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The National Cancer Institute's Community Networks Program Initiative to Reduce Cancer Health Disparities: Outcomes and Lessons Learned

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Abstract

Background—We describe reach, partnerships, products, benefits, and lessons learned of the 25 Community Network Programs (CNPs) that applied community-based participatory research (CBPR) to reduce cancer health disparities.

Methods—Quantitative and qualitative data were abstracted from CNP final reports. Qualitative data were grouped by theme.

Results—Together, the 25 CNPs worked with more than 2,000 academic, clinical, community, government, faith-based, and other partners. They completed 211 needs assessments, leveraged funds for 328 research and service projects, trained 719 new investigators, educated almost 55,000 community members, and published 991 articles. Qualitative data illustrated how use of CBPR improved research methods and participation; improved knowledge, interventions, and outcomes; and built community capacity. Lessons learned related to the need for time to nurture partnerships and the need to attend to community demand for sustained improvements in cancer services.

Implications—Findings demonstrate the value of government-supported, community–academic, CBPR partnerships in cancer prevention and control research.

Research has confirmed that racial/ethnic minority and underserved populations in the United States experience higher cancer incidence, earlier onset of disease, more frequent diagnoses at late stages, and higher mortality than White Americans and those from higher socioeconomic positions.¹ However, research to address the reduction of cancer health disparities has proven more complicated than originally envisioned.² Community-engaged translational research shows promise in bringing together academic and community investigators to learn about the complex cancer profiles of different populations and how discoveries made in the laboratory or clinic can be translated to their communities.^{3,4}

In April 2005, the National Cancer Institute (NCI) through its Center to Reduce Cancer Health Disparities (CRCHD) funded 25 CNPs. The aim of the CNPs was to reduce the unequal burden of cancer experienced by racial/ethnic minority populations and medically underserved populations by applying CBPR approaches to community education, problem assessment, intervention design and testing, and new investigator training.⁵ Each CNP was funded for 5 years to work with racial/ethnic minority populations (e.g., African Americans, Asian Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, and Other Pacific Islanders) and medically underserved populations (e.g., on Maryland's eastern shore and in low-income urban communities in Massachusetts). The CNP initiative built on the prior Special Populations Networks, also funded by the NCI.⁴ However, the CNP program was the first CRCHD and NCI program to formally adopt CBPR as its principal strategy for addressing cancer health disparities.

The CNP program logic model specified building blocks, activities, and short-term (1–2 year), intermediate (3–5 year), and long-range (5–7 year) outcomes. The building blocks in the framework referred to required partnerships—with community-based groups, with organizations that can help to reduce disparities (e.g., clinical and social programs and policy makers), and with other NCI units. For outcomes, all CNPs aimed to demonstrate change in individuals, communities, and policies that would increase use of beneficial cancer and cancer-related interventions.

Using CBPR has several advantages, including its potential to reduce community distrust of research, focus research on issues of concern to community, build community capacity, and improve the lives of people in the community. However, it also presents challenges. For example, it takes time and sustained resources to build community trust and capacity.^{6,7} A self-assessment by CNPs completed in 2011 demonstrated that the principles of CBPR (e.g., engaging community in all aspects of research, transferring skills, and sharing power) were operationalized fairly well across the 25 CNPs.⁸ However, the assessment did not capture the outcomes and lessons learned from the application of CBPR. This article describes CBPR processes and summarizes accomplishments in terms of reach, partnerships, products, trainees, benefits, and lessons learned.

METHODS

Data were abstracted from final reports submitted by the CNPs to the funding agency. These reports included examples of how CBPR approaches were applied to community education, problem assessment, intervention design and testing, and new investigator training. They

also provided descriptive information on the reach of the CNPs, the variety of partners engaged, the products of the CNPs (e.g., needs assessment, publications, and proposals), and new investigators associated with the CNP. Additionally, final reports included narratives that described the benefits of and lessons learned by CNPs in their use of CBPR. These qualitative data were grouped by two authors (K.L.B., M.D.) into themes. These were shared with all authors, who identified citations of publications they felt illustrated the themes from the qualitative findings from their research.

FINDINGS

CBPR Approaches

The CNP final reports gave examples of how CBPR approaches were applied to four major activities—community education, problem assessment, intervention design and testing, and new investigator training. New investigators could include individuals from a university or community interested in research, but not already funded by the National Institutes of Health (NIH), as well as investigators new to CBPR. The funding announcement required successful applicants to demonstrate existing partnerships within the CNP's specified community and to name members of the CNP's Community Advisory Boards/Groups. Generalizing across the 25 CNPS, these advisory boards helped the CNP to review existing data and outline community needs for education on cancer and research. If data were lacking, advisors suggested topics for needs assessments that the CNP should undertake. In many CNPs, advisors served as key informants and/or as data collectors in the needs assessment phase. The review by advisors and other community members of needs assessment findings led to the development of interventions that would have a high likelihood of attracting community participants and increasing their use of beneficial cancer services.

Interventions were designed with community members to respond to community data, context, strengths, and resources. Advisors and other people from the community served as co-deliverers of cancer education in their communities. Although the CNPs did not engage in multisite interventions with common measures, each CNP tested its interventions using methods approved by the community, including randomized controlled trials, delayed intervention trials, quasi-experimental designs, and one-group pretest–posttest designs. Advisors interacted with new investigators, who vetted their research proposals, making sure the correct research questions were being asked and suggesting ways to increase study attractiveness. Finally, advisors and community members joined, as appropriate, in dissemination of information about the CNP and the various needs assessment and research projects in which they engaged.

Reach

Of the 25 CNPs, seven targeted African Americans, three American Indians and Alaska Natives, two Asian Americans, four Hispanics, three Pacific Islanders, and six medically underserved individuals of any ethnicity within a specific community or region (Table 1). Four CNPs had a national reach (e.g., *Redes en Acción* worked with Hispanic populations in six communities across the United States, the Spirit of Eagles worked with American Indian

and Alaska Native populations nationally, and the Appalachia Community Cancer Network focused on medically underserved residents of Appalachia), 13 were regional (e.g., the Deep South Network for Cancer Control worked with medically underserved African-American populations in Alabama and Mississippi, whereas the Meharry University CNP worked with three urban community health centers in different parts of Tennessee), and 8 CNPs worked locally (e.g., inner-city Detroit, the Yakima Valley of Washington, Southern California, and Tampa Bay, Florida). Three CNPs were housed in community-based organizations (*Papa Ola L kahi* in Hawai'i, LBJ Hospital in American Samoa, and the Inter Tribal Council of Arizona), and the other 22 were based in universities. The CNPs tended to focus their outreach and research activities on cancers with clear mechanisms for primary and secondary prevention, including breast (n = 20), cervical (n = 18), colorectal (n = 16), lung (n = 13), prostate (n = 3), and hepatitis B–related liver (n = 4) cancers.

