A Statewide Needs Assessment of Perspectives on Training and Certification of Community Health Workers in Nebraska

Jessica Ern

University of Nebraska Medical Center

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A STATEWIDE NEEDS ASSESSMENT OF PERSPECTIVES ON TRAINING AND CERTIFICATION OF COMMUNITY HEALTH WORKERS IN NEBRASKA

Jessica Ern, BS
Maternal and Child Health Concentration

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   Drissa Toure, MD, PhD, MPH
   Jennie Hill, PhD
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INTRODUCTION: Community Health Workers (CHWs) are a crucial growing component of the health care field in the U.S. According to the US Bureau of Statistics (2018), the CHW workforce is expected to grow 38% in the next ten years. While research has repeatedly shown the success of CHW-led programs and the financial benefits of CHWs, little work has been done to evaluate the training and certification preferences of CHWs in Nebraska. This project aimed to gather and analyze qualitative and quantitative data through an exploratory sequential mixed-methods approach to provide policy recommendations regarding the future training and potential certification of CHWs in Nebraska.

METHODS: Qualitative and quantitative data from nine focus group discussions across Nebraska, a mixed-methods survey available from 142 CHWs, and eight key informant interviews from employers of CHWs was combined to identify the CHW perspective on training and certification and to determine if there are any differences in preferences based on CHW organizational setting. This data also identified key enablers and barriers to training for the CHW workforce in Nebraska. Data was collected and analyzed using computer software (REDCap, SPSS, and NVivo).

RESULTS: The majority of CHWs in Nebraska are female (92.3%), between the ages of 40-59 years old (45.1%), Caucasian or White (54.9%), and not of Hispanic or Latino origin (59.95%) and reside in urban population centers (78.2%). When asked about their previous training, approximately 82.0% focus group participants and 53.5% of survey participants received training prior to becoming a CHW. Survey participants expressed a desire for continuous training every 6 (41.5%) or 12 months (35.9%) to enhance their workforce skills. Overwhelmingly, survey participants expressed an interest in a statewide certification program (84%), stating community benefits, validation of the workforce, and professional advancement as key drivers. There was no
correlation between certification desire and employment type (community vs clinical; p-value = 0.195). Concurrently, only three key informants supported certification, three did not support certification, and two were undecided. Identified barriers for certification were time, literacy levels, financial support, and development of requirements.

IMPACT OF THE STUDY: This study has identified the overwhelming desire of CHWs in Nebraska to have a statewide certification program to enhance their work in the community and validate their role within the healthcare system. This, however, did not receive unanimous support from the key informants who participated in the study. Findings from this study can inform policy formulations in Nebraska for successful training and certification of CHWs.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>The Affordable Care Act</td>
<td>ACA</td>
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<tr>
<td>Centers for Medicare and Medicaid Services</td>
<td>CMS</td>
</tr>
<tr>
<td>Community Health Workers</td>
<td>CHWs</td>
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<tr>
<td>Department of Health and Human Services</td>
<td>DHHS</td>
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<tr>
<td>Focus Group Discussions</td>
<td>FGDs</td>
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<tr>
<td>Social Determinants of Health</td>
<td>SDOH</td>
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ACKNOWLEDGEMENTS

I would like to extend my gratitude to the Nebraska Department of Health and Human Services and UNMC’s Center for Reducing Health Disparities for the opportunity to give a voice to Community Health Workers in the state of Nebraska and to be a part of an important project to address health disparities in Nebraska. I am especially grateful for my committee chair Dr. Dejun Su, my maternal and child health concentration committee member Dr. Drissa Toure, and my faculty committee member, Dr. Jennie Hill. This project was made possible by Grant Number B04MC31500 from the Maternal Child Health Bureau, U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration.

I would like to thank Kathy Karsting, RN, MPH, Program Manager at Maternal Child Adolescent Health, Division of Public Health, Nebraska Department of Health and Human Services, and Mai Dang, Administrative Assistant for their support and advice to this project. Special thanks to Victoria Vinton MSN, RN Executive Director of the Nebraska Action Coalition-Future of Nursing for leading the Community Health Worker Survey Committee and for building the needed partnerships to complete the work. I also would like to thank Virginia Chaidez, Kate Trout, Victor Zarate, Joanna Barrera, Patty Falcone, Susan Bockrath, Pat Lopez, and Josie Rodriguez for their input and assistance with developing the survey instrument.

I also deeply appreciate the support from Douglas County Health Department, South Heartland District Health Department, Elkhorn Logan Valley Health Department, Public Health Solutions, and Two Rivers Health Department, for recruiting and hosting local CHWs in the focus groups and providing the refreshments. Special thanks to Kerry Kernen, Michele Bever, Liz Chamberlain, Heather Drahota, Gina Uhing, Katie Mulligan, Jeremy Eschliman, and Carmen Chinchilla for their commitment and assistance with organizing the focus groups.
CHAPTER 1 – INTRODUCTION

Community Health Workers (CHWs), a valuable growing workforce in the U.S. to help address growing health inequalities and disparities, are individuals from the community who have been trained to help their fellow community members to improve their access to health services and to promote community health (APHA, 2015). CHWs are known to change health behaviors, reduce health disparities, improve disease management strategies, and interact with marginalized communities (Katigbak et al., 2015; Sabo et al., 2013). An analysis of CHWs estimated that the use of CHWs reduced visits to the emergency room between 30% to 38% for diabetic and hypertensive patients (Mirambeau et al., 2013). The Affordable Care Act (ACA) has made explicit provisions to make CHWs more accessible in community and clinical settings to further improve health outcomes, including allowing for the financial reimbursement of these services (Urate, 2015; Congress, 2010).

The CHW workforce has grown significantly in the last decade and has gained significant recognition from other healthcare professionals. As the workforce has grown, great discussions have emerged to examine the efforts to standardize the CHW workforce through formalized training driving policy makers and employers to seek novel solutions to emerging issues, such as reimbursement, validations, and accountability. While some states have moved towards certification as a solution, such as Texas and New Mexico, the Centers for Disease Control and Prevention (CDC) and other researchers have found limited benefits of certified in comparison to uncertified CHWs (CDC, 2019). As the national debate continues and evaluations of statewide certification programs progress, little research has examined the perspectives of CHWs prior to certification implementation.

The purpose of this study was to empower and engage CHWs in Nebraska to share their perspectives on the steps our state can take in developing, supporting, and sustaining a
professional CHW workforce, through the assessment of CHW opinions in the state of Nebraska regarding their current training, preferred training methods, and opinions regarding a potential certification program. In addition, this information will be supplemented with information from key stakeholders in organizations that host CHW employees currently or in the past. This project also aims to identify any differences in certification and training preferences among clinical- and community-based CHWs. The long-term aims of this research are to help the CHW workforce and CHW employers make informed and appropriate decisions as the state moves forward with developing the CHW workforce by providing policy recommendations.
Community Health Workers (CHWs) are a growing and crucial part of the healthcare workforce across the U.S. and worldwide (APHA, 2015). CHWs provide healthcare services to culturally, economically, and geographically isolated communities with unique ethnic, cultural, and experiential connections to the population they serve (Brooks et al., 2018; Kash, May, & Tai-Seale, 2007). According to the American Public Health Association (APHA), CHWs are defined as a “frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served” (APHA, 2020). One systematic review of CHW definitions found that the majority of CHWs are paraprofessionals or lay individuals who receive job-related training shorter than health professionals (Olaniran et al., 2017). In 2014, the Nebraska CHW Coalition Steering Committee defined CHW as an individual who serves as a liaison/link between public health, health care, behavioral health services, social services, and the community to assist individuals and communities in adopting healthy behaviors (Nebraska CHW Education Work Group, 2014). According to the US Bureau of Labor Statistics (2018), there has been as many as 120,000 CHWs identified in the US, with 54,000 formally employed and approximately 660 CHWs in Nebraska.

