

“To Get the Patient the Best Care”: A Qualitative Analysis of Community Health Worker Integration in North Carolina Federally Qualified Health Centers

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Abstract

Objective: Research suggests that community health worker (CHW) integration within clinical care teams can improve chronic disease outcomes and address health-related social needs. However, the processes by which CHWs are integrated in Federally Qualified Health Centers (FQHCs) and organizational factors enabling their success remain incompletely understood. Within the context of a national initiative sponsored by the Centers for Disease Control and Prevention, this study assessed CHW integration across three North Carolina FQHCs with distinct patient populations, management systems, and levels of prior CHW experience to identify facilitators, barriers, and CHW impact.

Methods: We conducted a qualitative evaluation using inductive thematic analysis of semistructured key informant interviews with CHWs, their managers, and clinicians at each FQHC. Transcripts were analyzed using reflexive thematic analysis to identify themes and extract representative quotes.

Results: Facilitators included collaboration, targeted training, management systems, prior CHW and clinician experience, and organizational support. Barriers included unclear CHW role definition, CHW capacity and community resource constraints, and inconsistent communication about integration strategies. CHWs supported care coordination, health-related social needs referrals, and chronic disease management, improving patient engagement and outcomes.

Conclusions: Findings confirmed known enablers and barriers to CHW integration, including role definition, capacity constraints, resource availability, and supportive leadership. We additionally identified novel factors impacting CHW integration, including the influence of prior experience of CHWs and clinical staff, CHW leadership in workflow development, the role of peer-learning collaboratives, and the importance of inclusive communication and data practices. Integration was most successful when CHWs shaped workflows, clinicians and managers had foundational CHW understanding, and collaborative learning spaces enabled peer exchange. These findings highlight the importance of CHW-centered program design and implementation, and may enhance existing frameworks for clinical integration of CHWs in FQHCs and similar settings.

Key words: *chronic disease, community health, community health worker integration, FQHC, health-related social needs*

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BACKGROUND

Community Health Workers (CHWs) are increasingly integrated into primary care settings, including Federally Qualified Health Centers (FQHCs), to address health disparities and improve outcomes for populations experiencing structural barriers to care (Kim et al., 2016). As trusted community members with lived experience, CHWs possess insights into the cultural, social, and economic factors influencing health (American Public Health Association, 2009). Their core roles, outlined by the National Council on CHW Core Consensus Standards (C3), span from connecting clients to existing health and social services at one end of the spectrum to working with communities to identify and address the underlying causes of health inequities on the other (Rosenthal et al., 2024). Through these functions, CHWs support patients with health-related social needs, navigate fragmented care systems, and strengthen trust between communities and health care

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KEY POINTS

- Community Health Workers (CHWs) improve chronic disease management and connect patients to resources like food, housing, and insurance, strengthening trust and access to care. Less is understood about effective CHW integration strategies.
- In three North Carolina Federally Qualified Health Centers, CHWs enhanced care coordination, reduced barriers, improved outcomes, and increased patient engagement.
- Successful integration required clear roles, supportive leadership, strong communication, and was supported by prior care team experience. New findings show that peer learning and CHW-codesigned workflows further strengthened programs.
- Updating integration frameworks and pairing peer learning, technical assistance, and value-based incentives may help scale effective CHW models.

organizations (Ingram et al., 2014; Rosenthal et al., 2011).

FQHCs serve patients disproportionately affected by chronic disease and unmet social needs, making CHW integration particularly relevant. Evidence demonstrates CHW effectiveness in improving chronic disease outcomes, enhancing preventive care uptake, and addressing health-related social needs (Ingram et al., 2017; Knowles et al., 2023; McCutcheon et al., 2025; Perry et al., 2014; Vasan et al., 2020). However, despite robust documentation of CHW impact, less is known about how CHWs are integrated into FQHC clinical teams and which organizational factors shape successful implementation.

Existing literature identifies key facilitators of CHW integration in primary care settings such as lived experience, trust-building, interdisciplinary collaboration, and culturally responsive care, as well as persistent challenges, including unclear role definition, limited clinician understanding of CHW scope, and inadequate training or supervision structures (Ignoffo et al., 2022; Lee et al., 2020; McCutcheon et al., 2025; Payne et al., 2017; Reinschmidt et al., 2017; Schriger et al., 2024; Watford, 2024). This evidence base has been synthesized into frameworks for CHW programs (National Committee for Quality Assurance (NCQA) and Penn Center for Community Health Workers, 2021; MHP Salud, 2025; Center for Community Health Alignment, 2025). However, prior studies primarily focused on single sites or mature CHW programs, with limited attention to variation across health centers or the role of structured implementation supports.