Partnerships

Overall, the 25 CNPs reported working with 2,251 partners (range, 11–290 per CNP; Table 2). CNPs reported a mean of 5 academic partners (range, 1–30) and 16 clinical partners (range, 1–100), including medical centers, federally qualified health centers, community health centers, the Indian Health Service, the Alaska Native Tribal Health Consortium, and the Native Hawaiian Health Care Systems. Ten CNPs worked with faith-based organizations (range, 1–127), including the CNPs in the Mississippi Delta, South Carolina, metropolitan Detroit, Tennessee, and Arkansas. Many worked with state and local departments of health, especially their tobacco control and breast and cervical cancer screening programs. More than one-half (57.8%) of all partners were community-based agencies and coalitions, and on average each CNP worked with 52 (range, 5–443). These included professional associations, civic clubs, and service providers serving specific racial and ethnic groups, tribes, and tribal agencies, as well as local coalitions to reduce access to tobacco and local branches of the American Cancer Society and Susan G. Komen. There are no known standards for effective partnership development; establishment of more than 2,000 partnerships among the 25 CNPs provides prima facie evidence that may contribute to development of standards.

Products

The CNPs were directed to use CBPR approaches to increase understanding of cancerrelated needs and assets of their communities. Together, the 25 CNPs reported conducting 211 needs assessments, engaging community members in assessment design, data collection, and data interpretation and dissemination. Of the 211 assessments, 11% were related to primary prevention (e.g., tobacco cessation, diet, physical activity), 26% were related to screening (e.g., for hepatitis B, and breast, cervical, prostate, colorectal, and other cancers), 9% were related to treatment and survivorship (navigation, clinical trials, support groups), and 30% assessed a variety of cancer and upstream factors in the population to help CNPs prioritize focus areas for outreach and research.

In addition to helping to prioritize outreach and research activities, findings from needs assessments also guided the development of interventions that fit community context. These interventions were tested through pilot research projects funded by CRCHD supplements or through non-CRCHD funds. In total, the 25 CNPS reported securing 90 research

supplements and 238 other grants to support research, for a total of 328 funded research projects (range, 7–89). By the end of year 4 of this 5-year initiative, the 25 CNPs reported having leveraged \$36,622,805 in non-CRCHD funds, or about \$1,464,912 per CNP. This includes funds awarded to junior investigators and community partner agencies associated with the CNP, as well as funds awarded directly to the CNP.

Findings from needs assessments and intervention research were reported in 991 peerreviewed publications (range, 4–336). Of these, 832 (83.9%) featured indigenous or minority investigators and/or community members as co-authors. Not all CNPs reported whether first authors were indigenous, minority, and/or community based, but the proportion was likely large. By way of example, of the 61 peer-reviewed articles reported by 'Imi Hale Native Hawaiian Cancer Network, 44 (72.0%) were first authored by Native Hawaiian investigators and/or community members.

New Investigators and Community Trainees

CNPs reported mentoring 719 new investigators (range, 4–90). CNP reports note that 69.7% of the 719 new investigators were members of the racial/ethnic/underserved populations served by the CNP. Each CNP worked with their community advisory committee to identify new investigators, and CNPs provided mentors to assistant or associate professors, post-docs, graduate students and, in some cases, high-school students. Top training topics for new investigators included CBPR, cultural competence, research ethics, data collection, grant writing, and manuscript writing. In a survey of new investigators affiliated with the CNPs, trainees reported giving an average of 3 presentations at scientific meetings per year, publishing one first-authored and one non–first-authored peer-reviewed publication per year, and being part of six to seven funded grant applications over 5 years.⁹ These rates of scholarly productivity are comparable to findings from other training programs targeting under-represented minorities.¹⁰

Additionally, CNPs provided training to more than 50,000 community members. Community members also received training in research methods, along with training to enhance their skills in health education, health literacy, advocacy, cancer screening and treatment navigation, and tobacco cessation counseling. There are no known standards for the expected extent of new investigator and community member involvement in disparities reduction endeavors; numbers of new investigators and community members trained by the 25 CNPs may contribute to development of standards.

CBPR Benefits

From the qualitative data in the final reports, four major themes were identified (Table 3). The first three related to CBPR-related benefits, specifically how the use of CBPR improved research methods and participation, enhanced knowledge and intervention development, and strengthened community capacity. The fourth related to lessons learned by the CNPs over their 5-year programs.

Improved Research Methods and Participation—The final reports gave examples of how community engagement in priority setting (through jointly conducted needs

assessments and brainstorming) increased community buy-in for research.^{11–16} With sufficient trust and an introduction to research methods, report narratives spoke to increased willingness of communities to participate in controlled trials, favoring delayed intervention designs and designs in which the control group received a different intervention, rather than just standard care.^{17,18} CNP reports included examples of how community members helped pretest data collection tools, which increased the readability and relevance of these tools.^{19,20} Good recruitment and retention rates were attributed to having community members prioritize research needs, help to design recruitment materials, pretest data collection tools, and/or agree to serve as paid or volunteer research staff.^{19–24} Community members also provided input on how to disseminate research findings.^{21,25,26}

Improved Knowledge, Interventions, and Outcomes—When data were collected in the language of the community and/or by trained community members, CNPs reported that they generated richer data that provided meaningful insights into minority perceptions of cancer etiology, screening, treatment, clinical trials, tissue banking, randomized controlled trials, and informed consent.^{27–34} CBPR methods also informed the development of health education materials and interventions that were attractive to and welcomed by the community.^{18,25,30,35–38} Many CNPs successfully employed community members in intervention delivery.^{39–45}

