

A Case Study of CHW Integration in Two Health Departments in Southern Arizona

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Abstract: The objective of our participatory case study of community health worker (CHW) integration was to describe the role of CHWs in two local health departments (LHDs). Study partners co-developed an interview guide based on an existing framework. Fourteen staff participated in interviews. CHWs build community trust for LHDs, provide LHD core services, identify community concerns and priorities, and address social determinants of health. Integration barriers include hiring protocols, lack of understanding of the CHW role, inadequate compensation, and sustainable funding. The study identified key factors for an integration process that promotes the effectiveness, wellbeing, and sustainability of the workforce. **Key words:** *case study, community-based participatory research, community health workers, local health departments, public health workforce, qualitative research, social determinants of health*

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BACKGROUND

Community health workers (CHWs) are key agents in efforts to identify and confront inherent inequalities in the structure and delivery of health care and public health delivery systems. Largely recognized for providing a bridge between marginalized communities and essential health and human services, CHWs have long played a fundamental role in representing community needs within these sectors, holding publicly-funded programs accountable for providing adequate and responsive services. Professionalization of the CHW workforce and the necessity for sustainable

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KEY POINTS

- Community health workers (CHWs) can play a crucial role in local health departments (LHDs) by identifying community priorities and connecting community members to services. However, integrating CHWs into LHDs can be challenging due to a lack of understanding of the CHW scope of practice.
- In this case study of CHW integration in two LHDs in Southern Arizona, we identify key considerations about the role of CHWs as members of LHD staff and provide recommendations for an integration process that promotes the effectiveness, wellbeing, and sustainability of the workforce.

funding streams have contributed to an amplified focus on CHWs as key members of medical teams who enhance person-centered care and address the social determinants of health (SDOH) (Hynes et al., 2015). However, CHW origins in the USA are rooted in government-sponsored community programs to address the health needs of American Indian, migrant farmworker, and urban communities (Witmer et al., 1995). It is important to maintain a CHW presence in community settings where they may have more flexibility as natural leaders and change agents (Sabo et al., 2017). In this article, we describe a community-based participatory research (CBPR) study focused on further understanding the pivotal role of CHWs within the public health service delivery system, specifically within local health departments (LHDs).

CHWs in LHDs

CHWs have been organizing their profession for decades and today they have a standard definition and scope of practice,

and are represented nationally through the National Association of CHWs and numerous state-level organizations (Sabo et al., 2015; Wilkinson et al., 2021). A national survey of CHWs in 2010, estimated that 10% of CHW were employed at LHDs, compared to a third in community-based agencies or federally qualified health centers (Ingram et al., 2012). The Patient Protection and Affordable Care Act (2010) accelerated the integration of CHWs in clinical settings by emphasizing and funding preventive care (Shah et al., 2014). While celebrating this progress, CHW professional associations also expressed concern that the focus on clinic-based services risked the institutionalization of a community-based workforce (Balcazar et al., 2011).

An unexpected shift occurred when the COVID-19 pandemic assaulted the country and CHWs stepped up to educate and protect their vulnerable communities. The pandemic clarified the need for CHWs in LHDs who could bridge the fear of government in contact-tracing and related activities, particularly for immigrant and other marginalized communities (Campos-Dominguez Rumala, 2020). The pandemic spurred national efforts to promote CHWs in LHDs, as well as to support CHW wellbeing as frontline providers (Mayfield-Johnson et al., 2020). A 2020 CDC initiative financed efforts for state and local health departments to employ and deploy CHWs, giving LHDs the opportunity to experience how CHWs contribute to addressing broader public health mandates (De Jesus et al., 2024). In filling this role, CHWs may also have opportunities to practice core competencies that often are neglected in clinical settings, such as community advocacy and community capacity building (Rowell Bartels, 2023).