In 2021, the US Centers for Disease Control and Prevention launched its first national CHW program, the CHWs for COVID Response and Resilient Communities (CCR) initiative. CCR funded 67 recipients across the country as part of the 3-year, \$350 million initiative launched rapidly in the midst of the pandemic to deploy more trained CHWs in communities most affected by COVID-19 to help stop its spread and move towards health equity. Three national organizations were separately funded to provide programmatic and evaluative training and technical assistance to CCR recipients (De Jesus et al., 2025).

Via CCR funding to the North Carolina Department of Health and Human Services (NCDHHS) Office of Rural Health, four North Carolina FQHCs launched a pilot program in 2022 coordinated by the NC Community Health Center Association to support newly hired CHWs. The program was supported by integration-related training and peer collaborative spaces coordinated by the NC Area Health Education Center (AHEC). Through CCR, AHEC provided health equity training and peer

support for the four pilot FQHCs, which augmented ongoing practice support coaching to FQHCs. Additional components of NCDHHS' CCR initiative included expanding statewide standardized and specialty training opportunities for CHWs and establishing a state CHW association to develop and oversee CHW certification processes. CCR efforts in NC built upon years of preparation across the state, including development of a roadmap for CHW infrastructure and one of the largest pandemic investments in CHWs in the US through the NC COVID-19 CHW Program (North Carolina Department of Health and Human Services, 2018; Resendes et al., 2021).

Leveraging the structure of these pilots, this study addresses gaps in the literature by qualitatively examining CHW integration across multiple North Carolina FQHCs with varying levels of experience with CHWs to compare and contrast experiences. We also assess how learning collaboratives and shared management systems influence CHW integration processes during pilot implementation. We identify findings that may support CHW integration in FQHCs, particularly in those that have not previously employed CHWs or have limited experience in doing so.

METHODS

Program structure, training, and technical assistance

Four FQHCs were selected by the NC Community Health Center Association to participate in the CCR-funded CHW integration pilot via a competitive application process. After contracting and project planning processes, each FQHC hired one CHW by May 2023. Three FQHCs consented to participation in this qualitative evaluation to understand the facilitators and barriers to CHW integration. Before this pilot, FQHCs had demonstrated interest in CHWs but varying levels of experience integrating them: FQHC A had employed CHWs for over 4 years; FQHC B had hosted a small CHW program for 2 years; and FQHC

C had never employed a CHW. The fourth FQHC, not participating in this evaluation, had robust CHW programming for multiple years.

CHW roles and populations varied by FQHC, as determined by FQHC-identified priorities. FQHC A focused on patients enrolled in Medicare or dually-enrolled in Medicaid, and were connected to patients by a primary care provider (PCP) if an unmet health-related social need was identified. CHWs were focused on meeting those needs, also conducting home visits as necessary. While many patients in this program had chronic disease diagnoses, including hypertension and type 2 diabetes, disease management and navigation were not explicit goals. At FQHC B, the primary population was uninsured, but also included patients enrolled in Medicaid and/or Medicare. Patients were primarily referred by PCPs to the CHW, who would then screen for health-related social needs, conduct follow-up and outreach, including appointment scheduling, and meet one-on-one to discuss their health plans and progress, which included some chronic disease self-management coaching and conducting home visits as needed. FQHC C focused primarily on uninsured patients typically referred by PCPs, especially those with or at risk of developing type 2 diabetes. This CHW primarily conducted telephonic outreach to patients, often in Spanish, to provide care coordination, appointment scheduling assistance, and reminders for health screenings, and also participated in community events to engage with potential patients.

Each participating FQHC was connected to an AHEC practice support coach. The coach shared best practices and the AHEC CHW Integration and Optimization Tool (NC Area Health Education Center, 2025), a comprehensive, evidence-informed toolkit that included a gap analysis, implementation resources, and a project management plan for integrating new or optimizing existing CHW programs in Advanced Medical Home settings. It includes information

on C3 core roles and skills, prioritizing role definition and fidelity to the APHA CHW definition (American Public Health Association, 2009). AHEC also hosted a health equity training, completed in July 2023, and a peer learning collaborative for CHWs and staff at participating FQHCs. All CHWs participated in the peer learning collaborative, a five-session series, between September and November 2023.