The vast majority of these interventions, co-designed by community members, resulted in improved community cancer knowledge and outcomes. For example, CNP reports described culturally tailored interventions that resulted in reduced tobacco use among Asian immigrants⁴⁶ and Native Hawaiians.⁴⁷ They described CBPR projects that attracted rural dwelling adults to cancer screening for the first time⁴⁰; increased breast and cervical cancer screening among Vietnamese, Hmong, Micronesian, Hispanics, and African-American women^{17,23,48–50}; increased colorectal cancer screening among Chinese Americans,⁴⁴ Hispanics,^{51,52} and African Americans⁵³; increased Pap test follow-up among American Indian women⁵⁴; increased hepatitis B immunization among Asian Americans⁵⁵; increased prostate cancer screening among African Americans^{56,57}; and increased minority participation in clinical trials.^{58,59}

Strengthened Community Capacity—Community members engaged through the CNPs gained capacity in leadership, research, institutional review board issues, cancer care, strategic communications, and advocacy.^{60–62} At least eight CNPs provided funds and technical assistance to communities to conduct their own studies on problems of concern to that community, including CNPs serving African Americans in Tennessee and South Carolina, Native Hawaiians in Hawai'i, Hispanics in the Pacific Northwest, and American Indians and Alaska Natives in the Pacific Northwest, Alaska, the Southwest, and Oklahoma.^{63,64} In most cases, community members became stronger advocates for research after they gained experience as institutional review board members, research advisors, or research staff.^{65–67} Community members who co-authored and co-presented findings from CNP projects extended their communication skills and their standing as community leaders.⁴⁸ Three CNPs arranged to guest edit focused issues of peer-reviewed journals, featuring articles by community members alone or in partnership with academic

researchers.^{68–71} Participation in CNP activities also increased the number of community members with skills in delivering cancer prevention and control activities, for example, as cancer patient navigators, *promotoras*, tobacco cessation specialists, and media advocates.^{19,47,62,72–75}

Finally, co-authors cited examples of how CNP research findings were used to help obtain additional funding or to enact policies that expanded cancer services in the community.⁷⁶ For example, CNPs worked to support expansion and creation of new cancer screening programs.^{55–57} and cancer patient navigation programs were started or enhanced in Native Hawaiian, Pacific Islander, Asian, Hispanic, American Indian, and African-American communities across the United States.⁷⁷ Several CNPs started or strengthened programs for patients needing end-of-life care.⁷⁸ At least five CNPs worked with hospitals in their communities on successful applications to NCI's Community Cancer Center Program. Some CNPs mapped local resources through innovative methods such as GIS and asset mapping.⁷⁹ Others worked with tribal communities and community clinics to set up systems to better record cancer data.^{80,81} Others developed regional coalitions of consumers and cancer-related organizations to enhance advocacy and action.^{76,82} These activities help to speed the translation of knowledge into practice.

LESSONS LEARNED

CNP reports documented several challenges in applying CBPR in reducing cancer health disparities (Table 3). For example, although the notion of 'community' is key to CBPR work, report narratives noted that the definition of community is complicated and mutable. At the broad level, CNPs often made commitments to serve a specific disadvantaged group, usually within a defined geographic area. However, communities are not homogenous (e.g., Native Hawaiians living on different Hawaiian islands feel very distinct from each other). and some community partners and members may decide to join at the outset of the project, join later when the project is underway, or never join in CNP endeavors. CNPs serving African-American, Pacific Islander, Appalachian, and Korean communities found churches to be excellent partners for cancer health promotion.^{18,27,30,83} Through time, the number and type of churches involved with the CNPs often expanded. With the addition of new churches, new partners within the church had to be engaged, and the CNP needed to restart its process of building trust and research capacity. This illustrates the iterative, powersharing nature of CBPR, full of starts and restarts as networks widen and new community representatives join. Several authors found success in starting the trust-building process by offering cancer education programs and conducting needs assessments, both of which can increase community willingness to participate in future research.⁸⁴ Some CNPs attempted to analyze network variability over time. For example, a longitudinal study of the interrelationships that increased and decreased over the 5 years among CNP partners in Detroit led to development of a new conceptual and methodological approach for empirically modeling the sustainability of community health networks.⁸⁵ Another analysis of social network patterns among CNP partners in Massachusetts showed increase in ties and reciprocity over the duration of the CNP project among community and academic partners, and the increase was associated with success in program development, funding, and publications.⁸⁶

CNPs also were charged to develop CBPR skills in new investigators and to build a cadre of CBPR researchers from underserved groups.⁹ Although there was documented success in this arena,⁸⁷ great variation across CNPs was noted in the background of new investigators. For example, some already had NIH funding (e.g., R03s or K awards), whereas others were pre-doctoral students (especially in CNPs serving new immigrants and Pacific Islanders). Thus, CNPs had different pools from which to draw. They also had different expectations for new investigators in terms of using NIH pilot funds to launch independent research careers successfully.

CBPR requires a team approach, and members of the community need to be equal partners on the team. Thus, along with cancer education, CNPs found it essential to build community capacity in areas outside of cancer and research, for example, in grant writing and advocacy.⁸⁸ Qualitative research methods seem to be as important as quantitative methods in CBPR, and community members can become very effective collectors of both focus group and survey data. They also may be more effective at delivering interventions than individuals from outside the community. However, capacity development takes time and resources, and developing solid community research partners is a process that may take years, not months. CNPs appreciated the flexibility to use CNP funds to conduct community outreach and to nurture community leadership, and they noted that few other funding mechanisms support the extensive level of capacity building required by CBPR.

CBPR projects strive to strike a balance between research and action.^{88–90} Researchers, of course, need scientific data to demonstrate their responsiveness to the mechanisms that fund their research. In addition, findings need to be reported in peer-reviewed publications (the currency of academia), and should serve as baseline data for future research applications. However, communities need action, manifested as real improvements in cancer prevention, screening, and treatment, including expansion of services, increased access to (affordable) services, broadened participation in health insurance, and improved sensitivity of providers. If research findings are not used to prevent cancer or improve systems of cancer detection and care in these communities, then evidence may serve to widen the translation gap.^{3,91} For example, as communities gain capacity, their demand for education and assistance can exceed the ability of the CNP and the local health care system to meet them. Thus, CNPs were called on to help communities write grant proposals and to advocate for expanded cancer care services. CNP staff also served as critical change agents within their own institutions to examine institutional factors and policies that might impact access to and acceptability of care.