As with any grant funding, the effort has inevitably raised questions about the sustainability of CHW programming (Knowles et al., 2023). LHDs may naturally turn to other grant funding to maintain CHW staff, thus initiating the cycle of short-term projects focused on single diseases and select strategies. A recent review found that the majority of articles describing CHW efforts in LHDs focused on

specific health conditions and projects rather than the application of CHWs roles across the functions of an LHD (Ignoffo et al., 2024). While grant funding is essential to the capacity of LHDs to provide services in an underfunded system, this approach may silo CHWs within specific efforts and minimize their opportunity to address community needs holistically, as well as inform LHDs of community priorities. CHWs working in LHDs report experiencing low pay, lack of support from leadership, and insufficient resources to perform their work (Bekemier, 2021). A study of LHD worker satisfaction found that CHWs were less likely to be satisfied with their job and report lower quality work environments than their colleagues (Rodriguez Ramirez, 2015). It is imperative to clarify the contributions of the CHW workforce to the LHD mission, as well as to identify organizational structures that leverage and support their expertise.

There are several publications providing recommendations for CHW integration in LHDs (Rowell Bartels, 2023; Spencer, 2018). However, there are few lessons from the field to inform how LHDs should operationalize engagement with CHWs. This participatory study of CHW integration in two LHDs in Southern Arizona seeks to further describe the crucial role of CHWs in the public health delivery system and provide recommendations to promote the effectiveness, wellbeing, and sustainability of the workforce.

METHODS

The CHW Integration Study grew out of a long-standing CBPR partnership between academic, organizational, and community members in the Southern Arizona border region. The community action board, convened by the academic institution, has a 25-year history of working collaboratively to develop and evaluate CHW-driven interventions, with an ongoing focus on systemic and policy efforts to support and sustain the CHW workforce. Both LHDs involved in the current study were partners on a CBPR

intervention study that began in 2014 and was designed to integrate CHWs in LHDs to help connect people to county services to address SDOH (Lohr et al., 2021). Both health departments had prior experience with CHWs through Health Start, a CHW home-visiting maternal and child health program that has provided state health department funding to Arizona LHDs since 1992 (Hussaini, 2011). Participation in the CBPR study was an intentional effort to expand the involvement of CHWs into their chronic disease programs. These LHDs continued to augment and sustain CHW integration during and after the study completion with funding stemming from the COVID-19 response and other funding from the Centers for Disease Control and Prevention and the Office of Minority Health. LHD 1 reached 14 CHW staff and LHD 2 11 CHW staff across all programs. Notably, both LHDs included activities to support the development of local CHW networks in their funding activities and both had worked with the Arizona CHW Association (AzCHOW) for CHW training and program development. These converging efforts led to a mutual interest in conducting a formal study to explore and describe their experience of CHW integration.

The partners initiated the study with the dual objective of informing their own efforts and providing a resource to other LHDs working on CHW integration. The partners included program directors in both LHDs (authors G.C. and L.I.-K.), CHWs in both health departments (authors D.E. and M.E.), academic partners (authors M.I. and A.W.-L.) and four research coordinators/staff (authors J.S., R.V.C., R.C.A., and A.M.). Partners met regularly over Zoom throughout the study period from August 2023 to October 2024. Phase 1 included a literature review of CHWs in LHDs that demonstrated a dearth of articles on the integration experience among LHDs, which helped partners clarify the study objective. In Phase 2, partners used a white paper outlining nine elements to consider when implementing CHW programs (Lau et al., 2021) as a framework for discussing aspects

of CHW integration that might be specific or unique to LHDs. Over a 6-month period, the partners met seven times to discuss each of the nine elements, creating a community of practice, or a space in which they could reflect and share resources and challenges.

In the third phase, and the focus of this paper, the partners used the discussion notes to develop interview questions. The LHD partners were particularly interested in capturing the perspectives of people functioning at different levels within the department and took the lead in tailoring the questions to CHWs, CHW program manager/supervisors, and leadership. Questions for leadership explored CHW contributions to the core mission, role definition, how they encourage communication across departments, opportunities for career advancement, and strategies for sustainability. CHW supervisor/program manager questions focused on the CHW hiring process, CHW roles and responsibilities, the work environment, opportunities for professional growth, efforts to support CHW well-being, job sustainability, and preferred qualities for a CHW supervisor. CHWs were asked how they contribute to the LHD mission and were asked about recommendations for hiring CHWs, creating a supportive work environment, providing professional growth opportunities and preferred qualifications for CHW supervisors. Probing questions in all three interviews sought to identify barriers and facilitators to integration.