All CHWs completed the Standardized Core Competency Training delivered through NC community colleges and were offered CHW Certification through the North Carolina CHW Association. While all CCR recipients had access to training and technical assistance from national Centers for Disease Control and Prevention-contracted organizations, the extent to which FQHC staff, including CHWs, leveraged these resources was not captured by this evaluation.

Study design

We conducted a qualitative study using inductive thematic analysis of semistructured key informant interviews, reported in alignment with the Consolidated Criteria for Reporting Qualitative Research guidelines as relevant (Tong et al., 2007). As we were specifically interested in the experiences of those involved in the CCR-funded CHW integration, we used purposive sampling of participants. From each participating FQHC, the pilot-funded CHW, their direct manager, and one clinician who frequently collaborated with the CHW were asked to participate.

Results and interpretation reflect an interpretivist paradigm and are derived from the shared experiences of both interview participants and the research team. The goal of the assessment was to identify themes of integration as perceived by participants, while acknowledging the limited sample size and importance of context and individual experience in integration.

A preliminary site visit at one participating FQHC informed interview guide

development and ensured CHW perspectives were incorporated; two CHWs and two CHW managers were consulted during the study design phase. Site visit opportunities were offered to the other FQHCs, but were declined due to timing and capacity constraints. We incorporated additional CHW and ally feedback from evaluators across the CCR project into the study design. Separate interview guides were tailored to each role (Supplementary Exhibits 1–3, <https://links.lww.com/JACM/A174>).

Data collection

One site did not have a clinician available. At one FQHC, both outgoing and incoming CHW managers participated, referred to collectively as “Manager” in transcript excerpts. CHWs ($n = 3$), managers ($n = 4$), and clinicians ($n = 2$) were interviewed. Two authors conducted eight remote, audio-video interviews via Zoom in March 2024 (Zoom, 2024), approximately 1 year after CHWs began working at their respective FQHC. Each participant was interviewed by a member of the evaluation team with whom they had not otherwise interacted beyond interview scheduling. Interviews only included the interviewer and the participant. Interview guides were not provided to participants before the interviews. Participants were asked about their experiences with CHW integration, including facilitators, barriers, and perceived impact.

Analysis

Audio-visual interviews were recorded and transcribed in Zoom. Transcript edits were made manually for clarity and accuracy, and not returned to participants. Transcripts were assessed by three coders. After reviewing all transcripts, a codebook was developed with codes and definitions (Supplementary Table 1, <https://links.lww.com/JACM/A174>). While three parent codes (“Facilitators,” “Barriers,” and “Impact”) were determined a priori, all child codes emerged inductively after initial transcript

review and coder discussion. Codes were then applied using Dedoose (2024). Each transcript was coded by two authors to ensure reliability and validity. Coders applied and reconciled codes by consensus after review and discussion. Themes were synthesized using reflexive thematic analysis after multiple discussions between coders and other authors and engagement with relevant literature (Braun & Clarke, 2006).

Positionality and ethical considerations

The study team was contracted by NCDHHS to complete this evaluation as part of its CCR initiative. Previously, several members of the study team supported NCDHHS-led CHW efforts in pandemic response and recovery, including program evaluation. None of the coders identified as CHWs; one had previously worked at an FQHC. All authors have been engaged in CHW-related programming and/or research for at least 4 years. The senior author is a clinician and has worked with CHWs in their clinical capacity; they were dually-employed by the evaluation team’s not-for-profit organization and an academic medical center via a services agreement; no resources from the academic medical center were utilized in this evaluation. Other authors do not share vocational similarities with interview participants (i.e., CHWs, CHW managers, and clinicians), though two previously worked in clinical settings.

This study was submitted to the Mass General Brigham Institutional Review Board, the evaluation team’s Institutional Review Board of record, and did not meet the criteria for human subjects research (i.e., exempt). Each participant provided informed verbal consent for study inclusion and use of excerpts. Each participant understood that they were welcome to refuse participation or drop out of the assessment at any time and for any reason. To protect anonymity, quotes only identify participant roles. Aggregated assessment

results were provided to participants; they had no substantial feedback that altered interpretation or findings.

RESULTS

Themes are organized as “Facilitators” and “Barriers” of CHW integration, though many intersect (Table 1). While clinician sampling was limited by staff availability at one FQHC, thematic saturation was approached through available participant interviews.

Facilitators of integration

Overall, CHWs felt integrated and supported within their FQHCs. Although integration took multiple months, they generally felt incorporated into care systems 1 year after hiring.