CHWs serve in many different roles that promote health among communities in which they serve. CHWs can be utilized in either community- or clinical-based settings (Torres et al., 2017). Within clinical-based settings, CHWs generally fill non-clinical roles outside of the scope of traditional healthcare workers, often referred to as the ‘health human resources’ workforce, such as patient advocates, mediation between clinical staff and the patients, and assistance in accessing health and social services (Torres et al., 2017; Perez & Martinez, 2008; O’Brien et al., 2009). Community-based roles include acting as a member of the delivery care team, patient navigator, health educator, outreach coordinator, and organizer (Torres et al., 2017; O’Brien et
al., 2009). CHW can provide basic care for patients in a variety of acute and chronic conditions, such as obesity, diabetes, cardiovascular health, smoking cessation, cancer, reproductive health, asthma, and self-management.

The majority of CHW research has been focused on their success in achieving patient health outcomes, especially in low-income and marginalized populations (Malcarney et al., 2017; Kim et al., 2016; Viswanathan et al., 2010). The most common and practical areas of CHW intervention include chronic disease management, enhancing disease prevention and promoting screening, promoting a healthy lifestyle, reducing hospital readmittance and enrolling in insurance (Landers and Levinson, 2016; Coleman et al., 2006; Hunt, Grant, and Appel, 2011; Brownstein et al, 2007; Chang et al., 2010; Wennerstrom et al., 2016; Wells et al., 2011; Kangovi et al., 2017). The most common afflictions associated with CHW engagement are asthma, heart failure, HIV/AIDS, Type II diabetes, hypertension, and substance abuse (Basu et al., 2017). Another review of 18 community intervention sites found that the most beneficial attributes of CHWs are their knowledge of the community, communication skills and personality (CDC, 2019; Hohl et al., 2016). Financially, CHWs have been shown to reduce overall health care costs and reduce unnecessary medical expenses (Kangovi et al., 2017; Kangovi et al, 2014). In one study, the use of CHWs in a cancer screening project reduced medical expenses 22-fold (Kangovi et al., 2014).

In recent years, as the importance of CHWs has become more apparent, there has been a significant move to standardize the CHW workforce (Malcarney et al., 2017; The Network for Excellence in Health Innovation (NEHI), 2015). In order to accomplish this, states have moved towards standardized training programs and state certifications, in which training for CHWs can vary from 5 hours to 6 months of intensive education (Kim et al., 2016; Cummings et al., 2015). Nationally, it is informally recognized that CHWs should master the skills of communication,
cultural competence, assessment, training, professionalism, advocacy, education, and facilitation, and provide service such as outreach and enrollment, navigation, health services, and social-emotional support, regardless of organizational setting or employment specifics (Rural Health Information Hub, 2014).

Currently, there are three recognized categories of training for CHWs: on-the-job training, schooling at the community college level, and certification at the state level (Brooks et al., 2018; Kash, May, & Tai-Seale, 2007). These CHWs are further delineated into lay health workers, Level 1 paraprofessionals, and Level 2 paraprofessionals (Olaniran et al., 2017). Lay workers are the most common, who receive no formal training, with strictly on-the-job training, while the paraprofessionals receive some sort of secondary education. Level 1 CHWs receive no further formalized training past their secondary education while Level 2 CHWs will receive additional formal training. For example, Texas CHWs will receive an additional 27 hours of disease-specific formal training to become Level 2 paraprofessionals (Palmas et al., 2015). These training programs are often reliant on the employer or educational facility, with varied educational emphases or competencies.

While 16 states have moved towards statewide training programs or certification programs, the CDC has found that no evidence suggests a statewide certification program is effective in improving the CHW workforce (CDC, 2019). Due to the lack of research or evidence, a debate has emerged at the state and national level regarding the need for standardized training programs or certification. Proponents of certification programs identify career advancement, workforce organization, and legitimization of the workforce to other healthcare professionals as significant benefits (Brooks et al., 2018). The most beneficial aspect cited by states and organizations is the need to define the scope of CHWs’ practice in the healthcare field, which will help organizations more successfully incorporate CHWs (Brooks et al., 2018).
Secondly, certification will also allow for the reimbursement of services provided by CHWs by Medicaid and other insurance companies (Mason et al., 2011). This reimbursement development will also help create financial sustainability for CHWs within healthcare settings. Finally, certification can promote consistency in the quality of services provided and improve employment stability (AHRQ, 2019). In an assessment of New York employers, 92% of those surveyed were more likely to hire a CHW if they were trained in a standardized program (Findley et al., 2014).

On the other hand, opponents of certification believe that the act of certification will degrade the role of the CHW in the community and the individual barriers will prohibit the work (AHRQ, 2019). More specifically, CHWs are members of marginalized populations that are often hard to reach by traditional health care workers (Ingram et al., 2015; APHA, 2014). Community members may see formally trained CHWs similar to professional healthcare workers; this will lead to the loss of community trust. There is also a lack of evidence if community members assign any value to CHWs being certified (Arvey et al., 2012; AHRQ, 2019). Secondly, certification may lead to a hierarchy among CHWs, which will lead to unfair employment opportunities and stress workplace relations (AHRQ, 2019). Siemon and colleagues (2018) found no significant difference in the clinical workplace team climate between clinics that employed certified CHWs compared to uncertified CHWs. Next, due to the wide variety of work CHWs accomplish, standardized training may not be applicable (Chaidez et al., 2018). For example, community-based CHWs focus on addressing social determinants of health (SDOH) and advocacy while clinic-based CHWs work on addressing health education issues and clinical aspects. Finally, the financial, educational, and time barriers associated with certification may limit the population with the ability to become CHWs and undermine the workforce (Farrar, 2011).
Currently, Nebraska does not require CHWs to be certified nor are the programs that train CHWs regulated by the Nebraska DHHS or any other accrediting body (Chaidez et al., 2018). However, there are several formal educational programs for CHWs, including one hosted by the Nebraska Department for Health and Human Services (DHHS), University of Nebraska Medical Center, and other area community colleges, demonstrating interest in developing a sustainable CHW workforce. The Nebraska legislature has been approached and is open to the idea of supporting a CHW workforce (personal communication, Nebraska CHW Stakeholder meeting, July 2017); however, to be effective, there needs to be a consensus about roles, competencies, and whether or not certification will be required of CHWs. A recent assessment of CHWs in Nebraska found that there was an overwhelming desire to hire and employ CHWs in the healthcare field; there is a lack of grassroots evaluation to determine the importance and need of formalized training or certification of CHWs (Chaidez et al., 2018). This project aims to fill this gap of knowledge and provide evidence to support the growing CHW workforce in Nebraska.
CHAPTER 3 – DATA AND METHODS

Study design

This study aimed to gain insight on CHW perspectives of training and certification in Nebraska through an exploratory sequential mixed-methods approach (Berman, 2017). This mixed-methods study used qualitative data from focus group discussions (FGDs) to develop a mixed-methods survey and key informant interviews to determine the perspectives of CHWs and key stakeholders on the training and certification of CHWs in Nebraska.

Sample

Eligible participants for the FGDs and mixed-methods survey were any individuals that work in the state of Nebraska, 19 years or older, and self-identify as a CHW. A standard definition was presented to each participant before participation to help identify CHWs (Appendix A). Eligible key informants were any individual, 19 years or older, that work within an organization that has employed or currently employs CHWs.