DISCUSSION

Limitations

A limitation of this study was its use of final reports as the primary source of data. It is likely that CNPs put their 'best face' on their work in their reports, and there was no way to get an objective measure of the quality of their work. However, principal investigators were able to provide abundant citations of work to illustrate their CBPR-related activities and successes in improving the science of cancer disparities reduction while building the capacity of underserved communities. A second limitation was the lack of partner input into

this manuscript, because partners were not likely included in the preparation of the CNP final reports, and data for this paper were extracted in 2013, 3 years after the close of the CNP initiative. However, anecdotal information from CNP principal investigators suggests that lessons learned were a regular topic of discussion in Community Advisory Board meetings and informed reporting.

CONCLUSION

Collectively, the CNP initiative engaged a broad array of community partners and scholars and reported a number of benefits associated with CBPR. CBPR guided development of strong partnerships that improved research designs, focused interventions toward community needs and interests, and strengthened capacity of partners. The findings can help to inform other community–university partnerships engaging in CBPR. They also can inform government and private funders on the benefits of targeting resources to CBPR efforts to reduce cancer disparities.

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REFERENCES

- 1. Siegel R, Ma J, Zou Z, Jemal A. Cancer statistics, 2014. CA Cancer J Clin. 2014; 64(1):9–29. [PubMed: 24399786]
- Chu KC, Chen MS Jr, Dignan M, Taylor E, Partridge E, CNP PIs. Parallels between the development of therapeutic drugs and cancer health disparities programs. Cancer. 2008; 113:2790– 6. [PubMed: 18780311]
- 3. U.S. Department of Health and Human Services. HHS action plan to reduce racial and ethnic health disparities: a nation free of disparities in health and health care. Author; Washington (DC): 2011.
- Jackson FE, Chu KC, Garcia R. Special Populations Networks: How this innovative communitybased initiative affected minority and underserved research programs. Cancer. 2006; 107(Suppl 8): 1939–44. [PubMed: 16944469]
- National Cancer Institute. U.S. Department of Health and Human Services. Community Networks to reduce cancer health disparities (NIH Guide April 26, 2004) (RFA: CA–05–012). Author; Bethesda (MD): 2005. Available from: http://grants.nih.gov/grants/guide/rfa-files/RFA-CA–05–012.html
- 6. Israel, BA.; Eng, E.; Schulz, AJ.; Parker, EA., editors. Methods for Community-based Participatory Research for Health. 2nd. Jossey-Bass; San Francisco: 2013.
- Wallerstein N, Duran B. Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. Am J Public Health. 2010; 100:S40–6. [PubMed: 20147663]
- Braun KL, Nguyen T, Tanjasiri SP, Campbell J, Heiney SP, Brandt HM, et al. Operationalization of community-based participatory research principles across NCI's Community Networks Programs. Am J Public Health. 2012; 102:1195–203. [PubMed: 22095340]
- Felder TM, Brandt HM, Armstead C, Cavicchia PP, Braun KL, Adams SA, et al. Creating a cadre of junior investigators to address the challenges of cancer-related health disparities: lessons learned from the Community Networks Program. J Cancer Educ. 2012; 27(3):409–17. [PubMed: 22528636]
- Viets VL, Baca C, Verney SP, Venner K, Parker T, Wallerstein N. Reducing health disparities through a culturally centered mentorship program for minority faculty: The Southwest Addictions Research Group (SARG) experience. Acad Med. 2009; 84(8):1118. [PubMed: 19638783]

- Hebert JR, Brandt HM, Armstead CA, Adams SA, Steck SE. Interdisciplinary, translational, and community-based participatory research: Finding a common language to improve cancer research. Cancer Epidemiol Biomark Prev. 2009; 18(4):1213–7.
- 12. Larson C, Schlundt D, Patel K, Goldzweig I, Hargreaves M. Community participation in health initiatives for marginalized populations. J Ambulatory Care Manag. 2009; 32:264–70.
- Wynn T, Anderson-Lewis C, Johnson R, Hardy C, Hardin G, Walker S, et al. Developing a community action plan to eliminate cancer disparities: Lessons learned. Prog Community Health Partnersh. 2011; 5:161–8. [PubMed: 21623018]
- Scarinci IC, Johnson R, Hardy C, Marron J, Partridge E. Planning and implementation of a participatory evaluation strategy: a viable approach in the evaluation of community-based participatory programs addressing cancer disparities. Eval Program Plann. 2009; 32:221–8. [PubMed: 19232727]
- Matloub J, Creswell PD, Strickland R, Pierce K, Stephenson L, Waukau J, et al. Lessons learned from a community-based participatory research project to improve American Indian cancer surveillance. Prog Community Health Partnersh. 2009; 3(1):47–52. [PubMed: 20208301]
- Peterson N, Joshi S, Flood T, Coe K. Prioritizing interventions and research to address the cancer disparities of Arizona's American Indian Population. J Health Disparities Research Pract. 2011; 4(1):70–6.
- Nguyen TT, Le G, Nguyen T, Le K, Lai K, Gildengorin G, et al. Breast cancer screening among Vietnamese Americans: a randomized controlled trial of lay health worker outreach. Am J Prev Med. 2009; 37:306–13. [PubMed: 19765502]
- Ka'opua LS, Park SH, Ward M, Braun KL. Testing the feasibility of a culturally tailored breast cancer screening intervention with Native Hawaiian women in rural churches. Health Soc Work. 2011; 36:55–65. [PubMed: 21446609]
- Heiney SP, Adams SA, Wells LM, Johnson H. Evaluation of conceptual framework for recruitment of African American breast cancer patients. Oncol Nurs Forum. 2010; 37:E160–E7. [PubMed: 20439201]
- Mokuau N, Braun KL, Wong L, Higuchi P, Gotay C. Development of a family intervention for Native Hawaiian women with cancer: A pilot study. Social Work. 2008; 3:9–19. [PubMed: 18610817]
- Tanjasiri SP, Wiersma L, Briand G, Faletau V, Lepule J, Nacpil L, et al. Balancing community and university aims in a study of obesity and physical activity in Pacific Islander youth. Prog Community Health Partnersh. 2011; 5(1):19–25. [PubMed: 21441665]
- 22. Thompson VL, Arnold LD, Notaro SR. African American parents' attitudes toward HPV vaccination. Ethn Dis. 2011; 21:335–41. [PubMed: 21942167]
- 23. Lisovicz N, Johnson RE, Higginbotham J, Downey JA, Hardy CM, Fouad MN, et al. The Deep South for Cancer Control: Building a community infrastructure to eliminate health disparities. Cancer. 2006; 107:1971–9.
- 24. Sheppard VB, Sanderson Cox L, Kanamori MJ, Cañar J, Rodríguez Y, Goodman M, et al. Latin American Cancer Research Coalition. If you build it, they will come: Methods for recruiting Latinos into cancer research. J Gen Intern Med. 2005; 20:444–7. [PubMed: 15963169]
- 25. Kulukulualani M, Braun KL, Tsark J. Using a four-step protocol to develop and test culturally targeted cancer education brochures. Health Promot Pract. 2008; 9:344–55. [PubMed: 18353907]
- Nguyen TT, McPhee SJ, Bui-Tong N, Luong TN, Ha-Iaconis T, Nguyen T, et al. Communitybased participatory research increases cervical cancer screening among Vietnamese-Americans. J Health Care Poor Underserved. 2006; 17:31–54. [PubMed: 16809874]
- 27. Aitaoto N, Braun KL, Dang K, Soa T. Cultural considerations in developing church-based programs to reduce cancer health disparities among Samoans. Eth Health. 2007; 12:381–400.
- Fong M, Braun KL, Chang M. Native Hawaiian preferences for informed consent and disclosure of results from genetic research. J Cancer Educ. 2006; 21(Suppl):S47–S52. [PubMed: 17020502]
- Tu SP, Chen H, Chen A, Lim J, May S, Drescher C. Clinical trials: understanding and perceptions of female Chinese-American cancer patients. Cancer. 2005; 104:2999–3005. [PubMed: 16247796]