The partners met five times over a 2-month period to finalize the questions and a Spanish version of the CHW questions to ensure that interviewees could use the language they were most comfortable in. LHD partners identified the staff for the interviews which included the leadership along with program staff working in their chronic disease prevention and health promotion departments. The partners combined their outreach efforts through email to request their participation. The research partners conducted the interviews in teams both in person and virtually based on the respondent's preference, with one person primarily asking questions and the second person primarily taking notes.

Interviews were not recorded to increase the comfort of respondents. The study was approved by the University of Arizona Human Subjects Review Board (#1911175303).

Data analysis

To develop the codebook for analysis, which was completed in the language of the interview, the bilingual academic partners each carefully read a selection of the interviews and documented initial impressions. They reviewed initial themes together and identified commonalities and differences, developing an overarching codebook with agreed upon definitions and illustrative quotes (Clarke & Braun, 2018). Using Dedoose, two academic partners coded each transcript, first reviewing a sample of the codes to ensure general consistency. The academic partners presented the codebook and excerpts from select codes to LHD partners to gain feedback before finalizing the overall themes and findings.

RESULTS

Fourteen individuals participated in the interviews, with two CHWs interviewing in Spanish (Table 1). Interview responses coalesced around three major topics that relate specifically to the context of LHDs and the role of CHWs in the public health delivery system: the contributions of CHWs in LHDs (Table 2); considerations for CHW integration (Table 3); and CHW funding and sustainability (Table 4). The tables illustrate the themes of each topic as expressed by LHD CHWs, CHW supervisors/program managers, and leadership. Due to the tailoring of the questions and the focus of the responses, all three groups are not represented in each theme. When the respondent replied in Spanish, the English translation is provided below.

The role of CHWs in the public health delivery system

Leadership responses were mostly focused on ways that CHWs help fulfill mandated

Table 1. Participant Roles

Role in LHD	LHD 1 (8)	LHD 2 (6)	Total (14)
CHW	2	2	4
CHW supervisor/ program manager	2	2	4
Leadership	4	2	6

services by identifying community concerns and priorities, improving core service delivery, directly addressing SDOH, and addressing equity. One respondent explained,

“They are at the intersection of the department and the community we serve. We don’t know that we are meeting the needs without the CHW. It bridges from community to the organization, what we are doing, how to change it.” (Leader 3)

As they experienced the benefits of CHW integration, one leader also noted the need to be strategic with the workforce in order to maximize the benefit across programs.

“Right now, we’re trying to be really thoughtful of how we use CHW assets in the department... there’s more demand for CHWs than we have CHWs. We are trying to become more strategic in general, going through the process of identifying key indicators in the County, where to best deploy them to be able to meet the identified prioritized needs.. we’re moving routinely more cross divisionally how to best do that.” (Leader 6)

Leadership also acknowledged that as a government agency they confront issues of both trust and credibility with some community members. From this perspective, CHWs are essential members of the team in bridging mistrust, as expressed by one leader,

Table 2. Contributions of CHWs in Local Health Departments

	Leadership	CHW
Enhance capacity to fulfill LHD mandated services	<ul style="list-style-type: none"> • Provide a professional model to help county manage SDOH on a broad scale • Help LHD identify, prioritize and address county-wide issues • Represent community in LHD decisions • Ensure LHD workforce is reflective of community served • Meet equity goals 	<ul style="list-style-type: none"> • Connect people to SDOH services • Create connections between departments within LHD
Bridge issues of trust between government agency and community	<ul style="list-style-type: none"> • Provide a communication channel to community • Connect people and vulnerable populations to county programs • Build LHD credibility in the community 	<ul style="list-style-type: none"> • Serve as the face and voice of the LHD to community • Serve as the first contact with community members • Provide guidance to community members in accessing LHD services
Enhance community benefit of LHD core services	<ul style="list-style-type: none"> • Help LHDs understand the context of data • Strategically address county priority areas • Enhance core services 	<ul style="list-style-type: none"> • Leverage personal knowledge of/ relationship with community to ensure members access services • Fulfill commitment to serve community

