



Mini Review

North Carolina's Community Health Worker Initiative

Jeanne Milliken Bonds*, James H Johnson and Elizabeth Ordonez

Whole Community Health Initiative, Kenan-Flagler Business School and UNC Public Policy UNC Chapel Hill, USA

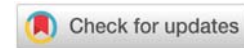
Received: 30 July, 2022
Accepted: 26 August, 2022
Published: 27 August, 2022

***Corresponding author:** Jeanne Milliken Bonds, Whole Community Health Initiative, Kenan-Flagler Business School and UNC Public Policy UNC Chapel Hill, USA, Email: Jeanne_Bonds@kenan-flagler.unc.edu

Keywords: Community Health Worker COVID-19

Copyright License: © 2022 Bonds JM, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

<https://www.peertechzpublications.com>



Abstract

Community Health Workers support frontline public health professionals during times of public health pandemics by providing communities with trusted messengers that are a support system and liaison to medical and social services. North Carolina deployed Community Health Workers during the COVID-19 pandemic using funding under the Patient Protection and Affordable Care Act with success. We offer recommendations for a more robust program going forward using what was learned during the pandemic.

Background

The North Carolina Department of Health and Human Services (NCDHHS) launched a Community Health Worker (CHW) Initiative to support the frontline public health workforce during the COVID-19 pandemic. The goal, given widespread misinformation about both the virus and the vaccines developed to minimize exposure, sickness, and deaths were to provide trusted messengers with a strong understanding of local communities to serve as liaisons between health care services and social services. Creating a portfolio of reliable health information and improving both the quality and cultural competence of service delivery during the crisis were the desired outcomes of this CHW Initiative.

Prior to the COVID-19 pandemic, using funding authorized under Section 5313 of the Patient Protection and Affordable Care Act [1], NCDHHS partnered with the North Carolina community college system to develop a training and certification program for CHWs. The urgent need for an effective response to the pandemic forced NCDHHS to expedite its plan to build a strong community health workforce in the state.

Implementation of the COVID-19 Response

Based on direct COVID impacts, fifty-five of North Carolina's

100 counties were selected for participation. In August 2020, seven vendors were selected to recruit, hire, train, and manage more than four hundred CHWs, across these fifty-five mostly rural counties, who would be charged with connecting North Carolinians affected by COVID-19 to needed services and supports through the end of June 2021 [2].

Vendors used core elements from three models in the Rural Health Information Hub's Community Health Workers Tool Kit to train recruits for the program: the Care Coordinator/Manage model, which helps individuals navigate the healthcare system and connect individuals to services and resources; the Outreach and Enrollment Agent model, which focuses on outreach, home visits, and assisting eligible individuals who experience barriers to enrollment in various programs; and the Community Organizer and Capacity Builder model, which promotes community action, facilitates involvement from community organizations, utilizes available resources to meet needs, and embraces advocacy [3]. The training based on the three models provided the recruited CHWs with a broad range of strategies, tactics, and options to intervene and assist residents in the targeted counties to access reliable information and culturally competent care.

The Worker CHW Initiative leveraged existing programs and



Initiatives, including NCCARE360 and North Carolina's Support Services Program (SSP). NCCARE360 is an electronic platform that enables CHWs and Community-Based Organizations (CBOs) to connect individuals to needed resources. Through the platform, CHWs and CBOs can make electronic referrals, communicate, securely share client information, and track outcomes across all one hundred North Carolina counties. Use of this platform, which also addresses non-medical drivers of health and connects health care and human services, expedited the roll-out and statewide launch of the CHW Initiative six months ahead of schedule in June 2020. By enabling CHWs and CBOs to connect health care and human services, the platform has been integral to the COVID-19 response. In twenty-nine of the fifty-five counties targeted for this Initiative, the Support Services Program allowed CHWs to connect needy individuals with other services, including funding for food assistance, personal protective equipment, cleaning supplies, and financial relief payments [4].

Leveraging this network of individuals, resources, and funding, the Initiative focused primarily on promoting safe quarantine and isolation practices for individuals and households affected by COVID-19. During quarantine and isolation, CHWs screened individuals for needed resources and assisted with the provision of both short-term (i.e., COVID-19-related supplies, transportation assistance, rent/mortgage assistance, etc.) and long-term (i.e., SNAP/WIC, job placement, health insurance, disability benefits, etc.) support [5].

