Journal of Community Health
https://doi.org/10.1007/s10900-021-01043-7

ORIGINAL PAPER

Knowledge and Attitudes of Potential Community Health Worker Employers: Findings from the State of Arkansas, USA

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Accepted: 19 October 2021

Abstract

Community health workers (CHWs) are critical to health equity efforts, but sustaining CHW programs is challenging. Understanding stakeholders' knowledge and attitudes about CHWs can inform strategies to advance this important workforce. The authors implemented an online survey of potential CHW employers to learn their perceptions of CHWs' roles, outcomes, and abilities to affect important health outcomes, and of key issues that affect CHW employment. The survey was disseminated statewide to a diverse group of stakeholders working in healthcare in Arkansas. A total of 151 surveys were collected and included in the analysis. The organizations represented by respondents primarily included state and local agencies and clinics, followed by healthcare systems. The main professional roles of survey respondents were administrators and clinicians, followed by healthcare staff. Over 90% of respondents agreed that CHWs have the ability to conduct community outreach, serve as a liaison, navigate health systems, provide coaching support, and participate in care coordination. Over 90% of healthcare administrators, clinicians, and policymakers agreed that standardized training and a clear definition of role and scope of practice are important to CHW employment. However, almost two-thirds of respondents' organizations were not employing CHWs, adding to previous research which has primarily focused on CHW employers' attitudes. Understanding and addressing attitudes of those who lack experience with CHWs can help to identify actions needed to promote and increase adoption of CHWs. The authors share how they are using these data to engage stakeholders in decision-making and adoption of CHWs in their state.

Keywords Community health workers · Health equity

Introduction

Community health workers (CHWs) are essential to achieving health equity, yet many settings have not fully adopted this important intervention. The American Public Health Association (APHA) defines a CHW as "A frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery" [1, 2].

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Published online: 24 November 2021

The national CHW core consensus project has identified CHWs' core competencies and roles including cultural mediation, culturally appropriate health education, care coordination, coaching and social support, advocacy, capacity-building, direct service, assessments, outreach, and evaluation and research [3]. An extensive body of research documents the effectiveness of CHWs in many domains including improving access to care, chronic disease prevention and management [4–6], and in reducing the cost of care [7–9]. Despite the evidence of their impact, sustainable integration of CHWs into traditional health care systems remains a challenge. Information on knowledge and attitudes on CHWs among key stakeholders is needed to identify barriers necessary to address for system integration, particularly those stakeholders who lack previous experience with CHWs. Herein we report selected results of a survey of potential CHW employers conducted to inform efforts aimed at strengthening CHW infrastructure in our state. We hypothesized that sustainable funding would be a primary concern among employers.

Methods

Instrument Development

The survey instrument was developed and implemented by a partnership comprising representatives from the University of Arkansas for Medical Sciences Fay W. Boozman College of Public Health, the Arkansas Department of Health, the Arkansas Community Health Workers Association, and the Tri County Rural Health Network. Instrument development was based on a review of existing instruments, both published and grey literature [10–13], and included questions regarding perceived roles, outcomes, and abilities of CHW as well as issues affecting their employment. Questions documenting respondents' demographics, organizational characteristics, healthcare priorities, knowledge, and experience with CHWs were also asked. The draft instrument was piloted using REDCap, an online survey tool, with a diverse group of 20 individuals representing the target audience. Their written and verbal feedback was used to revise and retest the instrument before finalizing. The final instrument (see online supplement) included a standard definition of CHWs and a total of 46 questions of yes/no, multiple-choice, and five-point Likert scale format.

Implementation

A contact list representing a comprehensive and diverse, statewide group of potential CHW employers and stakeholders was developed in Summer/Fall 2019. These target participants included health care clinics, university-associated and free clinics, community and faith-based organizations, federally-qualified health centers, home health agencies, hospital systems and medical centers, local and state health departments, local and state professional associations and networks, managed care organizations, mental health clinics, and social service agencies. Following institutional review board (IRB) determination of this project as not human subjects research, survey distribution and data collection were conducted from October 2019 to February 2020. Participant recruitment and survey distribution were conducted through an email sent to the key contact within each organization containing the link to the survey and the following information: overview of the instrument, the purpose of the study, procedures for maintaining anonymity of respondents' information, and notice that survey completion implied respondents' consent to participate.