Collaboration and training

Peer-learning, practice support coaching, and cross-FQHC collaboration enabled sharing of strategies and challenges. Managers valued AHEC-led programming, particularly the peer learning collaborative: “it was really... the most beneficial just to see... the things that other health centers [are doing], and how they were utilizing their CHWs, as well as challenges.” Some managers also reported reaching out to FQHCs nationally to learn about CHW programming outside of the CCR ecosystem. CHWs valued the trainings provided but expressed interest in more role-specific content tailored to their specific populations and health conditions. FQHC A, with a long-standing CHW program, still benefited from trainings and tools provided by AHEC around role definition, with one staff member specifically mentioning the gap analysis as helpful.

Management systems

Clear workflows and protocols supported integration, particularly when codesigned with CHWs. Examples included workflow algorithms, daily huddles, standardized

communication procedures, and warm handoffs. CHWs at FQHCs with more robust management systems felt more integrated, although some did not recognize these systems as formal “integration strategies.” Management systems were mentioned more frequently by managers and clinicians than by CHWs, potentially suggesting a need for clearer communication. At FQHC A, the CHW was integrated into the existing management system and workflow, whereas at FQHC B, there was no existing workflow and the management system was developed collaboratively between the CHW, clinicians, and the manager.

Prior clinical and lived experience of CHWs

CHWs’ previous experience, especially clinical, was viewed as central to smoother integration. All CHWs had previously worked as medical assistants (MAs). Having a clinical background was highly valued. Said one clinician: “She comes with a lot of clinical experience... that has influenced her ability to participate.”

Lived experience and familiarity with local resources were viewed as critical to the effectiveness of CHWs by two managers. Experience with specific populations (e.g., Medicare enrollees) was also viewed as helpful.

Manager/clinician experience with CHWs

Integration and perceptions of CHWs were significantly influenced by the prior roles and knowledge of managers and clinicians. Staff with prior CHW exposure were more likely to champion the role. Clinicians trained in interdisciplinary care described a clear understanding of the CHW role and its value: “I understand the limits of my training... [and] my lived experience as well.”

Having existing CHW programming (as with FQHCs A and B) at the FQHC could be valuable, but only insofar as other CHWs were doing work similar to the newly

Table 1. Themes and Subthemes of CHW, CHW Supervisor, and FQHC Clinician Interview

Theme	Definition	Example
Theme 1: Impact	Influences, direct or indirect, that CHWs and CHW programs have on patients in FQHCs.	
Subtheme 1.1: Health-related social needs referrals	Social and economic resources aiding patients in achieving improved health outcomes.	"I got him a secondary insurance. [...] now he has food stamps." (CHW)
Subtheme 1.2: Care coordination	Management or outreach of health care, including appointments and preventive testing.	"A lot of our patients are uncontrolled, and they're hard to track [...] and our providers just don't have the time to do that. So with me, being able to do that, it's just helped them be more accountable." (CHW)
Subtheme 1.3: Changes in health behavior	Behavior in or around the health care setting or likelihood to seek care.	"[Patients are] just feeling more comfortable in the clinic." (Clinician)
Subtheme 1.4: Chronic and other health conditions	Management, indicators, or improvement of chronic and acute conditions.	"We've seen how beneficial her role has been in chronic disease, and chronic disease management." (Manager)
Subtheme 1.5: Miscellaneous impact	Impact not categorized in above subthemes.	"I helped him get all of his papers organized. We put them in folders with big labels on it, so he can easily at least get to the folder." (CHW)
Theme 2: Promoters of Integration	Tactics or resources that promote and ease CHW integration in FQHCs.	
Subtheme 2.1: Collaboration	Ability and opportunity for FQHC CHWs, managers, and clinicians to engage in peer learning.	"And it was really... the most beneficial just to see how, the things that other health centers [are doing], and how they were utilizing their CHWs." (Manager)
Subtheme 2.2: Training	Educational resources provided to integrated CHWs.	"I don't necessarily feel like all of the classes, or all of the meetings and trainings were necessary for this role." (CHW)
Subtheme 2.3: Management systems	Specific systems, algorithms, or processes implemented before or during CHW integration.	"Huddling and providing education for staff, she was able to do that, incorporating her into our all staff huddles to talk a little bit about her role and what it entails, and creating workflows and process maps for staff." (Manager)
Subtheme 2.4: Prior role of CHWs	Employment experiences of CHWs before becoming CHWs at their respective FQHCs.	"I think for us, the benefit of having a CHW with medical assistant experience was really great." (Manager)
Subtheme 2.5: Manager/clinician prior knowledge of CHWs	Prior understanding, experience, or education on the CHW workforce that managers or clinicians may have had.	"When the opportunity came to us, I'm like, definitely, like, I've had experience in working with a community health worker." (Manager)