- Ma GX, Shive S, Tan Y, Gao W, Rhee J, Park M, et al. Community-based colorectal cancer intervention in under-served Korean Americans. Cancer Epidemiol. 2009; 33:381–6. [PubMed: 19914880]
- Baezconde-Garbanati L, Beebe LA, Perez-Stable EJ. Building capacity to address tobacco-related disparities among American Indian and Hispanic/Latino communities: Conceptual and systemic considerations. Addiction. 2007; 102:112–22. [PubMed: 17850621]
- 32. Harper FWK, Nevedal A, Eggly S, Francis C, Schwartz K, Albrecht TL. "It's up to you and God": Understanding attitudes about health behavior change among older, urban African American survivors of colorectal cancer. Transl Behav Med. 2013; 3(1):94–103. [PubMed: 23646096]
- Loffredo CA, Luta G, Wallington S, Makgoeng SB, Selsky C, Mandelblatt JS, et al. Knowledge and willingness to provide research biospecimens among foreign-born Latinos using safety-net clinics. J Community Health. 2013; 38:652–9. [PubMed: 23543371]
- 34. Luque JS, Quinn GP, Montel-Ishino FA, Arevalo M, Bynum SA, Noel-Thomas S, et al. Tampa Bay Community Cancer Network Partners. Formative research on perceptions of biobanking: what community members think. J Cancer Educ. 2012; 27:91–9. [PubMed: 21927867]
- Peters J, Davies P, Lane N, Coe K. Talking glossary of genomics terminology: A genomics education module for American Indian communities. J Health Disparities Research Pract. 2009; 3(2):35–41.
- Lane N, Evans K, Attakai A, Witte C, Riding-in Warne M, Coe K. Responding to American Indian Communities: Southwest American Indian Collaborative Network (SAICN) Cancer Educational Activities. J Health Disparities Research Pract. 2010; 4(3):18–33.
- Luque JS, Rivers BM, Gwede CK, Kambon M, Green BL, Meade CD. Barbershop communications on prostate cancer screening using barber health advisers. Am J Mens Health. 2011; 5:129–39. [PubMed: 20413392]
- Sheppard VB, Figueiredo M, Cañar J, Goodman M, Caicedo L, Kaufman A, et al. Latina a Latina: Developing a breast cancer decision support intervention. Psychooncology. 2008; 17:383–91. [PubMed: 17628037]
- Bencivenga M, DeRubis S, Leach P, Lotito L, Shoemaker C, Lengerich EJ. Community partnerships, food pantries, and an evidence-based intervention to increase mammography among rural women. J Rural Health. 2008; 24(1):91–5. [PubMed: 18257876]
- 40. Gellert K, Braun KL, Starkey V, Morris W. The 'Ohana (Family) Day Project—A community approach to increase cancer screening. Prev Chronic Disease. 2006; 3:A99.
- 41. Fang DM, Lee S, Stewart S, Ly MY, Chen MS. Factors associated with Pap testing among Hmong women. J Health Care Poor Underserved. 2010; 31(3):849–50.
- 42. Lo P, Fang DM, Ly MY, Stewart SL, Lee S, Chen MS Jr. Access to adequate health care for Hmong women: A patient navigation program to increase Pap test screening. Hmong Studies J. 2010; 11:1–29.
- Wells KJ, Rivera M, Procter S, Arroyo G, Bynum SA, Quinn GP, et al. Creating a patient navigation model to address cervical cancer disparities in a rural Hispanic farmworker community. J Health Care Poor Underserved. 2012; 23:1712–8. [PubMed: 23698685]
- Nguyen TT, Love MB, Liang C, Fung LC, Nguyen T, Wong C, et al. A pilot study of lay health worker outreach and colorectal cancer screening among Chinese Americans. J Cancer Educ. 2010; 25:405–12. [PubMed: 20204570]
- 45. Mock J, McPhee SJ, Nguyen T, Wong C, Doan H, Lai KQ, et al. Effective lay health worker outreach and media-based education for promoting cervical cancer screening among Vietnamese American women. Am J Public Health. 2007; 97:1693–700. [PubMed: 17329652]
- Wu D, Ma GX, Zhou K, Zhou D, Liu A, Poon AN. The effect of a culturally tailored smoking cessation for Chinese American smokers. Nicotine Tob Res. 2009; 11:1448–57. [PubMed: 19915080]
- 47. Santos LA, Braun KL, Aea K, Shearer L. Institutionalizing a comprehensive tobacco-cessation protocol in an indigenous health system: Lessons learned. Prog Community Health Partnersh. 2008; 2:279–89. [PubMed: 20208308]
- 48. Mayo RM, Scott DB, Williams DG. The Upstate Witness Project: Addressing breast and cervical cancer disparities in African American churches. J SC Med Assoc. 2009; 105:290–6.