Analysis

A total of 172 survey responses were received. Only 151 were fully completed and were included in the final analysis. Data were analyzed using SPSS statistical software. General descriptive statistics were used to summarize survey responses and characterize respondents and their organizations. Survey responses were analyzed further based on respondent's professional role, organization, and familiarity and experience with CHWs to determine the relationship with perceptions of CHWs' abilities and impact, and with issues affecting their employment.

Results

Demographics of survey respondents, their professional roles, and their organizations are summarized in Table 1. The main organizations represented by respondents were state/local agencies and clinics, followed by healthcare systems. The main professional roles of survey respondents were administrators and clinicians, followed by healthcare staff. The top three healthcare priorities of respondents were primary care, child health and safety, and treatment and prevention of chronic disease (i.e., cardiovascular disease, diabetes, stroke, and asthma) (data not shown).

The majority of respondents from all organization types reported being familiar with CHWs based on APHA's definition, though only 38% of all respondents were working in an organization employing CHWs. With the exception of healthcare staff, the majority of respondents from all professional roles also reported being familiar with CHWs as defined (data not shown). However, despite recognition of the term CHW, the majority of organization types and professional roles were unsure or undecided about

Table 1 Demographics, Professional Role, Organizational Affiliation, and Service Area of Survey Respondents

	N (%)
Gender (N = 151)	
Female	103 (68%)
Male	42 (28%)
Declined to answer	6 (4%)
Race (N > 151)[a]	
White	120 (80%)
Black	13 (9%)
Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, other Asian	7 (5%)
American Indian or Alaska Native	2 (1%)
Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander	1 (1%)
Declined to answer	11 (7%)
Ethnicity (N = 151)	
Did not identify as Hispanic	148 (98%)
Identified as Hispanic	3 (2%)
Professional role (N > 151)[a]	
Administrator	91 (48%)
Clinician or patient care provider	52 (27%)
Health care staff	29 (15%)
Policy maker	11 (6%)
CHW supervisor	2 (1%)
Other	5 (3%)
Professional organization[b] (N = 151)	
State or local agency	56 (37%)
Clinic	48 (32%)
Health care system	26 (17%)
Nonclinical or community organization	8 (5%)
Other	13 (9%)
Organization serves entire state (N = 151)	
Yes	115 (76%)
No	36 (24%)
Counties served by non-statewide organizations[c] (N = 36)	
Rural	15 (42%)
Urban	7 (19%)
Both rural/urban	14 (39%)

[a]Respondents were allowed to select more than one race and more than one role therefore, the total frequency is > N = 151 and the sum of percentages is > 100%

[b]Types of organizations represented by each category include: for state and local agencies: state associations and local public health providers; for clinics: FQHCs, medical, free health, mental, university, and community clinics; for health care systems: hospitals and managed care organizations; and for nonclinical or community-based organizations: home health agencies, social service agencies, and faith-based organizations

[c]Rural and urban designation was based on OMB's definition of counties as metropolitan vs. nonmetropolitan

whether their organization had plans to employ CHWs if not already in practice (data not shown).

Figure 1 illustrates the overall proportion of respondents who strongly or somewhat agreed with the ability of CHWs to perform each of the activities related to core CHW competencies. The majority of respondents agreed with the ability of CHWs to perform each of these activities. Over 90% strongly or somewhat agreed that CHWs have the ability to conduct community outreach, serve as a liaison, navigate health systems, provide coaching support, and participate in care coordination. Over 80% strongly or somewhat agreed that CHWs are able to conduct assessments, provide basic health screenings,

assist with chronic disease management, and deliver health interventions.

The majority of respondents in all professional roles strongly or somewhat agreed that CHWs have the potential to affect all five desirable healthcare outcomes with the greatest consensus for CHWs' ability to improve patient satisfaction and patient health (Table 2). Generally, higher percentages of administrators and policy makers agreed with CHWs' potential impact across almost all outcomes. Compared to other professional roles, lower percentages of healthcare staff strongly or somewhat agreed with CHWs' ability to improve patient health. Lower percentages of respondents overall agreed that CHWs have the potential to decrease clinical burden and decrease health care costs. Specifically, healthcare staff and policy makers were less convinced of the potential for CHWs to decrease clinical burden, as compared to other roles (Table 2).

