing for 6 partner communities and 6 core research communities, reflecting missing data for 3 PRCs.
*Because Hispanic or Latinos may be of any race, these data also are included in the racial categories.
Source: U.S. Census 2000.

Table R-15. Per Capita Income for PRC Partner Communities (N=134) and PRC Core Research Communities (N=119)

Type of Community	Income (in dollars)		
	Range	Mean (SD)	Median
Partner	6,986–41,015	14,745 (4,847)	14,075
Core research	7,269–41,015	15,387 (4,640)	14,862

Data were missing for 19 partner communities and 16 core research communities, reflecting missing data for 5 PRCs and 4 PRCs respectively.
Source: U.S. Census 2000.

Table R-16. Unemployment Rate for PRC Partner Communities (N=136) and PRC Core Research Communities (N=118)

Type of Community	Percentage		
	Range	Mean (SD)	Median
Partner	1–18	7 (3)	6
Core research	1–16	6 (2)	6

Data were unavailable for 17 partner communities and 17 core research communities, reflecting missing data for 5 PRCs.
Source: U.S. Bureau of Labor Statistics 2005 County and State Data Tables and U.S. Census 2000 for 4 PRCs' partner and core research communities.

Table R-17. Percentage of Persons Over 25 Years of Age Without a High School Diploma for PRC Partner Communities (N=132) and PRC Core Research Communities (N=116)

Type of Community	Percentage of Persons		
	Range	Mean (SD)	Median
Partner	8–61	33 (10)	33
Core research	12–58	31 (9)	32

Data were missing for 21 partner communities and 19 core research communities, reflecting missing data for 7 PRCs.
Source: U.S. Census 2000.

Appendix I: Definitions of Research Terms Used in the Core Research Study

The definitions of the following research terms are used by the PRC Program.

Anthropometric measures (e.g., height and weight): A process of taking basic human body measurements like height, weight, percent body fat, and others. Such measurements do not necessarily have to be performed by medical personnel.

Case control: An observational study design in which participants with a disease or condition (cases) are compared to participants without that disease or condition (controls), and information is collected about level of exposure to risk factors of interest.

Case studies or case series: An observational study design in which a program, an event, an activity, a process, or one or more individuals is explored, explained, or described in detail, and where the case(s) are bounded by time and space.

Cognitive interviews: A process of interviewing volunteers for the purpose of examining the study instrument regarding issues such as whether questions are understood as intended, the difficulty and type of mental processes respondents use to retrieve information in order to answer a question, decision processes respondents use in determining an answer, and respondents' ability to select a questionnaire response that matches their internal response.

Cohort/longitudinal: An observational study design in which a specific population (or cohort) is observed over time in order to longitudinally assess the presence or absence of certain variables (risk factors and outcomes of interest) in the population.

Community, organization, or school observation: A process that enables a researcher to gather data by seeing group behavior, daily activities, or the study environment first-hand at the site of study (community, organization, school) or in settings relevant to the research questions.

Computer-assisted interviews: A method of interviewing that uses an interactive, front-end software application. The software can customize the interview based on the respondent's answers. The computer assists by automatically controlling questionnaire branching, conducting on-line editing for reconciliation directly with respondent, scheduling future calls and capturing a variety of management information about the interview. Responses are entered into the computer in real-time (at the time of data collection), eliminating data transfer errors and the need for a separate data entry step. This method occurs with an interviewer present and therefore does not include Web- or Internet-based surveys.

Content analysis: A process of taking large amounts of textual information and systematically identifying its properties (such as the frequencies of most used keywords) by detecting the more important structures of its communication content. A selected theoretical framework usually is used to categorize the text and inform the data analysis. Content analysis generally answers the questions of who says what, to whom, why, to what extent, and with what effect?

Cross-sectional: An observational study design in which a population is examined at a certain point in time.

Data captured and reported electronically: A process by which data are captured using a measurement device, such as an accelerometer, frequency counter, or other device that gives an electronic output of data.

Data collected through participants' self-tracking: A process by which data are captured through a participant's self-report of specific activities, such as the number of steps as recorded on a pedometer or food eaten as recorded on a nutrition log.

Determinant research: Determinant research examines how various risk and protective factors affect health.