Recruitment

Participant recruitment was conducted through known CHW channels, such as alumni listservs, public health departments, and CHW associations across Nebraska, for the statewide survey and key informant interviews. Public health departments recruited CHWs for all of the FGDs.

For the CHWs Statewide Survey, a recruitment flyer with the eligibility requirements, information on the assessment, and a direct link was emailed to identified organizations and individuals throughout Nebraska that worked with or were familiar with CHWs. Eighty-seven community organizations, eight health systems, and all of the health departments were contacted to distribute the survey, including the UNMC Behavioral Health Education Center of Nebraska.
(BHECN) Community Health Worker Program and the Nebraska DHHS Community Health Worker Health Navigation Program alumni listservs. Participants from the CHW gatherings were also contacted through email and asked to help spread the survey to other known CHWS. In September 2019, information regarding the survey was released to the media to increase statewide awareness.

A suggested list of key informants was developed in August 2019 to include individuals across the state of Nebraska to interview for the key informant interviews. Individual invitations were sent to each member for participation. Convenience sampling was used to identify additional individuals. Recruitment continued until March 2020 for the statewide survey and key informant interviews, at which theoretical saturation was achieved (Charmaz and Belgrave, 2015). While there is a lack of confirmed conformation of the level of theoretical saturation in qualitative data collection sample size, the goal was to collect 20 key informant interviews by the deadline (Aldiabat and Le Navenec, 2018; Saunders et al., 2018).

At the time of data analysis, there were 9 FGDs, 142 surveys collected, and 9 key informant interviews have been conducted regarding CHW training and certification.

Data Collection and Measures

Prior to the FGDs, a guide was developed that described the aims and steps of each focus group to guarantee consistency. Nine FGDs were held in five health departments across the state of Nebraska in Crete, Hastings, Kearney, Norfolk, and Omaha. Participants were asked about the training undergone in their current work as CHWs, present or ongoing training practices, and preferences for future training. See Appendix B for questions related to CHW training.

The Community Health Workers Statewide Survey was developed using the online survey tool, REDCap, with a specific link for participants to access. A paper version of the survey was also developed to accommodate individuals without access to the online version. The
survey included the informed consent letter, a brief definition of a Community Health Worker (CHW) and two screening questions to ensure eligibility. If the individual was not at least 19 years of age or self-identified as a CHW, the participant was prompted to exit the survey. If the eligibility requirements were met, the participant was led to continue the survey and answer a total of 21 multiple choice questions and one open-ended question. Participants were asked to provide an address at the end of the survey in order to receive a $20 gift card as compensation. This information was not linked to the survey responses. Survey questions regarding past training, training topics, preferences, and perspectives on statewide certification were asked. All demographic questions were based on the Nebraska DHHS Disparities Demographic Data Recommendations (2016). See Appendix C for the paper version of the statewide assessment.

Key stakeholders were identified through known CHW networks and invited to participate via email and phone calls according to involvement in other CHW activities and events. Individuals were provided the consent form initially and sent the interview questions before the interview. The interviews were conducted and recorded through Zoom and lasted approximately 40 minutes. Key informants were compensated with a $50 gift card for participation. Questions aim to identify training methods, any improvements to training planned, and thoughts on certification in the state of Nebraska (Appendix D).

Focus group sessions and key informant interviews were recorded with the permission of the participants and transcribed verbatim. Transcripts will be checked for accuracy. QSR International's NVivo 12 software data analysis software (2018) was used to organize and identify common themes using grounded theory (Charmaz and Belgrave, 2015). Data collection in the statewide assessment was primarily managed using REDCap (Research Electronic Data Capture) hosted at UNMC. REDCap is a secure, web-based application designed to support data capture for research studies. REDCap at UNMC is supported by the Research Information
Technology Office funded by Vice Chancellor for Research (VCR). A paper version of the survey was developed to accommodate individuals without easy access to the online survey and entered by hand into the survey database. The statewide survey results were organized and analyzed with the Statistical Package for the Social Sciences (SPSS) (2017). General descriptive statistics and comparisons between clinical and community-based CHWs were reported. The open-ended question was organized and coded for themes using NVivo.

**Statistical Analysis**

General descriptive statistics were reported, including sociodemographic informants, organizational descriptions, and qualitative statements directly from study participants. Survey participants were analyzed further based on their employment organizations (i.e., clinical-based and community-based). Bivariate correlational analysis was then used to determine if there are any associations between certification preferences and CHW characteristics (Marusteri and Bacarea, 2010). Using a mixed-methods approach, the study conclusions are based on a summary and comparison of findings from all three sources of data and an assessment of consistency of findings across these sources.

For this assessment, community-based services include specific tasks such as home health care, case management, personal care, and health promotion and disease prevention, outside of the clinical or hospital realm, as described by the Centers for Medicare and Medicaid Services (CMS) (CMS, 2019). Clinical-based services are provided within a clinical setting, such as a doctor’s office or hospital. Appendix A further depicts the designation of each employer organization into community- or clinical-based services for statistical purposes.
Ethical Considerations

This study was approved by the Institutional Review Board of the University of Nebraska Medical Center (IRB # 900-18-EX). Data collection from eligible participants only started after we had obtained informed consent, and participants could choose to withdraw from the study or refuse to answer specific questions based on their judgments at any time during the data collection process. Only de-identified data were used in the final project report and related dissemination of project findings.
Chapter 4 – Results

Sociodemographic characteristics of the participants

Focus group participants were asked to voluntarily provide characteristics of their employment prior to attendance, for which 50 CHWs of the 65 CHW attendees responded. The majority of FGD participants worked in a clinical setting (34%) and worked part-time or less (53%). Table 1 depicts these characteristics in more detail.

<table>
<thead>
<tr>
<th>Table 1: Focus Group Participants Employment Characteristics</th>
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<tbody>
<tr>
<td>Work Setting (n=50)</td>
</tr>
<tr>
<td>Clinical or health care organization</td>
</tr>
<tr>
<td>Community Organization</td>
</tr>
<tr>
<td>Not currently working as CHW</td>
</tr>
<tr>
<td>Other</td>
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<tr>
<th>Work Status (n=48)</th>
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<tr>
<td>Paid</td>
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<tr>
<td>Volunteer</td>
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<th>Work Hours (n =49)</th>
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<tr>
<td>Full-time</td>
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<tr>
<td>Part-time or less</td>
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<tr>
<th>CHW Training (n=50)</th>
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<tbody>
<tr>
<td>Yes</td>
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<td>No</td>
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<table>
<thead>
<tr>
<th>Held any professional licensure (n=49)</th>
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<tbody>
<tr>
<td>Holds a license</td>
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<tr>
<td>Does not hold a license</td>
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The majority of the 142 CHWs that responded to the mixed-methods survey in Nebraska are female (92.3%), between the ages of 40-59 years old (45.1%), Caucasian or White (54.9%), and not of Hispanic or Latino origin (59.95%) and reside in urban population centers (78.2%). Eighty-six percent of the sample was at least a high school graduate, born in the US (67.6%) and
spoke only English at home (59.2%). Table 2 provides more demographic information for the survey participants.