- Ramirez AG, Perez-Stable EJ, Penedo FJ, Talavera GA, Carrillo JE, Fernandez ME, et al. Navigating Latinas with breast screen abnormalities to diagnosis: The six cities study. Cancer. 2013; 119(7):1298–305. [PubMed: 23233265]
- 50. Aitaoto N, Braun KL, Estrella J, Epeluk A, Tsark J. Woman to woman: A culturally appropriate cancer outreach project for and by Micronesian women. Prev Chronic Dis. 2012; 9
- Moralez EA, Rao SP, Livaudais JC, Thompson B. Improving knowledge and screening in colorectal cancer among Hispanics: Overcoming barriers through a promotora-led home-based educational intervention. J Cancer Educ. 2012; 27:533–9. [PubMed: 22488199]
- 52. Lopez-Class M, Luta G, Noone AM, Canar J, Selksy C, Huerta E, et al. Patient and provider factors associated with colorectal cancer screening in safety net clinics serving low-income, urban immigrant Latinos. J Health Care Poor Underserved. 2012; 23:1011–9. [PubMed: 24212154]
- Blumenthal DS, Smith SA, Majett CD, Alema-Mensah E. A trial of 3 interventions to promote colorectal cancer screening in African Americans. Cancer. 2010; 116(4):922–9. [PubMed: 20052732]
- 54. Eisenberg M, Coe K, Wilson C, Evans K, Brewer E. Pap smear follow-up among American Indian women. J Health Disparities Research Pract. 2011; 4(1):42–52.
- 55. Ma GX, Gao W, Tan Y, Chae WK, Rhee J. A community-based participatory approach to a hepatitis B intervention for Korean Americans. Prog Community Health Partnersh. 2012; 6(1):7– 16. [PubMed: 22643783]
- Ukoli F, Patel K, Hargreaves M, Beard K, Moton PJ, Bragg R, et al. A tailored prostate cancer education intervention for low-income African Americans: Impact on knowledge and screening. J Health Care Poor Underserved. 2013; 24:311–31. [PubMed: 23377736]
- 57. Patel K, Ukoli F, Liu J, Beech D, Beard K, Brown B, et al. A community driven intervention for prostate cancer screening in African Americans. Health Educ Behav. 2013; 24:311–31.
- Anwuri VV, Hall LE, Mathews K, Springer BC, Tappenden JR, Farria DM, et al. An institutional strategy to increase minority recruitment to therapeutic trials. Cancer Causes Control. 2013; 24(10):1797–809. [PubMed: 23846282]
- Ramirez AG, Miller AR, Gallion K, San Miguel S, Chalela P, Garcia SG. Testing three different cancer genetics registry recruitment methods with Hispanic cancer patients and their family members previously registered in local cancer registries in Texas. Community Genetics. 2008; 11(4):215–23. [PubMed: 18417969]
- 60. Kluhsman BC, Bencivenga M, Ward AJ, Lehman E, Lengerich EJ. Initiatives of 11 rural Appalachian cancer coalitions in Pennsylvania and New York. Prev Chronic Dis. 2006; 3(4):A122. [PubMed: 16978497]
- Torrence WA, Yeary KH, Stewart C, Mehta P, Duke K, Greer-Williams N, et al. Evaluating coalition capacity to strengthen community-academic partnerships addressing cancer disparities. J Cancer Educ. 2011; 26:658–63. [PubMed: 21633920]
- Koh HK, Oppenheimer S, Massin-Short S, Emmons KM, Geller AC, Viswanath K. Translating research evidence into practice to reduce health disparities: A social determinants approach. Am J Public Health. 2010; 100(Suppl):S72–80. [PubMed: 20147686]
- 63. Vines AI, Teal R, Meyer C, Manning M, Godley P. Connecting community with campus to address cancer health disparities: a community grants program model. Prog Community Health Partnersh. 2011; 2:207–12. [PubMed: 21623024]
- 64. Thompson B, Ondelacey S, Godina R, Coronado GD. A small grants program to involve communities in research. J Community Health. 2010; 35(3):294–301. [PubMed: 20146091]
- 65. Blumenthal DS. A community coalition board creates a set of values for community-based research. Prev Chronic Dis. 2006; 3:A16. [PubMed: 16356369]
- 66. Fong M, Braun KL, Tsark J. Improving Native Hawaiian health through community-based participatory research. Calif J Health Promot. 2003; 1(1):136–48.
- 67. Ma GX, Tan Y, Toubbeh JI, Edwards RL, Shive SE, Siu P, et al. Asian Tobacco Education and Cancer Awareness Research Special Population Network. A model for reducing Asian American cancer health disparities. Cancer. 2006; 107:1995–2005. [PubMed: 16952164]
- 68. Braun KL, Tsark J. Community-based research and programming in the Pacific. Prog Community Health Partnersh. 2008; 2(4):271–347. [PubMed: 20208305]