Table 3. Considerations for CHW Integration in Local Health Departments

	Program Manager/Supervisor	CHW
CHW recruitment and hiring	<ul style="list-style-type: none"> • Human resources department restricts eligibility/hiring process • CHWs should be involved in hiring committees • Tiered system allows flexibility in entry-level job requirements 	<ul style="list-style-type: none"> • Qualifications need to include passion and experience working in community • Staff often do not know what to look for in hiring a CHW
Compensation	<ul style="list-style-type: none"> • People with lived experience need to be compensated for their expertise (leadership^a) • County may require classification/compensation assessment for increased pay • Pay raises have to be approved by the Board of Supervisors • Language skills should be compensated • Tie higher compensation to CHW certification 	<ul style="list-style-type: none"> • Compensation is not comparable to CHW roles and work • Other positions doing similar work get higher pay
Inclusion challenges	<ul style="list-style-type: none"> • LHD staff lack understanding of CHW role • CHW team is the default for emergencies, unplanned activities • Leadership view CHW position as a stepping stone to “better” opportunities 	<ul style="list-style-type: none"> • Lack of understanding and discrimination against the CHW profession • Staff limit the potential roles of CHWs or fail to recognize CHW contributions to the team • CHWs are given inappropriate administrative or custodial work • Staff fail to elicit CHW ideas, perspectives or knowledge • LHD not communicating role of CHWs to public, leading to public not understanding CHW role
CHW roles and responsibilities within programs	<ul style="list-style-type: none"> • CHWs have a more relatable and organic relationship with community than clinicians (leadership^a) • The role too often is defined by grant requirements rather than a standard role across departments (leadership^a) • Flexible scheduling allows CHWs to meet community needs 	<ul style="list-style-type: none"> • CHWs fulfill an important function within the LHD structure • CHWs need flexibility to meet community needs • Supervisors need a strong understanding of CHW role • Supervisors with CHW experience are preferable

(continues)

Table 3. Considerations for CHW Integration in Local Health Departments (Continued)

	Program Manager/Supervisor	CHW
LHDs provide ample training, professional growth opportunities	<ul style="list-style-type: none"> • LHDs prioritize training/professional development • LHDs receive grants to offer core public health training • LHDs can offer CEUs and certifications that increase qualifications • Because of extensive training, CHWs qualify for positions with organizations offering higher pay • LHDs provide training hours and pay for CHW certification • The tiered CHW position is attached to certification and supervision • LHDs offer growth opportunities (leadership^a) 	<ul style="list-style-type: none"> • LHDs offer many training opportunities and encourages participation • CHWs are able to pursue various certificates • CHWs greatly appreciate the opportunity for training • More training on mental health would be helpful

^aRefers to a quote from a respondent in leadership.

“The health department has legal authority when we show up with our county logo; it is an institution and part of the dynamics, and we need to understand and acknowledge it.” (Leader 2)

Table 4. CHW Funding and Sustainability

	Leadership	Program Manager/Supervisor
Use of the general fund to support CHWs in providing mandated services	<ul style="list-style-type: none"> • CHWs need to be core to the delivery model • Bundling services across departments to create a position that can be underwritten by the general fund • Transitioning to permanent positions 	
Funding through soft money	<ul style="list-style-type: none"> • LHDs are constantly applying for grants to fund programs • CHWs are currently funded on grants • CHWs suffer from reliance on grant funding • Transition funding would allow LHDs to keep CHW positions • Positions that are not mandated are the ones that are cut 	<ul style="list-style-type: none"> • CHWs enter the position knowing they are grant funded • Some positions can be transitioned to other programs • LHD is constantly applying for grants to support CHWs
Reimbursement	<ul style="list-style-type: none"> • Requires knowledge and infrastructure for billing 	

CHWs also emphasized their important role in bridging issues of trust between the LHD and community members by knowing where to find community members, serving as the face of the LHD and providing a first contact that engages people on a community level. A CHW describes trust in this way,

“Los programas de prevención de salud son fundamentales, como todos sabemos las promotoras son una parte del esquema. Somos la cara más visible porque estamos en contacto con la comunidad en varios espacios, ferias de salud, en algunas organizaciones, somos fundamental - establecemos ese primer contacto.” (“Health prevention programs are fundamental, as we all know, CHWs are part of the system. We are the most visible face because we are in contact with the community in various spaces, health fairs, in some organizations, we are fundamental - we establish that first contact.”) (CHW 4)

Both leadership and CHW respondents referred to two major ways in which CHWs enhance the capacity of LHDs to deliver core services thus increasing community benefit. The first is to increase access to residents who are most in need, and the second is to work across county departments to ensure that diverse needs are met. Both partner LHDs took advantage of COVID-19 response funds to deploy CHWs and found that as CHWs helped people access vaccines and testing, they were also able to provide services around a wide array of resources connected to SDOH.

