An Evaluation of a Multi-Site National Community-Based Participatory Research Initiative to Address Cancer Health Disparities

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Consulting Services & Research

Community Network Programs to Reduce Cancer Health Disparities

Goal:
To reduce cancer health disparities among racial/ethnic minorities and underserved populations.

Strategy:
Use community-based participatory education, training, and research.

Resources: NCI awarded $95 million in 5-year grants to 25 institutions participating in the CNP that began in May 2005.

Impetus of CNP Program

Problem: Addressing cancer health disparities
Approach: To use a community-based participatory research method to engage both medical professions and community members to work together to educate and facilitate primary and secondary cancer prevention efforts.
Solution: Provide funding to academic centers and hospitals to foster community involvement in working toward fully adopting a community-based participatory research design.

CSR's Approach to Evaluation: Engage Stakeholders

- Key stakeholders
- CNP PIs and program staff
- NCI CRCHD CNP Program Directors
- Participatory approach throughout design and implementation of evaluation
- All data collection tools are vetted through CNPs
- Collaborate closely with CNP national evaluation team at CRCHD

Cancer Interventions

Primary:
- Tobacco education and smoking cessation
- Diet, nutrition and physical activity
- Hepatitis B immunization
- HPV immunization

Secondary:
- Breast cancer screening (mammography and CBE)
- Cervical cancer screening (Pap and HPV DNA Testing)
- Colorectal cancer screening (FBOT and Sigmoidoscopy testing)
- Prostate cancer screening (PSA and DRE)

Nine Principles of Community Based Participatory Research

1. Recognizes community as a unit of identity
2. Builds on strengths and resources within the community
3. Facilitates collaborative, equitable involvement of all partners in all phases of the research
4. Integrates knowledge and intervention for mutual benefit of all partners
5. Promotes a co-learning and empowering process that attends to social inequalities
6. Involves a cyclical and iterative process
7. Addresses health from both positive and ecological perspectives
8. Disseminates findings gained to all partners
9. Involves long-term commitment by all partners

Israel B, Schulz A, Parker E and Becker A. (1998). Review of community-based research: Assessing partnership approaches to improve public health. Annual Review of Public Health, 19, pp. 173-202

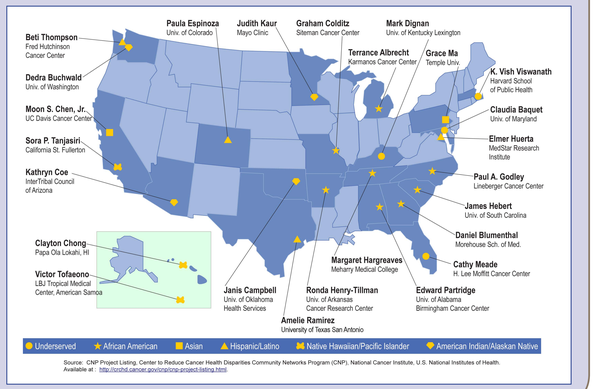
Sample Determinants of Disparities and Measures

Level/Determinant of Disparities	Sample Solutions
Individual Level	
Lack of knowledge on cancer and cancer risks	Educational sessions at health fairs
Community Level	
Need for training of community leaders about cancer in their communities	Cancer 101 train -the-trainer sessions
Health Care System Level	
Lack of communication tools to relay cancer related messages	PSA development and dissemination

How was CBPR implemented in CNPs?

- By forming sustainable community-researcher partnerships
- By increasing utilization of beneficial cancer health interventions
- By training junior researchers in CBPR and cancer health disparities
- By disseminating research findings through academic and non-academic/lay publications

Map of CNPs



Source: CNP Project Listing, Center to Reduce Cancer Health Disparities Community Networks Program (CNP), National Cancer Institute, U.S. National Institutes of Health. Available at : http://crchd.cancer.gov/cnp/cnp-project-listing.html.

Acknowledgements:

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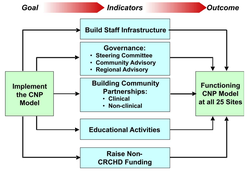
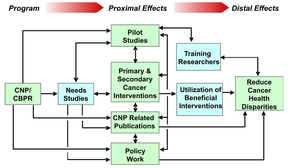
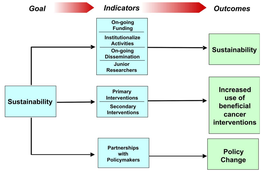
Phase I Logic Model: Implementation of the Model