- 69. Tsark J, Braun KL, Palafox N. Cancer in the Pacific. Pacific Health Dialog. 2004; 11(2):1–273.
- Hebert JR, Elder K, Ureda JR. Cancer disparities in South Carolina. J S C Med Assoc. 2006; 102(7):171–262.
- Tanjasiri SP, Peters R. Cancer control among Pacific Islanders. Calif J Health Promot. 2010; 8(Suppl):1–111. [PubMed: 25750596]
- Ma GX, Toubbeh JI, Su X, Edwards RL. ATECAR: An Asian American community-based participatory research model on tobacco and cancer control. Health Promot Pract. 2004; 5:382–94. [PubMed: 15358911]
- Ngoc Nguyen TU, Tanjasiri SP, Kagawa-Singer M, Tran JH, Foo MA. Community health navigators for breast- and cervical-cancer screening among Cambodian and Laotian women: Intervention strategies and relationship-building processes. Health Promot Pract. 2008; 9(4):356– 67. [PubMed: 17167109]
- 74. Tisnado DM, Sablan-Santos L, Guevara L, Quitugua L, Castro K, Aromin J, et al. A case study in community and academic engagement for a community-partnered research approach: Evaluating community-based patient navigation as an intervention to improve access to breast cancer services among Chamorros. Calif J Health Promot. 2010; 8:39–51.
- Livaudais JC, Coronado GD, Espinoza N, Islas I, Ibarra G, Thompson B. Educating Hispanic women about breast cancer prevention: Evaluation of a home-based Promotora-led intervention. J Womens Health. 2010; 19:2049–56.
- Baquet CR, Bromwell JL, Hall MB, Frego JF. Rural community–academic partnership model for community engagement and partnered research. Prog Community Health Partnersh. 2013; 3:281– 90. [PubMed: 24056510]
- Braun KL, Kagawa Singer M, Holden AR, Burhansstipanov L, Tran JH, Seals B, et al. Lay navigator tasks across the cancer care continuum. J Health Care Poor Underserved. 2012; 23:398– 413. [PubMed: 22423178]
- Kaur J, Coe K, Rowland J, Braun KL, Conde F, Burhansstipanov L, et al. Enhancing life after cancer in diverse communities. Cancer. 2012; 118:5366–73. [PubMed: 22434384]
- Gwede C, Ward B, Luque J, Vadaparampil S, Rivers D, Martinez-Tyson D, et al. Application of geographic information systems (GIS) and asset mapping to facilitate identification of colorectal cancer screening resources. Online J Public Health Inform. 2010; 2:2893. [PubMed: 24244805]
- Brown S, Martin L, Flood T, Coe K. Process for determining the cancer burden of the Hopi Tribe. Public Health Rep. 2010; 125:793–800. [PubMed: 21121224]
- Campbell JE, Martinez SA, Janitz AE, Pate AE, Julie Erb-Alvarez J, Wharton DF, et al. Cancer incidence and staging among American Indians in Oklahoma. J Oklahoma State Med Assoc. 2014; 107:99–107.
- Preston MA, Mays GP, Jones RD, Smith SA, Stewart CN, Henry-Tillman RS. Reducing cancer disparities through community engagement in policy development: The role of cancer councils. J Health Care Poor Underserved. 2014; 25(Suppl 1):139–50. [PubMed: 24583493]
- Harmon BE, Blake CE, Thrasher JF, Hebert JR. An evaluation of diet and physical activity messaging in African-American Churches. Health Educ Behav. 2014; 41:216–24. [PubMed: 24195841]
- 84. Briand G, Peters R. Cultural considerations for breast and cervical cancer education among Marshallese women in Orange County. Calif J Health Promot. 2010; 8:84–9.
- 85. Manning MA, Bollig-Fischer A, Berry Bobovski L, Lichtenberg P, Chapman R, Albrecht TL. Modeling the sustainability of community health networks: Novel approaches for analyzing collaborative organization partnerships across time. Transl Behav Med. 2014; 4:46–59. [PubMed: 24653776]
- Ramanadhan S, Salhi C, Achille E, Baril N, D'Entremont K, Grullon M, et al. Addressing cancer disparities via community network mobilization and intersectoral partnerships: A social network analysis. PLoS One. 2012; 7(2):e32130. [PubMed: 22384156]
- Buchwald D, Wiegman D. Weaving the Native web: Using social network analysis to demonstrate the value of a minority career development program. Acad Med. 2011; 86:778–86. [PubMed: 21512364]

- Tanjasiri SP, Tran JH. Community capacity for cancer control collaboration: Weaving an Islander Network for Cancer Awareness, Research and Training for Pacific Islanders in Southern California. Cancer Detect Prev. 2008; 32(Suppl 1):S37–40. [PubMed: 18359580]
- Mariella P, Brown E, Carter M, Verri V. Tribally-based participatory research. J Health Disparities Research Pract. 2009; 3(2):43–60.
- 90. Foster MW, Sharp RR. Share and share alike: Deciding how to distribute the scientific and social benefits of genomic data. Nat Rev Genet. 2007; 8(8):633–U8. [PubMed: 17607307]
- Kerner JF, Guirguis-Blake J, Hennessy KD, Brounstein PJ, Vinson C, Schwartz RH, et al. Translating research into improved outcomes in comprehensive cancer control. Cancer Causes Control. 2005; 16:27–40. [PubMed: 16208572]

Table 1

CNP Reach and Foci (N = 25)

Characteristic	n (%)
Target Population	
African Americans	7 (28)
American Indian/Alaska Native	3 (12)
Asians	2 (8)
Hispanics	4 (16)
Pacific Islanders	3 (12)
Medically underserved, any ethnicity	6 (24)
Reach	
National	4 (16)
Regional	13 (52)
Local	8 (32)
Location of CNP Center	
East	5 (20)
Midwest	4 (16)
West, including Hawaii and American Samoa	8 (32)
South	8 (32)
Cancer Foci	
All sites	3 (12)
Breast	20 (80)
Cervical	18 (72)
Prostate	13 (52)
Colorectal	16 (64)
Lung	13 (52)
Liver	4 (16)
Other	4(16)

Note. CNP, Community Network Program.

Table 2

Partners, Products, and Trainees

Element	Total for 25 CNPs n(%)	Mean per CNP
Partners	2,251	90.0
Academic	120 (5.3)	4.8
Clinical	396 (17.6)	15.8
Faith based	263 (11.7)	10.5
Other community-based agencies and coalitions	1,301 (57.8)	52.0
Business	48 (2.1)	1.9
Government	123 (5.5)	4.9
Products		
Needs assessments total	211	8.44
General needs and preferences related to cancer control	4 (30.3)	
Primary prevention (smoking cessation, diet, hepatitis B, etc.)	24 (11.4)	
Screening	54 (25.6)	
Treatment/survivorship	19 (9.0)	
Other	49 (23.2)	
Research projects total	328	10.9
CRCHD-funded pilot research supplements	90 (27.4)	3.6
Non-CRCHD funded research projects	238 (72.6)	9.5
Publications total	991	39.6
Co-authors from target populations	832 (83.9)	33.3
Trainees		
Jr. investigators		
Total	719	28.76
From target populations	501 (69.7)	20.04
Community members trained	54,562	2,182.5

Element	Total for 25 CNPs n(%)	Mean per CNP	
Non-CRCHD funds leveraged by the end of Year 4	\$36,662,805	\$1,464,912	

Note. CRCHD, Center to Reduce Cancer Health Disparities.