Considerations for CHW integration

Several considerations and challenges came up in integrating CHWs into the bureaucratic structure of an LHD. The recruitment and hiring protocols favor people with education and professional experience and the scoring rubrics make it difficult to recognize soft skills such as building rapport with others or knowledge of particular communities. Respondents agreed that CHW compensation does not reflect CHW work nor is it equitable in comparison with other job categories.

“I feel it’s still way low according to those roles we are doing. People don’t think we have an

important role to play in this health issues field. I wish government, I don’t know who decides, expands it.” (CHW 1)

“They get squat for pay.” (Leader 3)

Leadership described working through complex processes to address these issues including working with the human resources department on the job description and gaining approval for pay increases from the board of supervisors. LHD 1 created a tiered system for CHWs that allows individuals with a high school diploma to qualify for Tier 1 and provides an immediate pathway to Tier 2 through acquiring Arizona CHW certification. However, even with these changes, CHWs stressed the importance of knowing where and what to look for in hiring a CHW. One CHW expressed it this way,

“I think it’s something you do a lot with passion; you have to have the heart for it.” (CHW 3)

The general lack of understanding of the CHW profession was described as an integration challenge across programs and various levels of management and sometimes took the form of discrimination against the CHW workforce.

“I don’t want to impugn my staff, but I think there is arrogance about why would a CHW be able to do all that...Not arrogance but lack of understanding for what CHWs bring to the table.” (Leader 1)

“¿Por qué estás aquí? Tu no sabes inglés, no sabes de salud pública. No me contrataron porque sé inglés, me contrataron porque lo que yo sé.” (“Why are you here? You don’t know English, you don’t know public health. They didn’t hire me because I know English, they hired me because I know what I know.”) (CHW 5)

This lack of familiarity or bias against CHWs minimizes the potential benefits of integration. CHWs reported that staff sometimes limit their role within programs, give them inappropriate tasks, ignore their ideas for implementation, and even fail to recognize their contribution, as described by one CHW,

“A veces minimizamos el trabajo de una promotora; necesitas que el papel sea más reconocido,

abrir el abanico de posibilidades.” (“Sometimes we minimize CHW work; you need the role to be better understood to open up the array of possibilities.”) (CHW 4)

On the other hand, respondents were clear about the benefits they experienced in integrating CHWs in both new and existing programs.

“CHWs are so valuable because they come from the neighborhoods, they share socioeconomic status, they know the neighborhood, they know the providers, they are able to meet people where they are, the boots on the ground, between health care services and the community.” (Leader 4)

The CHW respondents stressed that to be most effective they needed flexible work hours and supervision by people who understand the CHW role, ideally who are CHWs themselves.

The importance of providing continuing education and training opportunities was emphasized by LHD leadership and employees viewed trainings as a benefit. Program managers and supervisors discussed the various opportunities, including public health certificates and continuing education units (CEUs), which they viewed as an incentive for retention as well as potentially translating into growth opportunities within the health department.

“Our director is very supportive of any employee expanding or strengthening skills through professional development. We take great pride in enhancing the skills of our employees so if there is trainings and funds, we would pay for that, so we have skilled employees and capacity is maintained.” (Program manager/Supervisor 2)

CHWs agreed that they were encouraged to pursue training opportunities and that they had the autonomy to do so.

“There’s always a list of trainings to help you advance or to help you with the work you’re already doing. To sign up you ask your supervisor or coordinator, usually they don’t say no as long as you have availability that day.” (CHW 3)

CHW funding and sustainability

The third topic focused on the perspectives of individual CHWs, CHW programming, and CHW integration more broadly. Leadership described the need to constantly apply for grants to fund programs, and that CHWs were currently being funded through grants. They acknowledged that CHWs suffer under this approach, stressing that any position not providing a mandated service was vulnerable to being cut. One respondent said,

“I just wrote a grant a week ago and put CHWs at the core. This is something that’s very much front and center.” (Leader 6)

Leadership reflected more broadly on the issue of sustainability and the potential for the general fund to solidify the CHW position as providing essential services.