(Continued)

Table 1. Continued

Theme	Definition	Example
Subtheme 2.6: Support, value, recognition	Importance of CHWs being respected and uplifted by their teams.	"I'm respected for my role and appreciated." (CHW)
Theme 3: Barriers to Integration	Challenges and limitations to CHW integration in FQHCs.	
Subtheme 3.1: Capacity	Limited CHW capacity due to high workload.	"I have like 2,000 some patients on my list already, and I'm pretty sure there's more that could be added to that list. But I'm only one person." (CHW)
Subtheme 3.2: Defining the CHW role	Lack of understanding of the CHW role or clear delineation and communication of responsibilities.	"I don't think the providers necessarily know the position." (Manager)
Subtheme 3.3: Strategy limitations	Challenges in developing or implementing a strategy for CHW integration.	"It's a position that we knew we needed, but we just didn't know how many ways we needed it and in what direction to move in." (CHW)

Abbreviations: CHW, community health worker; FQHC, Federally Qualified Health Center.

integrated CHW. FQHC B employed two other CHWs, but they had different roles from the CCR-funded CHW. At this FQHC, the CHW, manager, and clinician did not find that having previous experience with those CHWs was particularly helpful with this new role. However, at FQHC A, where other CHWs were employed in similar roles, participants found the community of CHWs and the resources and advice that they shared amongst each other to be useful.

Support and recognition

CHWs felt supported by their managers and clinicians, and viewed their supervisors as accessible resources. Managers and clinicians mentioned the importance of communicating CHW value to leadership. The pilot provided narratives and data used to advocate for further support, though some participants noted difficulty communicating CHW value without cost-effectiveness data.

Barriers to integration

CHW role definition

Role definition was the most frequently mentioned barrier. Across FQHCs, CHW responsibilities varied and took time to clarify, though sites with prior CHW programs experienced fewer challenges. In an FQHC where the CHW had previously worked as an MA at that clinic, distinguishing the CHW role from clinical tasks required ongoing communication. FQHC C experienced the most challenges around role definition and described the pilot period as a "learning process" that improved with time and open discussion. CHWs across all sites described difficulty connecting with clinicians, contributing to confusion about when referrals should occur.

Capacity constraints

All sites noted CHW workload challenges. However, only one CHW expressed

being unable to adequately serve the high client volume. All three CHWs indicated a desire to participate in or lead more community outreach events: “That just gets us more embedded within the community and having those points of contact with other agencies... to get the patient the best care.” Managers acknowledged capacity constraints while recognizing the breadth of CHW responsibilities and high level of patient needs.

Limited communication

Despite clinicians and managers describing integration strategies, at least two CHWs reported not being aware of them, with one feeling “thrown in.” CHWs generally felt they were not involved in early planning and decision-making, and that integration strategies were not always communicated clearly, though confusion lessened over time.

CHWs often felt disconnected from the clinicians and expressed interest in forming stronger relationships with them to better facilitate patient connections and follow-up. This challenge was also noted to be a reason why some clinicians did not understand the CHW role or when to contact them.

Limited social care resources

All sites described social care resource scarcity as a barrier to CHW program effectiveness. One CHW summarized, “If the resources aren’t there, then you’re stuck. You’re just another person telling them I can’t help you, so that sucks.” FQHCs expressed interest in cataloging resources and strengthening community partnerships.

Impact of FQHC CHW integration on patient care

Pilot CHWs supported four predominant domains: care coordination (63 mentions across transcripts), chronic disease management ($n = 48$), health-related social needs referrals ($n = 38$), and health

behavior changes ($n = 16$). Frequency is a descriptive indicator, not necessarily a measure of importance.

Care coordination

Care coordination was mentioned more than any other theme and encompassed patient outreach, appointment scheduling, and follow-up. CHWs mentioned care coordination more often than managers or clinicians. Still, managers and clinicians noted CHWs were critical in maintaining a care pipeline, ensuring follow-up, and connecting patients to their needs. At FQHC B, CHW follow-up for patients with uncontrolled chronic disease was seen by clinicians as contributing to improved clinical outcomes.