NCDHHS and Partners in Health conducted an initial evaluation of the program in March 2021. The evaluation was based on several key performance indicators and metrics, including the use of support services, number of referrals, and COVID-19 positivity rates. CHWs, according to the evaluation, served over 385,000 individuals, made 121,000 referrals for resource support and provided 171,000 support services to 38,000 households. And eighty-eight percent of surveyed program participants reported they were able to successfully quarantine and isolate because of the services provided by the Initiative. The program significantly reduced COVID-19 positivity rates in the fifty-five targeted counties [6].

The evaluation concluded that in the first nine months, the Initiative successfully leveraged other health and social service programs to create a multi-channeled response that better-used community resources, built local capacity, intentionally prioritized historically marginalized communities, and fast-tracked the rollout of NCCARE360 and the program in its entirety [7]. However, due to this rapid rollout, the evaluation also highlighted several programmatic challenges: poor retention of CHWs, funding constraints; the need to expand NCCARE360, particularly within Spanish-speaking communities and rural areas; and, despite a \$20 hourly pay rate, high CHW turnover due to challenging work hours (evenings and weekends) and conditions (providing services outdoors). Noting a clear imbalance of resources in rural versus urban areas, the evaluation also noted that funding has been an area of specific concern while working with rural CBOs that may require payments in advance in the future [7].

With the continued spread of the virus and major advances in vaccine research, the Initiative shifted from its initial focus on quarantine and isolation to prioritize vaccination outreach in January 2021. Further, in March 2021, the Initiative announced that it would operate beyond its initial planned end date, continuing through June 2022 and expanding to all one hundred of North Carolina's counties. Following a review and evaluation of proposals submitted by vendors from all over the state, the Initiative, in August 2021, expanded with a new set of CHW program managers under contract and with a broader programmatic focus on "whole health solutions" rather than a sole focus on COVID-19.

Recommendations

Using CHWs as trusted messengers was an effective tool in the state's effort to combat the COVID-19 pandemic. However, we offer a few recommendations for policymakers and program managers to consider moving forward--based on our review of the first-year evaluation findings, the upcoming shift in programmatic focus, and insights from CHW program case studies from other states.

First, North Carolina should consider establishing a Community Health Worker Advisory Committee, modeled after the one established by the state of Maryland's House Bill 490 [8]. Such a committee will create an opportunity for NCDHHS to receive input from the CHW community on certification and training, as well as program design and implementation-critical intelligence that can in turn be incorporated in decisions regarding future iterations of the program. Such a committee also will allow NCDHHS to engage the CHW in developing viable solutions to the worker turnover problem uncovered in the first-year program evaluation.

Second, CHWs often face the same financial, educational, language, and cultural barriers as the residents of the communities they serve. Accordingly, we recommend a rigorous review and evaluation of CHW training and certification programs, to address barriers in structure, design, content, and implementation. Such an evaluation also may go a long way toward addressing the turnover problem uncovered in the first-year evaluation of the CHW Initiative.

Third, like other states, North Carolina should consider incorporating supplemental programming in the CHW program. Three such CHW Initiatives are worthy of consideration for replication in North Carolina. New Mexico's CHW program uses a statewide 24/7 nurse-run health advice line that allows nurses to provide free medical or health information to any caller [9,10]. And the Kentucky Homeplace Project (KHP) and Pennsylvania's Individualized Management for Patient-Centered Targets (IMPACT) build supports for the social determinants of health holistically at the community level [11].

Fourth, North Carolina must finetune methods to assess the veracity of the CHW Initiative--both to gain a better understanding of how the program operates (implementation evaluation) and the return on investment (impact evaluation). Excellent examples of randomized control trial evaluations of



CHW work programs exist which are worthy of replication. The Penn Center for Community Health Worker IMPaCT evaluation is one such study. Three randomized control trial experiments revealed that the Penn Center's CHW intervention improved chronic disease control, mental health, and quality of care; and reduced total hospital days by 65 percent. Delivered to over 10,000 high-risk patients in the Philadelphia region, the CHW program generated, according to the IMPaCT evaluation, a \$2:1 annual return on investment to payers [12]. The impact has been replicated by organizations across eighteen different states including the Veterans Health Administration, state Medicaid programs, and integrated healthcare organizations.