“When we look at slimming down, personnel is where we cut. We have mandated positions that need to remain but other optional positions is where cuts occur.” (Leader 2)

“It is all about money. The bottom line is that it is not about commitment to them being core to our delivery model, but the fact that I have no CHWs on the health fund is telling. It is telling how we developed budget up to now, about how we have been able to offset and hire with grant money - but there is a cliff.” (Leader 1)

They also considered innovative approaches such as bundling services across the departments in order to create a permanent CHW position or creating the infrastructure to reimburse CHW billable services under Medicaid.

“Bundling services would allow us to give people a robust job that can be underwritten in general funds and make that position more sustainable.” (Leader 2)

“The challenge is not having a coder, biller and not having that knowledge. Getting used to the ability to bill, instead of doing everything for free.” (Leader 5)

DISCUSSION

Resources that encourage and guide LHDs in working with the CHW workforce have proliferated since 2020. In providing an insider perspective on the LHD experience of CHW integration, this study highlights the vital importance of CHWs to the LHD mission to ensure community health and wellbeing, as well as the significant challenges of incorporating the community-responsive and flexible CHW workforce into a more rigid and bureaucratic system. By utilizing reflections from three different viewpoints, the study findings illustrate key insights into strategies to promote the effectiveness, wellbeing, and sustainability of CHW integration by directly addressing the challenges expressed by respondents.

Our findings suggest that leadership, program managers, and CHW supervisors have varying roles to play in integration. In the planning process, leadership can create a shared vision among the upper management for a CHW position that works across departments to connect community members to an array of services, as well as communicate community needs to program administrators. It is imperative that leadership understand the CHW core competencies and cultivate agreement regarding their essential role in fulfilling the public health mandate. Pilot and grant-funded projects may provide the groundwork to give leadership direct experience with CHWs and demonstrate contributions of the profession. Both LHDs use grant funding to provide and sustain their services, while acknowledging that grant parameters may compromise CHW ability to engage in their full scope of practice (Knowles et al., 2023). The leadership in our study described some efforts to identify federal, state, and local general funds to employ or reimburse CHW services directly. Government general funds are often used to provide support for a variety of programs that may not be supported by other funding mechanisms, and states or counties may dedicate line items in budgets for programs to include CHW salaries or

services (Spencer, 2018). The 2024 CHW Sustainability Summit includes a toolkit for equitable CHW integration with specific strategies for funding CHW activities (<https://envisionequity.org/resources>).

Leadership should also take the lead in collaborative development of an HR-approved job description and career ladder, education of staff, and communication with community partners.

The CHW program manager/supervisors will be crucial to launching CHW integration. Supervisors with experience working with or as a CHW will ensure CHW staff have support and that their activities correspond to core competencies, and program managers can facilitate communication across departments. In addition to staff training on the CHW role, onboarding the CHW to understand county services and the public health mandate will be essential. While sustainable funding is central to maintenance, equally important is continuous evaluation of CHW integration, with a focus on maintaining the integrity of the workforce and their key role in community trust. Incorporation of evaluation across the process of integration will help ensure that county staff understand and leverage the CHW core competencies and that CHWs feel recognized for their contributions to the LHD mission. While passionate in their work, LHD CHWs also need to be mindful that they represent an agency with public authority and that their actions should be in step with leadership. We recommend that CHWs are involved across the integration process, in designing the role, hiring for the position, communicating with department leads and the community, and providing ongoing feedback to the process. Local or state professional organizations can aid these efforts if CHW staff is not yet hired.

Aspects of the study context are worth noting in interpreting the results. Since 2022, Arizona has had state-legislated CHW voluntary certification that requires evidence of CHW core competency training or commensurate experience (Ingram et al., 2020). Both LHDs paid CHW certification

fees, and one LHD utilizes certification to promote CHWs within their staff structure. Through AzCHOW, Arizona also has a strong CHW professional organization that offers CHW core competency training, CHW supervisor training, and technical assistance in CHW integration. The LHD partners are examples of how LHDs around the country can leverage these types of resources, given that 33 states have CHW certification as of 2025 (Association of State and Territorial Health Officials, 2025), and most states have some form of network, coalition, or organization that may be able to provide technical assistance.