Patients appreciated having a trusted care team member they could easily contact. According to clinicians, having one-on-one, consistent follow-up improved patient outcomes and communication with patients who might not otherwise have sought care. One CHW noted: “I’m the one reaching out to them. They’re not reaching out to me. So they know I know they’re there.”

Personal connection and consistent follow-up increased patient access to preventive care and health screenings. One CHW described connecting patients disinclined to seek care: “Some aren’t even ready for the help... and that’s the other main thing of being a community health worker. You got to meet the patients where they are...You’re not ready right now. Let me check back... How about I come out to your home... Let’s sit and talk a while and earn that trust.” All participants noted that this level of care coordination would not be possible without integrated CHWs.

Health-related social needs and whole-person care

CHWs addressed health-related social needs, including food insecurity, transportation, housing supports, and insurance enrollment. Managers and clinicians understood

the high need for and importance of social needs resource access, and how CHWs fill gaps. CHWs frequently provided tailored support beyond conventional categories to focus on whole-person, patient-centered care: “I got him a new recliner because his was falling apart like literally underneath him. I brought a lot of value to his life” (CHW). One CHW was instrumental in connecting patients to Medicaid coverage, particularly after state Medicaid expansion.

One clinician noted that their patients “need to be navigating all of the systems... the legal system, housing, education... because they impact health a lot more than... the things that we do inside of the clinic walls.” Another manager added that they wanted to make the CHW position “a role that’s just as important as nurses, providers... our patients deal with a lot of different social determinants. So having [CHWs]... has been a really integral part of our team.”

CHW ability and willingness to connect to patients outside the clinic setting were critical. In FQHCs A and B, where CHWs addressed social needs, both CHWs frequently made home visits. Home visits were particularly impactful for patients with limited mobility or lack of transportation. CHWs also attended community events to build trust and connect with patients. Without CHWs, managers and clinicians noted that they would not adequately connect patients to health-related social needs resources or provide necessary patient-centered care.

Chronic disease management

CHWs supported hypertension and diabetes monitoring, reached out to patients with uncontrolled conditions, and followed up on care plans. One manager reported a 3% decrease in uncontrolled chronic conditions, which was partially attributed to CHW outreach. CHWs also provided care coordination and linked patients to social supports affecting chronic disease management. CHWs expressed interest in expanding their role to other conditions, such as cancer and mental illness, with one already

facilitating cancer screening scheduling and follow-up.

Health behavior change

Nearly all clinicians and managers described improvements in patient engagement and reduced anxiety attributable to CHW support, particularly in FQHCs A and B, where CHWs engaged in home visits and resource coordination.

DISCUSSION

CHWs have been recognized as essential care team members for decades because of their impact on patients with chronic conditions and their ability to address health-related social needs (Witmer et al., 1995). However, the processes by which CHWs are integrated and organizational factors enabling their success remain incompletely understood. This evaluation expands upon prior evidence by examining CHW integration across three North Carolina FQHCs with differing levels of patient populations, management systems, and prior CHW experience. While our findings reaffirm well-documented impacts and known integration challenges, they also illuminate several underexplored dynamics, including the influence of clinician and CHW prior experience, the importance of CHW leadership in shaping workflows and data systems, the role of peer-learning structures, and the need for CHW-centered communication. These novel findings, strengthened via multisite comparison across multiple roles, offer insight into how FQHCs can design and sustain more effective, equitable, and integrated CHW programs.

CHW impact

CHWs provided extensive support in care coordination, chronic condition monitoring, and health-related social needs referrals, with work spanning all CHW Core Skills (Rosenthal et al., 2024). Many, though not all, of the C3 Core Roles were documented in the key informant interviews, including:

care coordination, case management, and system navigation; conducting outreach; providing coaching and social support; and building individual and community capacity. Because we utilized inductive thematic analysis, we did not prescriptively assign C3 roles as “Impact” child codes.

Our findings are consistent with existing literature demonstrating CHW effectiveness across clinical and community settings (Knowles et al., 2023; Perry et al., 2014). CHWs helped patients navigate appointments, follow up on screenings, and maintain continuity of care. Their lived experience, linguistic or cultural alignment, and intentional relationship-building improved patient engagement (Chang et al., 2021; Lee et al., 2020), particularly for populations historically disconnected from health care systems.