Dissemination research: Dissemination research examines strategies for promoting the adoption and maintenance of effective programs and may include assessing the effectiveness of programs in different settings or with different populations. It may also include improving research methods through advances in measurement, research design, or analytic approaches.

Document review: A process of reviewing the content of documents and abstracting specific data points for specific information. Documents can include medical charts, school records, reports, media such as newspaper or journal articles and television shows, and others.

Focus groups: A method wherein a group of people (usually between 6 and 10 people) are asked about their attitude toward a health issue, marketing product, or other topic. Questions are asked in an interactive group setting where participants' responses can build on those provided by others in the group.

Geographic Information System (GIS): A system for capturing, storing, analyzing, and managing data and associated attributes which are spatially referenced to the earth.

Intervention research: Intervention research examines the effectiveness of strategies or programs in reducing disease and promoting health, and may include program evaluation, cost effectiveness research, or research synthesis.

Medical assessments: A procedure performed by medical personnel to diagnose a disease, determine the presence of a particular health condition, or assess current health status in the participant. Examples include hearing and/or vision screening, measuring blood pressure, taking a participant's pulse, drawing blood, and other procedures.

Participant and key informant interviews: A method that involves identifying different members of a given community who are especially knowledgeable about a topic ("key informants"), or have some knowledge about the topic because they were involved in some way ("participants"), and asking them questions about their experiences in that community and with that topic. Key informants generally have more than average knowledge about the topic or subject, whereas participants' knowledge is relational to their own experience and involvement with the topic.

Participant observation: A process that enables a researcher to gain a close and intimate familiarity with a given group of individuals (such as a religious, occupational, or subcultural group; or a particular community) and their practices through an intensive involvement with people in their natural environment, often, though not always, over an extended period of time. Participant observation can involve a range of methods, including: informal interviews, direct observation, participation in the life of the group, collective discussions, analysis of personal documents produced within the group, self-analysis, and life-histories.

Quasi-experimental with control or comparison group: An experimental study design in which participants are non-randomly assigned to one or more treatment groups and one or more control or comparison groups.

Quasi-experimental without control or comparison group: An experimental study design in which participants are non-randomly assigned to one or more treatment groups.

Randomized trial: An experimental study design in which participants are randomly assigned to one of two or more treatment groups.

Surveillance-based secondary studies: An observational study design in which data collected by someone else undergo a secondary analysis.

Survey instruments: A method of collecting information from a sample or subset of a population, at one point in time or at various time points, where the questions are standardized and structured, to reduce bias, and ensure reliability, validity, and generalizability. A survey instrument or questionnaire may have open ended or closed ended questions and it may focus on opinions or factual information depending on its purpose. The instruments can be administered by a researcher or self-administered by the respondent. Web- or Internet-based surveys are included here.

Appendix J: Implications for and Revisions to the PRC Program Logic Model

The logic model for the PRC Program (Appendix A), created through a participatory process with various PRC stakeholders in 2002 and 2003, was developed to describe the activities of the program and the outcomes it expects to achieve (Anderson et al, 2006). The logic model captures how the program is believe to work and the context in which the PRCs operate.

The evaluation studies provided information about PRCs' practices that can be used to refine the logic model. The studies focused on the inputs and activities, contextual factors, and relationships captured by the model. ***The study results confirmed the contribution of several components of the 2003 logic model as shown in Appendix A:***