Our findings align with the well-documented need for organizational guidelines that encourage structural support for CHWs, as well as respond to specific aspects of the LHD context, such as the fact that they are a public-facing governmental agency and that they have access to a general fund connected to mandated public health services. The LHDs in our study had experience in CHW integration, but the capacity for LHDs to engage CHWs varies considerably and may not fit a uniform model. As a case study, our findings are limited to the context of the two partner LHDs and cannot be generalized to other LHDs. Further, Arizona

ranked 47th in per capita public health funding in 2021, and this restrictive environment for innovation will differ from other states. Our study did not capture other differences in context, such as rural/urban, which might impact the CHW integration process.

CONCLUSION

Data collected through this CBPR study lay the groundwork for recommending an optimal process for CHW integration that promotes the effectiveness, wellbeing, and sustainability of the workforce. Our commitment to the extensive process of discussion, data collection, and interpretation was crucial to building a comprehensive understanding of the organizational environment of the partner LHDs in this study. Certain key features must be included in any robust vision of CHW engagement—a vision in which the organizing structure and scope of work recognizes CHWs as professionals and necessary partners and leaders in community-based work. The convening of LHDs to discuss CHW integration would be a valuable next step in creating environments that maximize CHW benefit while supporting their wellbeing and satisfaction as county employees.

REFERENCES

- Association of State and Territorial Health Officials (2018). *State approaches to community health worker certification*. Retrieved March 17, 2025, from <https://www.astho.org/topic/brief/state-approaches-to-community-health-worker-certification/>
- Balcazar, H., Rosenthal, E. L., Brownstein, J. N., Rush, C. H., Matos, S., Hernandez, L. (2011). Community health workers can be a public health force for change in the United States: Three actions for a new paradigm. *American Journal of Public Health, 101* (12), 199–203. doi:10.2105/AJPH.2011.300386
- Bekemier, B. D. W., Hetzler, R., Lamberth, C., Moir, S., Ridini, S., Shah, H., ... Yamauchi, J. (2021). *Role and future directions of community health workers in the public health workforce*. National Coordinating Center for Public Health Training. <https://nnphi.org/wp-content/uploads/2021/05/NCCPHT-CHW-Report-Final.pdf>.2021
- Campos-Dominguez, T. Rumala, B. B. (2020). *Case study—role of community health workers in addressing inequities and systems transformation during COVID-19 and beyond: An opportunity for health department and organizational practices*. [White Paper] CHW COVID-19 Writing Group. <https://www.communitycommons.org/entities/8d9c4ff5-a513-45bc-a889-dd110c95f82a>
- Clarke, V. Braun, V. (2018). Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counseling and Psychotherapy Research, 18*(2), 107–110. doi:10.1002/capr.12165
- De Jesus, S., Rohan, E. A., DeGroff, A., Vaughan, M., Hayes, N., Presley-Cantrell, L., ... Hacker, K. (2024). Engaging community health workers in the centers for disease control and prevention's COVID-19 public health response to address health disparities and build community resilience. *Health Promotion Practice, XX*(X), 1-3.