CHWs addressed social needs ranging from food insecurity and insurance enrollment to housing-related challenges, often through home visits and intensive accompaniment. These patient-centered, whole-person activities include tasks beyond conventional social needs categories (Kangovi et al., 2014; Schriger et al., 2024), illustrating CHWs’ ability to address barriers that influence patients’ capacity to engage in care. CHW involvement in chronic disease management was associated with improved monitoring and follow-up, echoing prior evidence that CHW programs complement clinical care to enhance outcomes (Knowles et al., 2023; Robusto et al., 2025).

All CHWs were involved in some form of outreach, though each noted their desire to participate in more in-person outreach events, highlighting another potential avenue for impact and additional alignment with C3 roles. Limitations around in-person events resulted from capacity and do not necessarily reflect limited understanding of C3 roles or skills.

CHW integration strategies: confirmatory findings

This evaluation reaffirms several well-established considerations for CHW integration. As with prior studies, CHW

role definition emerged as a core barrier across all FQHCs, even in sites with prior, long-standing CHW programs, highlighting persistent gaps in clinician understanding of CHW functions and optimal collaborative approaches. Existing literature supports the finding that tailored training, including on-the-job training, can enhance CHW integration (Ignoffo et al., 2022; Lee et al., 2020; McCutcheon et al., 2025; Payne et al., 2017; Reinschmidt et al., 2017).

Clinicians and managers emphasized the need for increased education on CHW roles and clearer communication structures among FQHC staff, particularly for clinicians, who were less likely to attend the trainings and peer learning collaborative sessions. Studies have suggested training for care providers around the CHW role and scope, as well as health-related social needs and community resources (Gore et al., 2020; Ignoffo et al., 2022; Lee et al., 2020; Payne et al., 2017). Clinician champions for CHWs can support program adoption and integration (Lee et al., 2020; Payne et al., 2017). Capacity and community resource constraints were widely acknowledged, reflecting both the breadth of patient needs addressed by CHWs and the challenge of sustaining high-impact support with limited staffing. This aligns with broader work highlighting resource limitations and system-level barriers to CHW effectiveness (Lapidus et al., 2022; Payne et al., 2017; Schriger et al., 2024). Participants noted the importance of organizational support, recognition, and supportive supervision, consistent with literature linking these factors to reduced burnout and stronger integration (Rahman et al., 2023).

CHW integration strategies: novel findings

This study contributes several novel insights into how prior staff experience, management systems, and collaborative structures shape CHW integration. While not all findings may be generalizable to

nationwide clinical settings, many reflect the experience of staff across all three participating FQHCs.

Prior staff experience influenced the desire for CHW programs and quality of integration. Clinicians and managers with earlier CHW exposure were more likely to champion integration (Lee et al., 2020; Watford, 2024). CHWs with clinical or FQHC experience quickly adapted to clinical workflows. However, CHWs should not necessarily be expected to have prior MA experience, and reliance on CHWs' clinical backgrounds risks overmedicalizing the role. Future hiring and CHW integration should ensure fidelity to CHW identity and refer to essential qualities of CHW roles (McCutcheon et al., 2025; Reinschmidt et al., 2017; Rosenthal et al., 1998; Rosenthal et al., 2024). Role-specific training may be provided to prevent reliance on clinical backgrounds. While lived experience is foundational to the CHW role (American Public Health Association, 2009; Knowles et al., 2023), it is unclear whether specific lived experience relevant to patients was factored into CHW recruitment, suggesting that further education on evidence-based CHW hiring practices may be warranted (National Committee for Quality Assurance (NCQA) and Penn Center for Community Health Workers, 2021; Association of State and Territorial Health Officials, 2022).

CHW-centered strategy development and communication were essential to successful integration. CHWs reported limited initial involvement in strategy design, contributing to confusion during early integration. This mirrors challenges around CHW role definition, indicating that consistent, bidirectional communication between CHWs, clinicians, and managers supports clearer expectations. CHWs' insights into patient needs and workflow barriers helped refine program strategies over time, illustrating their key role in ongoing program development. Lack of clinician knowledge of CHW programs and fragmented communication between CHWs and clinicians suggest that integration may also benefit from clinician

involvement in trainings, strategy creation, and iteration. External collaboration with expert CHW leaders, including CHW associations or technical assistance partners, may be beneficial when developing new programs. This evaluation did not capture why FQHCs did not leverage technical assistance from national organizations under CCR.