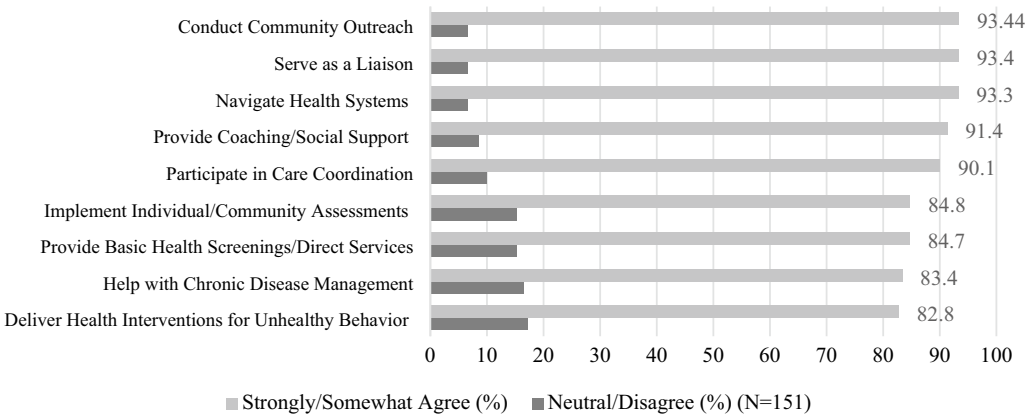

Fig. 1 Percent of respondents who agree with CHWs' abilities to perform activities related to CHW core competencies

Table 2 Percent who strongly or somewhat agree that CHWs have the ability to affect desirable healthcare outcomes according to respondents' reported professional role(s)

Desirable outcome	Respondent professional roles reported (N > 151)[a]					
	Administrator (N = 91)	Clinician (N = 52)	Healthcare staff (N = 29)	Policy Maker (N = 11)	CHW supervisor (N = 2)[b]	Other (N = 5)
I. Improve patient satisfaction	88%	90%	86%	100%	–	100%
II. Improve patient health	90%	90%	76%	100%	–	100%
III. Improve quality of care	87%	85%	83%	91%	–	100%
IV. Decrease clinical burden	89%	83%	72%	73%	–	100%
V. Decrease healthcare costs	70%	65%	69%	73%	–	80%

[a]Respondents were allowed to select more than one role therefore, the total N is > 151

[b]Fewer than five respondents

Table 3 Percent who strongly or somewhat agree that CHWs have the ability to affect desirable healthcare outcomes based on respondents' professional organization

Desirable outcome	Respondent professional organization (N = 151)				
	State/local services (N = 56)	Clinics (N = 48)	Healthcare system (N = 26)	Non-clinical services (N = 8)	Other (N = 13)
I. Improve patient satisfaction	80%	90%	92%	100%	100%
II. Improve patient health	86%	90%	85%	100%	92%
III. Improve quality of care	79%	92%	81%	100%	92%
IV. Decrease clinical burden	77%	81%	77%	75%	92%
V. Decrease healthcare costs	61%	73%	73%	75%	69%

Table 4 Percent who strongly or somewhat agree that CHWs have the ability to affect different desirable healthcare outcomes based on respondents' familiarity with CHWs

Desirable outcome	Respondent familiarity with CHWs (N = 151)		
	Familiar (N = 104)	Non-familiar (N = 47)	Difference
I. Improve patient satisfaction	92%	81%	− 11%
II. Improve patient health	95%	72%	− 23%
III. Improve quality of care	90%	77%	− 13%
IV. Decrease clinical burden	85%	66%	− 19%
V. Decrease healthcare costs	74%	57%	− 17%

The majority of all organizations represented agreed with CHWs' abilities to improve patient health and patient satisfaction; however, lower percentages of organizations somewhat or strongly agreed with their potential to decrease clinical burden and healthcare costs (Table 3). Agreement with the potential of CHWs to improve patient satisfaction and quality of patient care varied most by organization represented, with the largest difference observed between state/local agencies and clinics/non-clinical services respectively (Table 3).