NCDHHS also needs to better define key performance indicators and metrics for the CHW program. It should consider using the Area Deprivation Index (ADI) and Social Vulnerability Index (SDI) to assess critical needs for interventions and services. ADI was developed to quantify levels of disadvantage across small areas; evaluate community associations with health outcomes, and address health inequities. In combination with other indicators, the ADI has the potential to identify areas of social deprivation that are in grave need of additional health care resources. SDI, on the other hand, uses 15 U.S. Census variables to help local officials identify communities that may need support before, during, or after disasters. Given North Carolina's history of adverse weather events and the expanse of environmental justice communities, NCDHHS should consider using these two measures to address inequities and provide natural disaster support, two factors that heavily influence health outcomes in North Carolina's 34 most distressed counties.

Finally, North Carolina must establish a sustainable funding base for the CHW Initiative. From August through December 2020, the CHW Initiative was initially funded by federal money available from the CARES Act, which passed as part of sweeping COVID relief. From January through July 2021, it was supported with funding from the CDC. When the program began in August 2020, funding was stable and robust but that changed over time. As funding decreased, a CHW based in Edgecombe County commented that she had to find creative ways to meet the needs of community members. According to NCDHHS, the lack of consistent funding resulted in a significant turnover of CHWs six months into the program, when the CARES Act funding was depleted.

NCDHHS should lobby for stable funding for CHWs through the recent transformation of North Carolina's Medicaid Program to Managed Care, which has similar goals. In their Medicaid programs, Minnesota, Texas, New Mexico, and Washington have integrated CHWs into care coordination services through direct contracts with managed care organizations (MCOs). In New Mexico, this integration resulted in a reduction of claims and increased financial security for CHWs. New Mexico also requires Medicaid MCOs to increase the number of CHWs they employ by a set percentage each year. A tedious reimbursement process notwithstanding, this source of funding is the most sustainable option for supporting CHWs and reducing long-term health costs.

References

1. Text - H.R.3590 - 111th Congress (2009-2010): Patient Protection and Affordable Care Act | Congress.gov | Library of Congress
2. NC Department of Health and Human Services, Community Health Workers in North Carolina: Creating an Infrastructure for Sustainability, Final Report and Stakeholder Recommendations of the North Carolina Community Health Worker CHW Initiative. 2018.
3. Community Health Workers Toolkit - RHihub Toolkit (ruralhealthinfo.org)
4. NCCARE360. Quarterly Report, February 2021. Link: <https://nccare360.org/wp-content/uploads/2021/02/NCCARE360-Quarterly-Report-Feb-2021.pdf>.
5. NC DHHS COVID-19 Response. Community Health Worker Webinar. Presented June 2021
6. LT-CRC_case_study_NC_march_2021_Final.pdf (pih.org)
7. Ibid.
8. Maryland House Bill 490. LegiScan. <https://legiscan.com/MD/bill/HB490/2018>.
9. Johnson D, Saavedra P, Sun E. Community health workers and Medicaid managed care in New Mexico. J.
10. The Commonwealth Fund. How New Mexico's Community Health Workers are Helping to Meet Patients' Needs. Available at: <https://www.commonwealthfund.org/publications/case-study/2020/feb/new-mexico-community-health-workers>, February 19, 2020.
11. Schoenberg NE, Campbell KA, Garrity JF, Snider LB, Main K. The Kentucky Homeplace Project: family health care advisers in underserved rural communities. J Rural Health. 2001 Summer;17(3):179-86. doi: 10.1111/j.1748-0361.2001.tb00955.x. PMID: 11765882.
12. Kangovi S, Mitra N, Norton L. Effect of Community Health Worker Support on Clinical Outcomes of Low-Income Patients Across Primary Care, A Randomized Clinical Trial. 2018.

Discover a bigger Impact and Visibility of your article publication with Peertechz Publications

Highlights

- ❖ Signatory publisher of ORCID
- ❖ Signatory Publisher of DORA (San Francisco Declaration on Research Assessment)
- ❖ Articles archived in worlds' renowned service providers such as Portico, CNKI, AGRIS, TDNet, Base (Bielefeld University Library), CrossRef, Scilit, J-Gate etc.
- ❖ Journals indexed in ICMJE, SHERPA/ROMEIO, Google Scholar etc.
- ❖ OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting)
- ❖ Dedicated Editorial Board for every journal
- ❖ Accurate and rapid peer-review process
- ❖ Increased citations of published articles through promotions
- ❖ Reduced timeline for article publication

Submit your articles and experience a new surge in publication services (<https://www.peertechz.com/submission>).

Peertechz journals wishes everlasting success in your every endeavours.