Integration was strongest when CHWs participated in creating workflows. Co-developed systems facilitated clarity, efficiency, and shared ownership, whereas CHWs who lacked visibility into strategy or management systems reported feeling "thrown in." Working with CHWs to develop management systems, including those for data reporting, improved perceptions of integration. Notably, collaboration around workflow development may be limited in existing programs; it may not be prudent to have multiple or changing workflows. While FQHC B benefited from having their CHW collaborate on workflow development, the CHW at FQHC A was integrated into an existing program that likely could not reasonably sustain modifications every time a new CHW was onboarded. These findings build upon evidence highlighting the importance of clear management structures and workflow integration (Payne et al., 2017; Reinschmidt et al., 2017).

Peer-learning collaboratives enhanced CHW integration and problem-solving. CHWs and managers valued NC AHEC's collaborative spaces, using them to troubleshoot challenges and share tools. Communities of practice supported newer programs in identifying feasible workflows. Practice support and collaborative spaces have not been widely examined in CHW integration literature and represent an important area for further evaluation.

Finally, inclusive data collection practices, including CHWs codeveloping management and reporting and involvement in data reviews, facilitated CHW recognition and advocacy. Robust data collection is essential for meaningful evaluation, which is critical for continuous quality

improvement and sustained investment. FQHCs relied heavily on narrative examples of CHW impact, but CHWs noted that data systems were not always designed with their workflows in mind. These findings align with recommendations that CHW programs adopt codesigned data and reporting systems and data collection standards to ensure CHW leadership (National Committee for Quality Assurance (NCQA) and Penn Center for Community Health Workers, 2021; Rodela et al., 2021).

Implications for policy and practice

Our findings highlight actionable implications for FQHC leaders, policymakers, and funders seeking to strengthen CHW integration. Uptake of CHW integration frameworks, including hiring centered in C3 skills and lived experience, structured onboarding, role-specific training, and clinician education, is essential. Additional dissemination of these frameworks to community health center associations and FQHCs can support their adoption. FQHCs should operationalize CHW integration frameworks to support CHW involvement in workflow design, data systems, and continuous quality improvement to enhance clarity and program ownership. To enable integration efforts, FQHCs can benefit from establishing or joining peer-learning collaboratives, which may include additional training or technical assistance opportunities, to accelerate the development of effective CHW programming. In North Carolina, although standardized and specialty training and CHW certification have provided an infrastructure to support the workforce, limited financing policy exists to grow and sustain it. Policymakers may consider tying quality measures associated with CHW integration frameworks to common sources of FQHC funding, such as the Health Resources and Services Administration and Medicaid. Medicare Community Health Integration and Principal Illness Navigation were launched in 2024 and remain an underutilized potential billing

mechanism for care management services by CHWs across the United States. (Centers for Medicare & Medicaid Services, 2023).

Limitations

This study included a small sample across three pilot FQHCs, potentially limiting its generalizability. The CHWs included in this evaluation did not span all 10 C3 roles, limiting our ability to discuss barriers, facilitators, and the impact of integration specific to some roles. Roles were determined by FQHC need and CHW capacity. Clinicians from two of the three FQHCs were available for interviews, limiting our ability to compare experiences across all staff roles. To maintain participants' anonymity, we were sometimes limited in our ability to use excerpts and provide case studies to fully compare and contrast the programs. Additionally, we were unable to capture the integration experience of a fourth CCR-funded FQHC with prior robust CHW programming. Findings reflect perceived rather than directly measured impact and do not directly capture patient perspectives. As with most qualitative analyses, researcher and participant biases may have influenced results. While CHWs were consulted in the study design process, programmatic and funding constraints limited full CHW participation in the evaluation process, representing an area for growth to build CHW leadership in research and evaluation. Finally, this work exists in a larger funding ecosystem of the CCR program, though we did not ask participants to expound on their experience specifically as CCR subcontractors or how they interacted with CCR tools and trainings. We did not frame this analysis to speak to larger themes of CCR funding or grantee experience, and recommend additional reading (De Jesus et al., 2025).

CONCLUSIONS

Our qualitative evaluation of CHW integration into FQHCs demonstrated that

while CHW impact was consistently strong across medical and health-related social needs, the integration process varied substantially depending on prior staff experience, CHW involvement in program design, and access to supportive structures. Integration was most successful when CHWs shaped workflows, clinicians

and managers had foundational CHW understanding, and collaborative learning spaces enabled peer exchange. These findings highlight the importance of CHW-centered program design and may enhance existing frameworks for more effective, equitable CHW integration across clinical settings.

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