Over 90% of respondents who identified as familiar with CHWs agreed that CHWs have the ability to improve patient satisfaction, patient health, and quality of care. Alternatively, respondents who were not familiar less frequently agreed that CHWs have these abilities. Agreement discordance between respondents with and without familiarity ranged from 11% for improving patient satisfaction, to 19% for decreasing clinical burden, to 23% for improving patient health (Table 4).

Concerning specific issues that may affect the employment of CHWs, the majority of respondents across professional roles agreed that all of the issues they were surveyed about are important (Table 5). Generally, the greatest percentage of respondents agreed that standardized training and a clear definition of CHWs' role and scope of practice, followed by funding sources, are important issues that affect CHW employment. However, compared to administrators and clinicians, fewer healthcare staff and policy makers agreed that funding sources are important to employment. Overall, lower percentages of respondents agreed that state certification, supervision, and recruitment of CHWs are important to address in order to advance CHW employment, with the lowest percentage of clinicians agreeing (Table 5). Funding sources and state certification were priority employment issues demonstrating the least agreement between professional roles (Table 5). Notably, fewer policy makers agreed that the ability to bill for Medicaid is an issue affecting employment, compared to other professional roles and issues regarding employment (Table 5).

The majority of respondents across organization types agreed that all of the surveyed issues affecting employment are important (Table 6). Generally, the greatest percentage of organizations agreed that standardized training and a clear definition of CHWs' role and scope of practice, followed by funding sources and knowledge of CHW effectiveness are important issues affecting CHW employment. Employment issues demonstrating the least agreement between organizations regarding their priority include sufficient patient volume, ability to bill Medicaid, state certification, and CHW

Table 5 Percent that strongly or somewhat agree on perceived priority issues to CHW employment based on respondents' professional role

Perceived issue to employment	Respondent professional role (N > 151)[a]					
	Administrator (N = 91)	Clinician (N = 52)	Healthcare Staff (N = 29)	Policy Maker (N = 11)	CHW Supervisor (N = 2)[b]	Other (N = 5)
I. Standardized training	96%	90%	90%	100%	–	100%
II. Clear definition of role/scope	93%	95%	89%	100%	–	80%
III. Funding sources	95%	89%	79%	64%	–	80%
IV. Knowledge of CHW effectiveness	90%	87%	90%	82%	–	80%
V. Ability to bill medicaid/other insurers	91%	81%	79%	73%	–	80%
VI. Training & staff education for CHW supervisors	88%	87%	76%	82%	–	80%
VII. Sufficient patient volume	90%	79%	76%	91%	–	0%
VIII. Liability	84%	73%	86%	64%	–	80%
IX. Managing/ Supervising CHWs	78%	75%	72%	64%	–	80%
X. State certification	77%	60%	76%	73%	–	100%
XI. Recruiting CHWs	75%	67%	62%	55%	–	60%

[a]Respondents were allowed to select more than one role therefore, the total N is > 151

[b]Fewer than five respondents

Table 6 Percent that strongly agree and agree on perceived priority issues to CHW employment based on respondent professional organization

Perceived issue to employment	Respondent professional organization (N = 151)				
	State/local agencies (N = 56)	Clinics (N = 48)	Healthcare systems (N = 26)	Non-clinical services (N = 8)	Other (N = 13)
I. Standardized training	96%	94%	92%	100%	85%
II. Clear definition of role/scope	94%	92%	92%	90%	92%
III. Funding Sources	95%	90%	88%	87%	85%
IV. Knowledge of CHW effectiveness	88%	90%	84%	87%	92%
V. Ability to bill Medicaid/other insurers	87%	92%	77%	100%	77%
VI. Training & staff education for CHW supervisors	88%	81%	88%	87%	85%
VII. Sufficient patient volume	90%	84%	69%	87%	85%
VIII. Liability	88%	75%	77%	87%	77%
IX. Managing/ Supervising CHWs	75%	68%	81%	100%	77%
X. State certification	86%	67%	58%	87%	85%
XI. Recruiting CHWs	75%	66%	61%	75%	62%

supervision respectively (Table 6). Notably, more respondents from state/local agencies and non-clinical services agreed on the priority of state certification, as compared to those from other organizations (Table 6).

Discussion

A number of other states have conducted surveys of CHWs and their employers to assess their perspectives on the CHW workforce and to inform policy development [14–17]. These studies and other unpublished reports primarily focus on existing programs and CHW employers, providing limited insight into perceptions among potential employers regarding CHW ability and employment who have not yet engaged CHWs in their workforce. Understanding and addressing the attitudes of those lacking experience with CHWs can help to identify issues impeding the promotion and adoption of CHWs and CHW programming.