Table 2: Demographic Characteristics of Survey Participants

<table>
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<td><strong>Age (n = 142)</strong></td>
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<td>19-24 years</td>
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<tr>
<td>25-39 years</td>
<td>63</td>
<td>44.4</td>
</tr>
<tr>
<td>40-59 years</td>
<td>64</td>
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<tr>
<td>60 years or older</td>
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<td>7.0</td>
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<td>Prefer not to answer</td>
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<td><strong>Gender (n = 142)</strong></td>
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<td>Female</td>
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<td>92.3</td>
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<tr>
<td>Not of Hispanic or Latino Origin</td>
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<td>59.9</td>
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<td>1.4</td>
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<td>Caucasian/White</td>
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<td>54.9</td>
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<tr>
<td>Native American/American Indian</td>
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<td>3.5</td>
</tr>
<tr>
<td>Native Hawaiian or some other Pacific Islander</td>
<td>33</td>
<td>23.2</td>
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<tr>
<td>Some other race</td>
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<td>7.0</td>
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</table>
Table 2: Demographic Characteristics of Survey Participants

<table>
<thead>
<tr>
<th>Marital Status (n = 142)</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never married/single</td>
<td>40</td>
<td>28.2</td>
</tr>
<tr>
<td>Married</td>
<td>79</td>
<td>55.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>14</td>
<td>9.9</td>
</tr>
<tr>
<td>Legally separated</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Partnered</td>
<td>6</td>
<td>4.2</td>
</tr>
<tr>
<td>Widowed/Widower</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest level of education (n = 142)</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never attended school</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Grade 1-8</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Some high school</td>
<td>14</td>
<td>9.9</td>
</tr>
<tr>
<td>High school graduate</td>
<td>16</td>
<td>11.3</td>
</tr>
<tr>
<td>Some college or technical school</td>
<td>27</td>
<td>19.0</td>
</tr>
<tr>
<td>College graduate</td>
<td>50</td>
<td>35.2</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>27</td>
<td>19.0</td>
</tr>
<tr>
<td>Professional degree</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>2</td>
<td>1.4</td>
</tr>
</tbody>
</table>

There were eight key informant interviews, in which seven key informants identified as White or Caucasian and identified as non-Hispanic or Latino. All key informants were female. Seven of the key informants had a master’s degree and one had a professional degree. Approximately 50% were employed by a local health department, followed by a hospital system (Table 3). The mean length of time employed by the organization was 8.71 years, with a range of 2 to 26 years. These organizations served several urban and rural areas throughout Nebraska (Table 3).
Table 3: Characteristics of Key Informant Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of Organizations</th>
<th>Geographic Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-Based Organization</td>
<td>4</td>
<td>Omaha, Lincoln, Norfolk, Kearney, and Scottsbluff</td>
</tr>
<tr>
<td>Hospital</td>
<td>2</td>
<td>Omaha, Kearney, Grand Island, Lincoln</td>
</tr>
<tr>
<td>Local Health Department</td>
<td>1</td>
<td>Omaha and Bellevue</td>
</tr>
<tr>
<td>Doctor’s Office/Clinic</td>
<td>1</td>
<td>Omaha</td>
</tr>
</tbody>
</table>

Training and Training Gaps

FGD participants, survey respondents, and key informants were asked in a variety of manners in which CHWs are trained in Nebraska and any identified gaps in these training (Appendix B, C, and D).

In the FGDs, 82% of the participants reported some form of training and 55% held a professional licensure of any type (Table 1). The majority of CHWs agree that most of their training is from on-the-job, experiential work. Others stated they received orientation training in their job, followed by other training as needed. Some CHWs are required to fulfill education hours per year, while others seek training to better their professional selves. On-the-job training includes internal training, and professional development training contracted through other organizations or online modules provided by other state health departments. Those who completed formal training completed the DHHS Community Health Worker Training or the UNMC BHECN training. Several participants had formal education through universities pertaining to their current employment or past employment.

Only 53.5% of survey respondents reported any training prior to becoming a community health worker. CHWs stated formal training received between 1995 and 2019, with 71.2% of respondents receiving training since 2015. Training varied from single-day training to 6 months
in length. The most common training organization was OneWorld Community Health Center (n = 23), followed by the University of Nebraska Medical Center (Munroe-Meyer Institute or BHECN; n = 5). Other training organizations include public health departments, school districts, local hospitals, local universities, and community-based organizations.

Key informants identified that each organization provided internal, on-the-job training for CHWs, which included orientation training, followed by job shadowing, and monitoring. Two organizations provided a more structured, formalized training while the other organizations had more informal orientation training. All seven organizations provide ongoing training as needed or at set intervals throughout the year. For example, one health department gathers all employees together four times a year for training.

The topics covered in training varied greatly by data source. FGDs participants identified chronic disease management, physiological measurements, mental health, medical laws, and communication techniques as the most common training provided. Survey participants reported a large variety of topics; nutrition and diabetes/pre-diabetes were the most common topics covered in training. Other topics introduced are found in Figure 1.

**Figure 1: Topics Covered in Training Received by CHWs**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women, Newborn, and Child Health</td>
<td>28</td>
</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>26</td>
</tr>
<tr>
<td>Diabetes and Pre-diabetes</td>
<td>50</td>
</tr>
<tr>
<td>Nutrition</td>
<td>58</td>
</tr>
<tr>
<td>Oral Health</td>
<td>11</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>29</td>
</tr>
<tr>
<td>Cancer</td>
<td>16</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>41</td>
</tr>
<tr>
<td>Cultural Competencies</td>
<td>42</td>
</tr>
<tr>
<td>Navigating Health Insurance</td>
<td>14</td>
</tr>
<tr>
<td>DHHS Health Navigator Training</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
</tr>
</tbody>
</table>
All participants identified key gaps in training, including motivational interviewing, medical terminology, cultural competency, electronic documentation systems, insurance terminology and enrollment, maternal and child health topics, communication methods, and lack of training opportunities. Table 4 provides the major themes identified by data source. For more qualitative support, see Appendix E - Table 4. Six key informants stated that a more formalized and structured ongoing training process is needed to help improve the performance of the CHWs.

<table>
<thead>
<tr>
<th>Source</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD</td>
<td>Communication and sensitive topics</td>
</tr>
<tr>
<td>FGD</td>
<td>Communication and conflict management</td>
</tr>
<tr>
<td>FGD</td>
<td>Knowledge of population</td>
</tr>
<tr>
<td>FGD</td>
<td>Cultural Competency</td>
</tr>
<tr>
<td>FGD</td>
<td>Standardization of knowledge</td>
</tr>
<tr>
<td>FGD</td>
<td>Standardization of knowledge</td>
</tr>
<tr>
<td>Key informant</td>
<td>Organization improvement</td>
</tr>
<tr>
<td>Key Informant</td>
<td>Organization Improvement</td>
</tr>
</tbody>
</table>

Another training gap is the lack of knowledge of training opportunities. Survey respondents reported that only 22.5% knew of available training opportunities. Of these known opportunities, the majority were job-specific certifications, such as a certified lactation specialist or topic-specific case-manager, that was exclusive to individual positions. Other known opportunities are conducted by universities, hospital systems, DHHS, and community-based organizations. FGDs participants identified online training from other states or health departments.
One final component of the training was to assess the training preferences of CHWs in the state of Nebraska. CHWs identified continuous training as a key to training (90.1%), either every 6 (42.2%), 12 (35.9%), or 24 months (12.0%). Only 5.6% of respondents reported no need for additional training.

Statewide Certification Preferences

Survey respondents and key informants were asked about their preferences for a statewide certification program (Appendix C, Q.21; Appendix D).

Survey respondents overwhelmingly preferred a statewide certification program (84.0% vs. 16.0%), and 37.5% of key informants supported certification outright. CHWs’ preference for statewide certification included standardization of knowledge, validation of the workforce, community benefit, accountability and socialization opportunities for CHWs (Table 5). Several quotes from the mixed-methods survey are as follows:

Certification can help to ensure appropriate training and skills that are universal throughout the state and communities.