Phase II Logic Model: Initiate CBPR



Phase III Logic Model: Sustainability



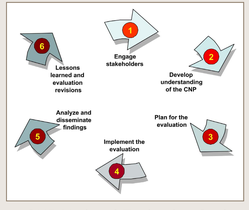
Total Number of People Served by CNPs

Cancer Health Issue	Intervention Type	2006	2007	2008	2009*
		Number of People Served			
Breast Cancer	Mammography	11,778	15,083	17,183	3,106
Breast Cancer	Clinical Breast Exam	257	1,717	1,862	1,055
Cervical Cancer	HPV DNA Testing	-	865	991	601
Cervical Cancer	Pap Smears	12,104	16,205	11,033	1,985
Colorectal Cancer	Colonoscopy	4,716	5,018	961	488
Colorectal Cancer	FOBT	3,461	5,388	4,570	-
Colorectal Cancer	Sigmoidoscopy	-	55	331	162
Prostate Cancer	Digital Rectal Exam	84	67	449	549
Prostate Cancer	PSA	1,293	3,306	1,375	627
Other Cancer	Skin Cancer, Cancer Knowledge	59	52	37	-

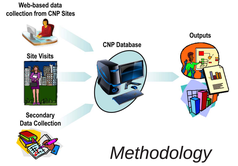
*2009 covers only a 6-month period.

CSR's Plan for the Evaluation

- Design evaluation to measure achievement of RFA goals and objectives
- Develop logic models for each CNP Phase
- Link phase goal and objectives to activities, outputs, and outcomes
- Identify core data elements to measure achievement of objectives
- Develop data collection tools
- Develop web-based data collection tool
- Obtain CNP PI and local evaluator input



CNP National Evaluation Cycle



Methodology

Analyze and Disseminate Findings

- Extensive data cleaning
- Followup with CNPs to revise responses, as needed
- Descriptive analyses
- Analysis by funding level of CNP
- Group 1: $1 - $1.4 million
- Group 2: $700,000 - $950,000
- Group 3: $350,000 - $520,000
- Analysis by participants in a precursor program, The Special Population Networks (SPN) vs. grantees who were not SPNs
- Disseminate findings through reports, presentations, publications

Sample Implementation

Goals and Objectives	Activities	Outputs	Outcomes	Variables
Phase I Goal: To develop and increase capacity building to support community-based participatory education, research, and training to reduce cancer health disparities.				
• Create partnerships with communities experiencing cancer health disparities and organizations working to reduce cancer disparities in these communities	• Identify/form partnerships with non-clinical community-based organizations	• Data on partnerships formed	• Successful partnership synergy	• Type of agreement signed • Services provided by partner
• Increase utilization of beneficial interventions to reduce cancer health disparities	• Conduct cancer education activities to increase utilization of evidence-based interventions	• Data on education activities conducted	• Improvement in community knowledge, attitudes, beliefs about cancer health disparities	• Type of activity • Topic of activity • Location of activity
Phase II Goal: Develop community-based participatory research and training programs to reduce cancer health disparities.				
• Perform the full spectrum of community-based participatory research to reduce cancer health disparities	• Conduct community-based participatory research	• Data on community intervention/research projects implemented	• Increased use of beneficial interventions by community members	• Type of screening intervention implemented • Screening rates at baseline and followup

Reporting by Funding Level and Experience with CBPR

	Number of CNPs	Percent of Community Advisory Group (%)	Percent of Cancer Educational Activities (%)	Percent of Clinical Partnerships (%)	Percent of Non-Clinical Partnerships (%)	Percent of Junior Researchers (%)	Percent of Publications with CBPR (%)
New to CBPR	12	28 (20)	36 (3264)	18 (86)	21 (262)	22 (101)	25 (214)
Past Experience with CBPR	13	72 (51)	62 (5304)	82 (390)	79 (1064)	78 (363)	75 (649)
Totals	**25**	**100 (71)**	**100 (8568)**	**100 (476)**	**100 (1346)**	**100 (464)**	**100 (863)**
Funding Level 1	6	55 (39)	49 (4224)	57 (272)	62 (848)	46 (214)	61 (523)
Funding Level 2	8	13 (9)	19 (1612)	24 (94)	21 (285)	34 (158)	18 (157)
Funding Level 3	11	32 (23)	32 (2712)	19 (88)	16 (213)	20 (94)	21 (183)
Totals	**25**	**100 (71)**	**100 (8568)**	**100 (476)**	**100 (1346)**	**100 (464)**	**100 (863)**

Lessons Learned from the National Evaluator

- The evaluation tools for measuring the outcomes of a program need to assess the use of interim measures to determine the impact in addressing cancer health disparities
- The results of the national evaluation of the CNPs allowed the program to be approved for further funding, demonstrating the need to evaluate programs throughout the course of their activities
- Because communities are diverse, it is challenging to generalize the results of CNP activities to non-CNP communities