Results from this survey demonstrate a collective familiarity with the definition of a CHW and overall positive attitudes regarding the roles and abilities of CHWs, indicating the general attitudes of organizations and professionals towards CHWs are not necessarily a barrier to their employment. A positive finding is the overall agreement among the majority of respondents regarding the ability of CHWs to perform each of the nine different activities related to core CHW competencies. Notable differences were demonstrated in perceptions of CHWs' potential to affect specific outcomes according to respondents' role and organization. The high percentages of administrators and policymakers agreeing with their impact is encouraging given their role as decision-makers within healthcare.

Compared to respondents with other roles, fewer healthcare staff agreed with CHWs' abilities to improve patient health. These doubts among healthcare staff about CHWs' ability to impact clinical outcomes may be influenced by the medical model prevailing within traditional healthcare systems which presumes professionally-trained individuals as uniquely qualified to affect these outcomes. Lower percentages of respondents agreed that CHWs have the potential to decrease clinical burden and healthcare costs compared to other outcomes. This result was especially true for healthcare staff and policy makers, indicating they may need to be targeted with the evidence that CHW interventions can indeed affect these important outcomes.

Existing literature on CHW employers focuses on evaluating programs, state utilization of CHW programs, CHW recruitment methods, education and skill basis for hiring CHWs, employment and supervision infrastructure, CHW productivity and volume, funding mechanisms, and training needed [14–17]. In our survey, standardized training, clear definition of role/scope, and funding sources were the priority issues identified as affecting CHW employment (Table 5). While previous research has identified CHW certification as a priority, our survey found lower percentages of respondents agreeing that this issue is important for CHW employment (Table 5). This result is notable considering that previous research has identified CHW certification as a priority and this has been a key driver of certification as a primary focus of early workforce efforts. Nevertheless, certification of CHWs and CHW training programs is a valuable approach to achieving standardizing training and a clear scope of practice, both of which, in our survey, were the issues with the highest percentage in agreement with their importance to CHW employment.

These findings have been used by our CHW partnership to establish and inform a statewide coalition of CHWs, CHW employers, and CHW stakeholders to develop recommendations for how best to promote and advance the CHW workforce in our state. Critical efforts of the partnership have included intensive educational efforts to raise awareness among potential employers about the critical role of CHWs and evidence of their impact; creation of a standardized CHW training curriculum being provided by a team of CHWs in both face-to-face and hybrid virtual formats; and development of a CHW Certification Commission within the Arkansas Community Health Worker Association to implement a voluntary CHW Certification Program. The experiential pathway for CHW Certification was launched in July 2021 and we plan to launch certification for training programs and the training track to certification in the winter.

Understanding potential CHW employers' perceptions about issues affecting CHW employment has implications for state-level efforts to advance the CHW workforce. These data can aid in building the stakeholder base needed to support decision-making and broad adoption of CHWs within healthcare.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10900-021-01043-7.

Author Contributions All authors listed made substantial contributions to the conception or design of the work. JF and TC were responsible for a majority of the data analysis. All authors listed approved for the current version to be published.

Funding Preparation of this manuscript was partially supported by the Arkansas Department of Health (Award ID: NU58DP006556) funded by Centers for Disease Control and Prevention and Control (CDC), by the University of Arkansas for Medical Sciences Translational Research Institute (Award ID: U54TR001629) funded by the National Institutes of Health (NIH) National Center for Advancing Translational Sciences, and by the Arkansas Center for Health Disparities (Award ID: U54MD002329ARCHD) funded by the National Institute on Minority Health and Health Disparities at the NIH. The content is solely the responsibility of the authors and does not necessarily represent the official views of the CDC or NIH.

Data Availability The survey date generated and analyzed for the current study are available from the corresponding author on reasonable request.

Code Availability Not applicable.

Declarations

Conflict of interest The authors have no conflicts or competing financial interests.

Ethical Approval This work was deemed non-human subjects research by the Institutional Review Board at the University of Arkansas for Medical Sciences.

Consent to Participate Not applicable.

Consent for Publication Not applicable.

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