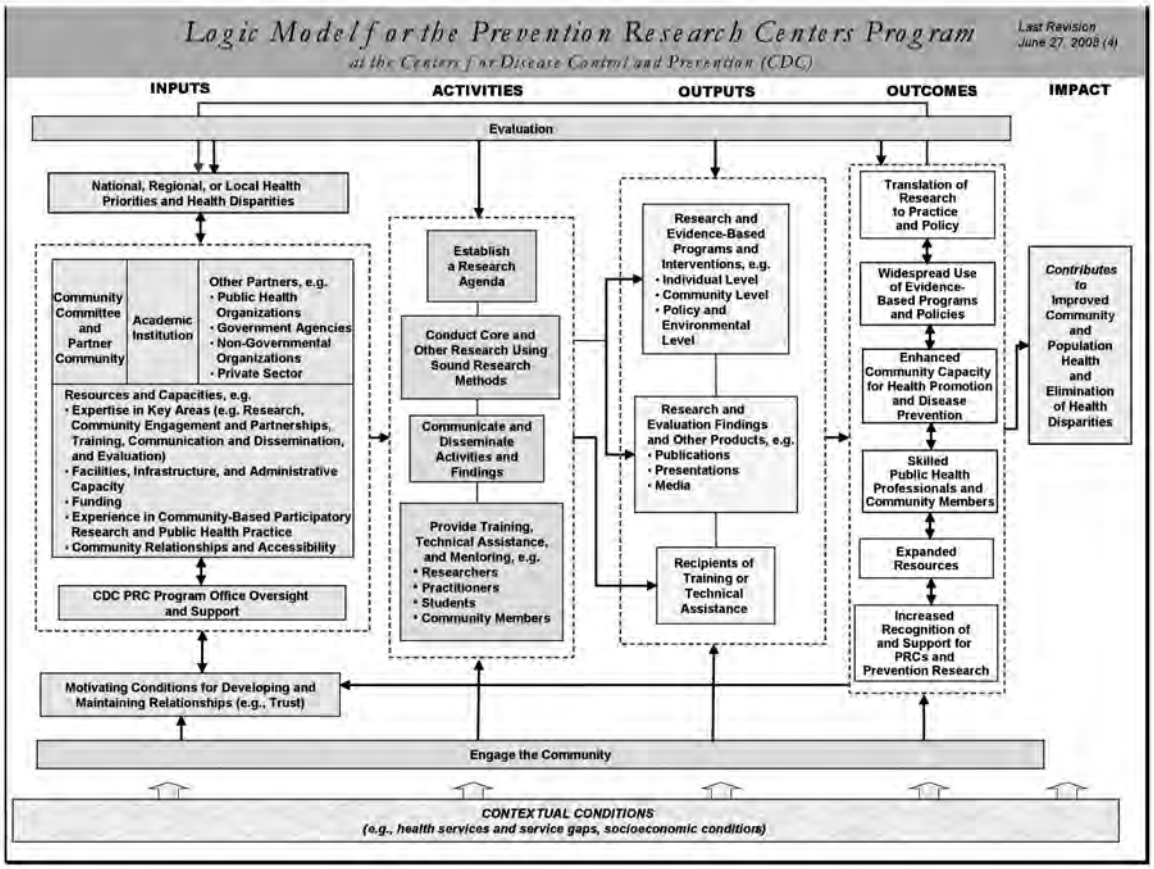
- Inputs
    - PRC Capacity box, describing the contribution of human resources, facilities and financial resources, and communication and administrative resources
    - PRC Community Committee and Relationships with Partners boxes, describe the involvement of and relationships between academic, community, and other partners
    - Motivating Conditions box, describe the elements (particularly trust) that are needed to initiate and sustain relationships with community members and other partners
- Activities
    - Engage the Community box, shown as a primary activity of the PRCs, influences the other three activities boxes in the model
    - Core and Other Research Using Sound Research Methods box, captures the conduct of quality research as a key element of PRCs
    - Training, Technical Assistance, and Mentoring box, describing activities that occur at PRCs for researchers, practitioners, students, community members, and public health professionals

Recommendations

Several concepts and relationships identified by the studies are not reflected in the 2003 logic model. In June and July of 2008, the PRC Program revised the logic model by involving the PRC Program office staff; the PRC Steering, Evaluation, and Community Committees; PRCs; and national partner organizations. The revised logic model is shown below, and the model and accompanying narrative are available at www.cdc.gov/prc.

Modifications and additions to the logic model include the following:

- Inputs
    - Add the capacities that community committees and other partners bring to the PRC
- Activities
    - Add an arrow to show how the PRC activities related to community engagement in research and capacity-building influence the motivating conditions for partnerships
    - Add communication and dissemination as an activity, rather than a component of outputs
    - Illustrate the extent to which the community is engaged in PRC activities other than research and represent this engagement in all components of the logic model.
- Outcomes
    - Add trained community members to the outcome of trained public health professionals



For more information, please contact
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K–45
4770 Buford Highway NE, Atlanta, GA 30341-3717
Phone: (770) 488-5395
E-mail: cdcinfo@cdc.gov
Web: http://www.cdc.gov/prc

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