The individual would be seen more as a professional and valued by medical providers.

Having a statewide certification program ensures that all CHW has the same basic training and therefore clients/patients can expect the same levels of care regardless of the area or county.

For more thorough qualitative data, refer to Appendix E – Table 5.
Key informants stated that this would allow for the development of core competencies, define the scope of work, provide accountability, validate the workforce, develop a pipeline for professional advancement, and encourage personal pride (Table 6; Appendix E – Table 6). For example, one key informant stated:

*The call to public health and the nuance skillset that it has, that goes into this kind of work... it's ever changing. That's like the one thing you can count on is like trends and advances and things like that. So, it only makes sense to have, um, a certification process. A formalized road for education and ongoing education. So, I would support that hands down.*
Table 6: Key informant certification preferences

<table>
<thead>
<tr>
<th>Certification Preference</th>
<th>Theme</th>
<th>Number of times mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Accountability</td>
<td>3</td>
</tr>
<tr>
<td>Yes</td>
<td>Standardization of skills</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>Barriers</td>
<td>5</td>
</tr>
<tr>
<td>No</td>
<td>Lack of organizational structure</td>
<td>5</td>
</tr>
</tbody>
</table>

Suggested core competencies from the key informants included less of a focus on specific skills, but general knowledge (Table 7). There was an emphasis on providing a basis of knowledge that could be built upon in individual positions.

Table 7: Suggested Core Competencies

<table>
<thead>
<tr>
<th>Core Competency</th>
<th>Sub-competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural competency</td>
<td>Diversity</td>
</tr>
<tr>
<td></td>
<td>Inclusivity</td>
</tr>
<tr>
<td>Technology</td>
<td>Electronic records</td>
</tr>
<tr>
<td>Information Security</td>
<td>HIPAA</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
</tr>
<tr>
<td>Advocacy</td>
<td></td>
</tr>
<tr>
<td>Resource referrals</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Boundaries</td>
</tr>
<tr>
<td></td>
<td>Safe spaces</td>
</tr>
<tr>
<td></td>
<td>Sensitive topics</td>
</tr>
<tr>
<td>Clinical skills</td>
<td>Vital signs</td>
</tr>
<tr>
<td></td>
<td>Medical terminology</td>
</tr>
</tbody>
</table>
While the majority of CHWs stated a certification program would be beneficial, there were several concerns raised among the approximately 16% that said that there should not be a state-wide certification program. One major concern is that the knowledge acquired by a CHW is inherent with the individual’s working experience in the community (Table 5; Appendix E – Table 5). Other reasons given against a certification program include additional training or job-specific certifications that are already in place. Examples of these concerns are as:

I feel that skills necessary to do Community Health Work are typically learned on the job and from experience out working with families in the community.

Because 'community health worker' is an extremely broad term, that covers nurses, interpreters, breastfeeding counselors, housing specialists, legal aid, etc. It would be hard to identify who actually needed to attend the certification program.

Key informants speaking in opposition to CHW certification were concerned with the current infrastructure in place, such as the ability to employ certified CHWs and the development of core competencies, and too many barriers for CHWs (Table 6; Appendix E – Table 6). Several key informants stated that there were not enough jobs or a sustainable model in place to support CHWs in Nebraska at this time. Without this infrastructure, there is no need for a certification program. Finally, a key informant identified concern as to what core knowledge would be included in the certification. Many CHW responsibilities are job-related, and it may be challenging to develop a streamlined and effective training program to cover all CHWs.

To further explore the certification preferences of CHWs in the state of Nebraska, it is important to examine if there are any differences in training and certification preferences according to organizational setting and training knowledge. CHWs were separated into community-based and clinical-based categories (see APPENDIX A). Using bivariate regression with alpha = 0.05, there was not a significant association between organizational setting and certification preference (Pearson correlation coefficient = 0.109; p-value = 0.195). Those that
worked in clinical settings were not associated with the knowledge of other training (Pearson correlation coefficient = 0.004; p-value = 0.959), or with training before becoming a CHW (Pearson correlation coefficient = 1.06; p-value = 0.207). There is an association between those who received training and those that are aware of other training opportunities (Pearson correlation coefficient = - 0.305; p-value ≤ 0.001).
Chapter 5 – Discussion

The aims of this study were to gather the opinions of CHWs across the state of Nebraska in order to gain insight into their experiences with training and their preferences for training and possible statewide certification, in the hopes of providing recommendations for policy makers and employers. This assessment found that CHWs are receiving a wide variety of training that is often dependent on the organization and somewhat insufficient for the tasks they are asked to perform. When asked about statewide certification, the majority of CHWs preferred statewide certification, while only three key informants supported certification outright. Delving into this deeper, there was not a significant association between organizational settings and preferences for certification.

Study Sample

One aspect of this study was to gather demographic information regarding the diverse CHW workforce in Nebraska. The definition of CHWs often claims that the CHW is a member of the community that acts as a liaison between that community and the health care realm. In this sample, the CHWs were mostly White or Caucasian women not of Hispanic or Latino origin, between the ages of 40-59 years, and residing in urban areas in Nebraska (Table 2). Assessing Nebraska’s population demographics, this sample is not overtly representative of all of the communities. For example, Nebraska is approximately even with males and females residing in the state (49.7% vs. 50.3%) with an average age of 36.2 years of age (Center for Public Affairs Research, 2019). This sample is representative of the racial make-up of Nebraskans, in which 87.49% is White or Caucasian; however, the majority of CHWs work with Black or African American populations (Table 7), which suggests these CHWs are not representative of the communities they serve. The sample is also older than the average Nebraskan (Table 2). While this does not speak to the quality of the services provided in communities, it is important to note
that the CHWs surveyed are often not representative of the communities in which they serve. This may be due to lack of CHW representatives in diverse communities, relocating due to job availability, or the inability of this project to access marginalized CHW populations. In further studies, it will be crucial to access the services among communities and make efforts to reach more diverse populations.

*Training and Training Gaps*

CHWs and employers in this sample have stated that CHWs receive some form of training, either from on-the-job training or more formal training, from a variety of sources in their work as CHWs. It is clear that there is no consistent form of training provided, even among similar employers. For example, among public health departments, four different models of training were employed. Two departments used formalized training programs of various lengths, while the other two used on-the-job shadowing as the primary method of training. This is consistent with other sampled organizations throughout Nebraska and the United States. This lack of consistent training accounts for the wide variety of topics touched upon and overall gaps presented.

National and Nebraska guidelines have developed training guidelines to include communication, interpersonal, teaching, advocacy, and organizational skills, in addition to capacity building, client assessment, service coordination, outreach methods and strategies and community assessment (Hultquist, 2019). In this assessment, CHWs have identified training in some of these competencies, primarily communication skills. Five key informants also mentioned communication as a key aspect of their training processes. On a lesser level, advocacy and service coordination were also reported. CHWs who attended the Nebraska DHHS CHW Training (Figure 1) also received individual modules in organizational, documentation, assessment, and service coordination skills (DHHS, 2020). However, the majority of the
competencies were not mentioned; either CHWs received the training but did not retain the information or did not receive training in these areas.

Despite being offered communication skills as one of the most common form of training, it was also identified as one of the most requested training methods. As seen in Table 4, CHWs often struggle with discussing sensitive topics, such as domestic abuse, delivering bad news, motivational interviewing and communicating with members of different cultures. While it is unclear the exact communication skills provided in the majority of training, these training are not covering some of the more crucial aspects of the tasks required of CHWs. Further assessment into the exact nature of communication taught in training or a renovation of communication training is needed to address some of the concerns of CHWs.