Table 3

Benefits of CBPR and Lessons Learned

Benefits of CBPR	
CBPR can improve research methods and participation.	
Buy-in is increased because priorities are established by community.	the
Community interest and trust in research is increased thre training and participation.	ough
Controlled studies are possible, especially using delayed intervention design.	
Data collection tools are more relevant after pretesting w community.	<i>'</i> ith
Recruitment, retention, and data completeness are increa with community participation.	sed
CBPR can improve knowledge and intervention developme	ent.
New cancer-related knowledge about minority groups is generated when data are collected in the language of the community and/or by trained community members.	
Interventions are better developed and adapted with community input.	
CBPR can help to bridge the translation gap by using net to disseminate information on what is needed and what v	works.
CBPR builds community capacity.	
Our communities have increased knowledge of cancer prevention and control.	
Our pool of minority and indigenous researchers is grow	ing.
CBPR skills of nonminority researchers have been enhan	nced.
Community partners have expanded their skills in researce and grant getting.	ch
Individuals from the community have gained clinical, res and organizational skills.	search
More cancer services are available in the community.	
Lessons Learned	
CBPR requires an iterative, power-sharing process that mphasizes transparency.	
The definition of community may change with each project	t.

Benefits of CBPR	
Starting with educational programs may help increase community willingness to participate in research.	
Community capacity must be built by offering training, participation, and leadership opportunities.	
CBPR requires a team approach.	
Qualitative research methods are as important as quantitative methods in CBPR.	
CBPR partnerships must balance research need for findings wit community need for action.	th

CBPR takes time and resources.

Note. CBPR, community-based participatory research.

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Appendix

Participants

Institution, Location	Name of CNP	PI Name	NCI Grant No.
LBJ Tropical Medical Center, Pago Pago, American Samoa	American Samoa Community Cancer Network (ASCCN)	Victor Tofaeono	U01CA114590
University of Kentucky, Lexington, KY	Appalachia Community Cancer Network (ACCN)	Mark Dignan	U01CA114622
University of Arkansas for Medical Sciences, Little Rock, AK	Arkansas Cancer Community Network (AR- CCN)	Ronda Henry- Tillman	U01CA114607
University of California Davis Cancer Center, Davis, CA	Asian American Network for Cancer Awareness, Research and Training	Moon S. Chen, Jr.	U01CA114640
Temple University, Philadelphia, PA	ATECAR—Asian Community Cancer Network	Grace X. Ma	U01CA114582
Lineberger Cancer Center, UNC-Chapel Hill, NC	Carolina Community Network (CCN)	Paul Godley	U01CA114629
Karmanos Cancer Center, Wayne State University, Detroit, MI	CNP for Older, Underserved African- American Adults	Terrence Albrecht	U01CA114641
University of Colorado, Denver, CO	Colorado Front Range Latino Community Network (CFRLCN)	Paula A. Espinoza	U01CA114604
University of Alabama at Birmingham Comprehensive Cancer Center, Birmingham, AL	Deep South Network for Cancer Control	Ed Partridge	U01CA114619
Fred Hutchinson Cancer Research Center, Seattle, WA	Hispanic Community Network to Reduce Cancer Disparities	Beti Thompson	U01CA114633
Papa Ola L kahi, Honolulu, HI	'Imi Hale—Native Hawaiian Cancer Network	Clayton Chong / Kathryn L. Braun	U01CA114630
Med Star Research Institute, Washington, DC	Latin American Cancer Research Coalition (LACRC)	Elmer E. Huerta	U01CA114593
Harvard School of Public Health, Boston, MA	Massachusetts Community Networks to Eliminate Cancer Disparities Through Education, Research, and Training (MASS CONECT)	Howard K. Koh / K. Viswanath	U01CA114644
Meharry Medical College, Nashville, TN	Meharry Medical College-Community Health Centers Network	Margaret K. Hargreaves	U01CA114641
Morehouse School of Medicine, Atlanta, GA	National Black Leadership Initiative on Cancer III: Community Networks Program (NBLIC III)	Daniel S. Blumenthal	U01CA114652
Siteman Cancer Center, Washington University, St. Louis, MO	Program for the Elimination of Cancer Disparities (PECaD)	Graham A. Colditz	U01CA114594

Institution, Location	Name of CNP	PI Name	NCI Grant No.
University of Texas Health Science Center at San Antonio, TX	Redes En Acción: National Latino Cancer Research Network	Amilie Ramirez	U01CA114657
University of Washington, Seattle, WA	Regional Native American Community Networks Program	Dedra S Buchwald	U01CA114642
University of South Carolina, Columbia, SC	South Carolina Cancer Disparities Community Network (SCCDCN)	James R. Hebert	U01CA114601
Inter Tribal Council of Arizona	Southwest American Indian Collaborative Network (SAICN)	Kathryn Coe	U01CA114696
H. Lee Moffitt Cancer Center, University of South Florida, Tampa Bay, FL	Tampa Bay Community Cancer Network (TB-CCN): A Model for Reducing Health Disparities	Cathy D. Meade	U01CA114627
Mayo Clinic College of Medicine, Rochester, MN	The American Indian/Alaska Native Initiative on Cancer (Spirit of EAGLES)	Judith Salmon Kaur	U01CA114609
University of Maryland, Baltimore, MD	The Maryland Regional Community Network Program To Eliminate Cancer Health Disparities (MRCN)	Claudia Baquet	U01CA114650
University of Oklahoma, Oklahoma City, OK	University of Oklahoma Community Networks Project (OUCNP)	Janis E. Campbell	U01CA114626
California State University, Fullerton, CA	WINCART: Weaving an Islander Network for Cancer Awareness, Research and Training	Sora Park Tanjasiri	U01CA114591

Notes. CNP, Community Network Program; NCI, National Cancer Institute; PI, principal investigator.