- Hussaini, S. K., Holley, P., & Ritenour, D. (2011). Reducing low birth weight infancy: assessing the effectiveness of the health start program in Arizona. *Maternal and Child Health Journal, 15*, 225–233.
- Hynes, D. M., Buscemi, J., & Quintiliani, L. M. (2015). Society of Behavioral Medicine (position statement: SBM supports increased efforts to integrate community health workers into the patient-centered medical home. *Translational Behavioral Medicine, 5*(4), 483–485. doi:10.1007/s13142-015-0340-1
- Ignoffo, S., Gu, S., Ellyin, A., Benjamins, M. R. (2024). A review of community health worker integration in health departments. *Journal of Community Health, 49*(2), 366–376. doi:10.1007/s10900-023-01286-6
- Ingram, M., Reinschmidt, K. M., Schachter, K. A., Davidson, C. L., Sabo, S. J., Carvajal, S. C. (2012). Establishing a professional profile of community health workers: Results from a national study of roles, activities and training. *Journal of Community Health, 37*(2), 529–537. doi:10.1007/s10900-011-9475-2
- Ingram, M., Sabo, S., Redondo, F., Soto, Y., Russell, K., Carter, H. ... de Zapien, J. G. (2020). Establishing voluntary certification of community health workers in Arizona: A policy case study of building a unified workforce. *Human Resources for Health, 18*(1), 46. doi:10.1186/s12960-020-00487-7
- Knowles, M., Crowley, A. P., Vasan, A., Kangovi, S. (2023). Community health worker integration with and effectiveness in health care and public health in the United States. *Annual Review of Public Health, 44*(1), 363–381. doi:10.1146/annurev-publhealth-071521-031648
- Lau, D., Soucie, J., Willits, J., Scholle, S. H., Kangovi, S., Garfield, C. ... Feldstein, J. (2021). *Critical inputs for successful community health worker programs*. [White paper] https://www.ncqa.org/wp-content/uploads/2021/11/Critical-Inputs-for-Successful-CHW-Programs_White-Paper_Final.pdf
- Lohr, A. M., Doubleday, K., Ingram, M., Wilkinson-Lee, A. M., Coulter, K., Krupp, K. ... Carvajal, S. C. (2021). A community health worker–led community-clinical linkage model to address emotional well-being outcomes among Latino/a people on the US–Mexico border. *Preventing Chronic Disease, 18*, 210080. doi:10.5888/pcd18.210080
- Mayfield-Johnson, S., Smith, D. O., Crosby, S. A., Haywood, C. G., Castillo, J., Bryant-Williams, D. ... Wennerstrom, A. (2020). Insights on COVID-19 from community health worker state leaders. *The Journal of Ambulatory Care Management, 43*(4), 268–277. doi:10.1097/JAC.0000000000000351
- Patient Protection and Affordable Care Act. (2010). *Public Law 148, U.S. Statutes at Large. 124: 119–1024*. <https://www.govinfo.gov/app/details/STATUTE-124/STATUTE-124-Pg119/summary>
- Rodriguez, H. P., Ramirez, J. C. (2015). The work experiences of community health professionals: Implications for the continued rollout of the Affordable Care Act. *Journal of Public Health Management and Practice, 21*(Suppl 6), S111–120. doi:10.1097/PHH.0000000000000307
- Rowell, S., Bartels, A. (2023). The role of state and territorial health agencies in supporting and hiring community health workers. *Journal of Public Health Management and Practice, 29*(6), 941–945. doi:10.1097/PHH.0000000000001832
- Sabo, S., Ashley, W., Phillips, D., Haywood, C., Redondo, F., Bell, M. ... Ingram, M. (2015). Community health worker professional advocacy: Voices of action from the 2014 National Community Health Worker Advocacy Survey. *Journal of Ambulatory Care Management, 38*(3), 235–245. doi:10.1097/JAC.0000000000000089
- Sabo, S., Flores, M., Wennerstrom, A., Bell, M. L., Verdugo, L., Carvajal, S. ... Ingram, M. (2017). Community health workers promote civic engagement and organizational capacity to impact Policy. *Journal of Community Health, 42*(6), 1197–1203. doi:10.1007/s10900-017-0370-3
- Shah, M., Heisler, M., Davis, M. (2014). Community health workers and the Patient Protection and Affordable Care Act: An opportunity for a research, advocacy, and policy agenda. *Journal of Health Care for the Poor and Underserved, 25*(1), 17–24. doi:10.1353/hpu.2014.0019
- Spencer, A. (2018). *Integrating community health workers into state and local chronic disease prevention efforts: Program and financing considerations*. Center for Health Care Strategies. https://academyhealth.org/sites/default/files/integrating_chws_prevention_efforts_may2018.pdf
- Wilkinson, G. W., Wennerstrom, A., Cottoms, N., Sutkowi, K., & Rush, C. H. (2021). Uniting the workforce: building capacity for a national association of community health workers. In J. A. St John, S. L. Mayfield-Johnson W. D. Hernández-Gordon (Eds.), *Promoting the health of the community*. Cham: Springer. doi:10.1007/978-3-030-56375-2_15
- Witmer, A., Seifer, S. D., Finocchio, L., Leslie, J., O'Neil, E. H. (1995). Community health workers: Integral members of the health care work force. *AJPH, 85*(8 Pt 1), 1055–1058. doi:10.2105/AJPH.85.8_Pt_1.1055