One area not addressed by Nebraska standards is cultural competencies, which is repeatedly mentioned as a large gap. If it is the case that the majority of CHWs are working in communities that are not reflective of their personal demographics, this is an important area to address in training in order to create parity of services and ensure equality in diverse populations. Another method to address is to make concerted efforts to recruit in communities to ensure similar demographic backgrounds. This is an area that needs to be further explored as mentioned previously.

One interesting result is the negative association between those CHWs receiving training prior to employment and those who were aware of additional training opportunities. This may be a unique area of intervention to promote training among CHWs. According to this sample, CHWs from the FGDs and the survey received training 82% and 53.5%, respectively, prior to beginning their work as CHWs; only 22.5% of CHWs were aware of additional training. This may suggest that formally trained CHWs are not seeking additional training after orientation, while informally trained CHWs are seeking additional training to supplement their knowledge. It
may be beneficial to further examine this association to determine if initial formal training discourages later training.

*Certification Preferences*

CHWs in this sample overwhelmingly preferred statewide certification (84% vs. 16%). The predominant reason for the preference was the standardization of knowledge, which was mentioned 41 times in the open-ended question. One of the major subthemes associated with this was the development of a key skillset that would help with professional advancement and employment changes anywhere throughout the state. This might be due to the impermanency of grant positions or concerns with job security if there was any physical mobility within or outside of the state.

Another key component for the preference towards certification was job validation. Many CHWs in the FGDs and survey expressed concerns about how other health care professionals viewed their role. This is seen several times in the literature, in which a lack of a clear definition of the scope of practice and lack of knowledge by other health care providers often alienates CHWs in interprofessional groups. As seen with other surveys, validation is an essential component to incorporate CHWs. More information from other health care professionals is needed to determine if certifications would improve this attitude.

While CHWs overwhelmingly prefer the idea of a statewide certification, key informants were more hesitant to implement a statewide requirement (Table 6). The most significant reason was the various barriers that CHWs would have to overcome, such as the time commitment, cost, language, and literacy levels. All of these barriers were also mentioned by CHWs; despite this, CHWs were still looking at the benefits of certification outweighing the barriers needed to overcome certification at a large level. This may be due to a lack of knowledge of the requirements of certification or simply the validation of the workforce is more important.
In addition to the concerns of barriers, key informants provided more concerns regarding the systematic changes needed to incorporate certified CHWs into the current healthcare system. These included the concerns regarding the definition of a CHW, who was responsible for paying for the certification, and what would be the reimbursement methods be after certification. While the ACA does provide provisions for reimbursement of CHWs, there was no clear path to accomplish this. Four states have since implemented statewide policies that certification is required to receive reimbursement, Nebraska has not entered this debate (London, Carey, and Russell, 2015).

The question of reimbursement also touched on whether this would influence which CHWs would prefer certification. Clinical-based CHWs are often reimbursed for services at a higher rate than community-based CHWs, which suggests clinic-based CHWs would be more inclined to prefer certification. However, there was not an association between organizational setting and certification preference observed. This may be due to the difference in observable clinic-based CHWs captured in the data. Further examination is required to discover if this discovery applies to the state of Nebraska.

**Strengths and limitations**

This study represents the first statewide assessment of the CHW workforce in Nebraska based on comprehensive data collection from CHWs. One of the largest strengths of this study was to identify and gather the perspectives of CHWs across the state and allow their preference to be incorporated into the debate regarding certification and training. This study also includes data from multiple sources to gather a complete picture of the current and preferred direction of the CHW workforce in Nebraska.
There are several limitations to this study that need to be addressed. First, the FGDs are voluntary perspectives that do not necessarily represent or provide a complete picture of the training and training gaps experienced by CHWs in Nebraska. The statewide survey was also a cross-sectional examination of 142 CHWs and may not reflect the complete CHW workforce. Therefore, the results of this study may not be generalized to all CHWs. Secondly, the information gathered relied on self-reports from respondents, which may be subject to recall biases, a limitation very common in cross-sectional surveys collecting self-report data. Additionally, the survey was only offered in English and may not include individuals who do not speak or read English proficiently. Finally, the interview data described here represent only the perspectives of the eight non-CHW individuals interviewed and do not necessarily represent the official stance of their agencies. Given the large number of agencies employing CHWs in Nebraska, our findings based on interviews with eight key informants do not capture all perspectives from various stakeholder agencies, which limits the generalized use of the findings. Despite these limitations, the rich information collected in this study provides updated assessment of the current status quo of CHWs in Nebraska. The focus groups and survey combined provide a unique sample of the voices and perspectives of Nebraska CHWs.

Conclusions
This study was one of the first assessments of CHW training and certification in the state of Nebraska, which empowered CHWs to have their voice heard in the debate regarding certification. It is clear that CHWs are receiving a wide variety of training, that is inconsistent even across similar organizations. However, CHWs prefer at a minimum to be trained continuously every 12 months. Furthermore, an overwhelming majority of CHWs prefer that the state of Nebraska develop a statewide certification program. Based on the results of this assessment, the following are recommendations:
1. Continue research to assess further the gaps identified in this project, such as the negative association between previous training and knowledge of training opportunities and certification preferences between organizational settings.

2. Develop a core set of competencies based on gaps identified by CHWs.

3. Identify or recruit representative CHWs, including males and African American/Black CHWs as well from the refugee communities.

4. Evaluate and open discussions regarding the reimbursement for CHW services with key stakeholders, such as policymakers and insurance companies.

5. Develop training opportunities that address the core competencies suggested for all CHWs that are not time, cost, language, or literacy level prohibitive.

These recommendations reflect the direct opinions and perspectives of CHWs in Nebraska and should be considered for the future development of a stronger workforce.
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NVivo qualitative data analysis software; QSR International Pty Ltd. Version 12, 2018.


Palmas, W., March, D., Darakjy, S., Findley, S. E., Teresi, J., Carrasquillo, O., & Luchsinger, J. (2015). Community Health Worker Interventions to Improve Glycemic Control in


Appendix A – Operational Definitions

A Community Health Worker (CHW) is an individual who:

- Serves as a bridge between public health, health care, behavioral health services, social services, and the community to assist individuals and communities in adopting healthy behaviors;
- Conducts outreach that promotes and improves individual and community health; and
- Facilitates access to services, decreases health disparities, and improves the quality and cultural competence of service delivery in Nebraska.

For this survey, Community Health Worker (CHW) is an umbrella term used to describe many different health positions. The following is a list of some titles used to describe CHWs:

- Community Health Worker
- Community Health Advisor
- Outreach Worker
- Community Health Representative
- Promotora/Promotores de Salud
- Peer Leader
- Patient Navigator
- Navigator Promotoras
- Peer Health Advisor
- Peer Counselor
- Lay Health Ambassador
- Community Health Advocate

For the purpose of this assessment, community-based services include specific tasks such as home health care, case management, personal care, and health promotion and disease prevention, outside of the clinical or hospital realm, as described by the Centers for Medicare and Medicaid Services (CMS) (CMS, 2019). Clinical-based services are provided within a clinical setting, such as a doctor’s office or hospital. The following table further depicts the designation of each employer organization into community- or clinical-based services for statistical purposes.

<table>
<thead>
<tr>
<th>Community-Based CHWs</th>
<th>Clinical-Based CHWs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-Based Organizations</td>
<td>Doctor’s office</td>
</tr>
<tr>
<td>Housing Authority</td>
<td>Clinic</td>
</tr>
<tr>
<td>Migrant community health center</td>
<td>Hospital</td>
</tr>
<tr>
<td>Faith-based organizations</td>
<td></td>
</tr>
<tr>
<td>Congregation</td>
<td></td>
</tr>
<tr>
<td>Tribal-based organizations</td>
<td></td>
</tr>
<tr>
<td>Adult family homes</td>
<td></td>
</tr>
<tr>
<td>Schools and universities</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B – Focus Group Discussion Questions

Q1. How were you trained?
Q2. What did you learn later that you wish was part of your training?
Q3. How should Community Health Workers be trained?
Q4. How long was your training?
Q5. What topics were covered in your training?
Appendix C – Statewide Community Health Worker Survey

Section A: Please tell us a little about yourself:

1. What is your age group?
   1. □ 19-24 years        2. □ 25-39 years
   3. □ 40-59 years        4. □ 60 years or older
   5. □ Prefer not to answer

2. What is your gender?
   1. □ Male              2. □ Female
   3. □ Prefer not to answer

3. Are you of Hispanic or Latino origin?
   1. □ Yes               2. □ No
   3. □ Prefer not to answer

4. What is your race?
   1. □ African-American/Black
   2. □ Caucasian/White
   3. □ Asian
   4. □ Native American/American Indian
   5. □ Native Hawaiian or some other Pacific Islander
   6. □ Some Other Race (please specify):
   7. □ Prefer not to answer

5. What is your home zip code? (5 digits)
   _____________________________

6. What is your country of birth?
   1. □ Please specify:________________________________________________________
   2. □ Prefer not to answer

   6.a. If you were born in a foreign country, how many total years have you been living in
   the U.S.?   _____ Years    _____ months

7. Do you speak another language other than English at home?
   1. □ Yes, please specify:____________________________________________________
   2. □ No (skip to 8)
   3. □ Prefer not to answer

8. What is your current marital status?
   7. □ Prefer not to answer
9. What is the highest grade or year of school you have completed?
   1 □ Never attended school       2 □ Grade 1-8 (Elementary)
   3 □ Grade 9-12 (Some High School) 4 □ High School Graduate
   5 □ 1-3 years of college or technical school 6 □ 4 or more years of college (Graduate)
   7 □ Master’s degree          8 □ Professional degree (MD, JD, PhD, etc.)
   9 □ Prefer not to answer

10. What is your current employment status as a community health worker?
    1 □ Full-time       2 □ Part-time       3 □ Retired       4 □ Unemployed
    5 □ Volunteer       7 □ Prefer not to answer

Section B: Now we would like to know about your training and work

1. What is your job title?
   1 □ Community Health Worker 2 □ Patient Navigator
   3 □ Community Health Advisor 4 □ Navigator Promotoras
   5 □ Outreach Worker          6 □ Peer Health Advisor
   7 □ Community Health Representative 8 □ Peer Counselor
   9 □ Promotora/Promotores de Salud 10 □ Lay Health Ambassador
  11 □ Peer Leader              12 □ Community Health Advocate
  13 □ Other (please specify): ................................................................

2. How long have you been working as a community health worker?
   ________ years  ________ months

3. How many hours do you work or volunteer per week as a community health worker?
   1 □ Less than 10 hours  2 □ 10-30 hours
   3 □ 30 - 40 hours     4 □ More than 40 hours

4. How long have you worked at your current organization?
   ________ years  ________ months

5. What was your work experience before becoming a community health worker?
   1 □ Doctor
   2 □ Nurse
   3 □ Midwife
   4 □ Other health professional (e.g. social worker, CNA, medical assistant)
   5 □ Other (please specify): ................................................................

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6. Please describe the key tasks you are prepared to perform as a community health worker (Check all that apply).
1. Coordinating care
2. Health coaching
3. Social support
4. Linking to resources
5. Medication compliance
6. Health education
7. Health screenings
8. Translation/Interpretation
9. Data collection
10. Advocacy
11. Cultural awareness
12. Community events (e.g. health fairs or health classes)
13. Other (please specify): .................................................................

7. Please list the health issues that are the focus of your work (Check all that apply).
1. HIV or STDs
2. Behavioral / Mental Health
3. Prenatal health
4. Newborn and Infant health
5. Child health
6. Adolescent health
7. Reproductive aged women (15-49 years)
8. Elder health
9. Obesity Prevention (Nutrition/Physical Activity)
10. Chronic Diseases (e.g. diabetes, high blood pressure, cancer) management
11. Chronic Diseases (e.g. diabetes, high blood pressure, cancer) prevention
12. Other (please specify): .................................................................

8. Do you provide any services to improve Maternal, Newborn, and Child Health currently?
1. Yes, please specify (Check all that apply):

   1. Home Visit
   2. Prenatal Counseling
   3. Immunizations
   4. Maternal Nutrition (e.g. gestational diabetes)
   5. Essential Newborn Care
   6. Special Care for Low Birth Weight/Premature Infant
   7. Injury prevention
   8. Overweight/Obesity
   9. Access to mental health services
   10. Other (please specify): .............................................................

2. No

9. Did you receive any training before becoming a community health worker?
1. Yes (Please continue on to question 10a & 10b)
2. No (skip to 10)
9a. If yes, what was the year you were trained and how long was your training? Please provide the agency and training title if you can remember.

Year __________________________________________

Duration (how many hours or days?) | ___ | ___ days | ___ | ___ hours

Agency __________________________________________

Name of training __________________________________________

9b. Topics covered during your training (select all that apply):

1. Women, Newborn, and Child Health  2. Heart disease and stroke
7. Cancer                            8. Communication skills
9. Cultural competencies             10. Navigating health insurance
11. DHHS health navigator training
12. Other (please specify): ............................................................

10. Are you aware of any current training opportunities for CHWs to reinforce initial training, learn new skills, or update their knowledge base?

1. Yes, please describe: ............................................................

2. No

11. While you are working as a CHW, how would you like to be trained?

1. Do not see the need for receiving any continuous training
2. Continuous training at least every 6 months for CHWs
3. Continuous training at least every 12 months for CHWs
4. Continuous training at least every 2 years for CHWs
5. Other (please specify): ............................................................

12. Please describe the community where you primarily work as a CHW.

12a. What is the predominant ethnic background of the community you work in?

1. Hispanic/Latino/Spanish
2. Non-Hispanic

12b. What is the predominant racial background of the community you work in?

1. African-American/Black  2. Caucasian/White
3. Asian/Pacific Islander  4. Native American/American Indian
5. Other (please specify): ............................................................
12c. Please list the Nebraska counties that you practice as a CHW, and the hours per week you generally work in each county.

Primary County: .......................................................... Hours per week: .......
  *Primary County is the county you spend the majority of your time.

Secondary County: .......................................................... Hours per week: .......

In the space below, list any other county that you work as a CHW and time distribution you spend in each of the counties.

13. What is the organizational setting where you work as a community health worker?
   1 ☐ Community-Based Organization       2 ☐ Doctor’s Office/Clinic
   3 ☐ Hospital                            4 ☐ Migrant/Community Health Center
   6 ☐ School/University                   7 ☐ Local Health Department
   8 ☐ Housing Authority                   9 ☐ Adult Family Homes
   10 ☐ Private Insurance Companies
   11 ☐ Tribal-Based Organizations or Health Centers
   12 ☐ Faith-Based Organization (CHI Health, Lutheran Family Services, etc.)
   13 ☐ Congregation (church, mosque, place of worship, etc.)
   14 ☐ Other (Please Specify):  ..............................................................

14. Do you have opportunities for promotion or professional advancement through the CHW program?
   1 ☐ Yes, please describe them:  ..............................................................
   2 ☐ No

15. What is your biggest personal challenge when working as a CHW? (Please select only one)
   1 ☐ Financial support       2 ☐ Language barriers
   3 ☐ Safety                   4 ☐ Support from community
   5 ☐ Support from supervisors 6 ☐ Support from other healthcare professionals
   7 ☐ Transportation           8 ☐ Lack of training
   9 ☐ Unsure of work responsibilities 10 ☐ Stress/ Burn out
   11 ☐ Other:  ..............................................................

16. How is your work supervised?
   1 ☐ By Registered Nurses (RNs)
   2 ☐ By another health professional (i.e. Physician, Licensed practical nurse (LPN), Social Worker, dietician, etc.)
   3 ☐ By an Administrative Staff
   4 ☐ By another Community Health Worker
   5 ☐ Other (please specify):  ..............................................................
17. How is your performance monitored and evaluated?
   1. Monthly reviews
   2. Annual reviews
   3. Random skill evaluation
   4. Continuing education sessions
   5. No evaluation or monitoring
   6. Other (please specify): ..............................................................

18. Do you expect to retire from your CHW position?
   1. In the next 5 years
   2. In the next 6-10 years
   3. Not planning to retire in the near future

19. How did you hear about this survey?
   1. Health Department
   2. News Media (e.g. news, radio, newspaper)
   3. Social Media (e.g. Facebook, Twitter)
   4. Hospital/Clinics
   5. Another Community Health Worker
   6. Employer (please specify) ..............................................................
   7. Other (please specify): ..............................................................

20. Did you attend one of the Community Health Worker Gatherings recently hosted by selected health departments in Nebraska?

   1. Yes. Please specify (check all that apply):
      1. South Heartland District Public Health Department, Hastings, April 9th
      2. Elkhorn Logan Valley Public Health Department, Norfolk, April 23rd
      3. Two Rivers Public Health Department, Kearney, April 25th
      4. Public Health Solutions, Crete, April 30th
      5. Douglas County Health Department, Omaha, May 10th
      6. Public Health Solutions, Crete, July 12th
      7. Elkhorn Logan Valley Public Health Department, Norfolk, July 17th
      8. South Heartland District Public Health Department, Hastings, July 22nd
      9. Douglas County Health Department, Omaha, July 26th
     10. Two Rivers Public Health Department, Kearney, July 30th
   2. No

21. Do you think Nebraska should have a statewide certification program for community health workers as some other states do (e.g. Arizona, Florida, Indiana, Massachusetts, New Mexico, Ohio, Oregon, Rhode Island, and Texas)?

   1. Yes
   2. No

21a. Why do you believe Nebraska should or should not have a certification program?
Appendix D – Key Stakeholder Interview Questions

Question: Are there community health workers working in your organization now?

(If yes)
Qa. Could you describe their major responsibility and role in the organization?

Qb. Do they provide any services to improve reproductive, women, newborn and infant health? Please specify.

Qc. How is their work supervised and supported? Are they full-time employees?

Qd. Have they received any job-related training since they started their position in your organization?

Question: To date 15 states in the U.S have developed certification programs for community health workers. Nebraska is not one of them. Do you think Nebraska should have its own certification program for community health workers? Why?

Qa. What would you include in a statewide certification training course?
## Appendix E – Expanded Qualitative Data Results

### Table 4: Focus group discussions and key informant training gap themes

<table>
<thead>
<tr>
<th>Source</th>
<th>Theme</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD</td>
<td>Communication and sensitive topics</td>
<td>I took a training called bridges out of poverty. And I think that was one of the most useful tools for me to learn about poverty as a culture. And I wish it had been in our community health worker class because I think it's a really good training.</td>
</tr>
<tr>
<td>FGD</td>
<td>Communication and conflict management</td>
<td>…to have a little bit more knowledge on the behavioral aspect of it and how to approach a patient who breaks down crying and know what to do and why and how...</td>
</tr>
<tr>
<td>FGD</td>
<td>Knowledge of population</td>
<td>…would be really helpful to just know a little bit more about the patients they see…</td>
</tr>
<tr>
<td>FGD</td>
<td>Cultural Competency</td>
<td>But I really feel like trainings, there has to be some kind of cultural training. It doesn't even matter. I would love to have Vietnamese, Sudanese, whatever it is, I would like to learn myself so I know, and I can be respectful towards them. It's a lot, but I think it's important.</td>
</tr>
<tr>
<td>FGD</td>
<td>Standardization of knowledge</td>
<td>I think it would offer valuable initiative training that would add a level of comfort and confidence in having clear lines to follow and adding a benefit of showing available resources that can be utilized. I feel this would help the CHW be more apt and productive.</td>
</tr>
<tr>
<td>FGD</td>
<td>Standardization of knowledge</td>
<td>…I was only trained on what-- exactly what I needed to put into it.</td>
</tr>
<tr>
<td>Key informant</td>
<td>Organization improvement</td>
<td>I think that would probably be one of the (organization’s) biggest opportunities for growth. It's having a more robust… informal like, not only an onboarding training but like a kind of skillset maintenance.</td>
</tr>
<tr>
<td>Key informant</td>
<td>Organization Improvement</td>
<td>I think we will be stronger if we start to implement some regular training.</td>
</tr>
</tbody>
</table>
**Table 5: Certification preference themes**

<table>
<thead>
<tr>
<th>Certification Preference</th>
<th>Theme</th>
<th>Quote</th>
<th>Number of times mentioned</th>
</tr>
</thead>
</table>
| Yes                      | Standardization of Knowledge | *Certification can help to ensure appropriate training and skills that are universal throughout the state and communities.*  
A state-wide certification program would ensure that community health workers had an adequate amount of knowledge to help seek out health services for the people they support  
*I believe Nebraska should have a certification program to ensure the understanding of the industry. Also, to work in health care as a CHW you are allowed to perform certain activities such as vitals or medication administration that requires a certification.* | 41                        |
| Yes                      | Validation             | *It would provide more community awareness of what services can be provided. It can help with continuity of care. The individual would be seen more as a professional and valued by medical providers.*  
*Because this would demonstrate to providers that whomever holds that certification has the core competencies to perform their job. I feel like we are often not seen as professionals in this field and that can hurt gaining buy in from providers.* | 37                        |
| Yes                      | Community benefit      | *I think that with this we will have more capacity and be able to serve the community better.*  
*To ensure parity of services*  
*Great opportunity to help people who wish to help their community gain respect and support in the Community Health Worker profession* | 28                        |
| Yes | Professional advancement | because we need more promotion opportunities to grow and getting a certificate can help us on getting a better job  

*It would ensure that if I wanted to move to Lincoln as an example, I would be able to find work as a CHW because certification is statewide.* | 15 |
| Yes | Accountability | *Having a statewide certification program ensures that all CHW has the same basic training and therefore clients/patients can expect the same levels of care regardless of the area or county.*  

*Having ill trained or non-trained CHW presents dangers.*  

*It provides us a chance to hold ourselves accountable and achieve better standards for the people we serve.* | 8 |
| Yes | Socialization opportunities | *It will also give community health workers the opportunity to talk to each other to gain resources, share experiences and give advice, and offer support to each other.*  

*I think it would be helpful for the social aspects of CHW (diversity, inclusion, etc.)* | 3 |
<p>| No | Against definition of a CHW | <em>I feel that skills necessary to do Community Health Work are typically learned on the job and from experience out working with families in the community.</em> | 10 |</p>
<table>
<thead>
<tr>
<th>No</th>
<th>Barriers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I also believe it could limit how many people are able to go through it.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Time: I couldn't take the time away from work.</td>
<td></td>
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<tr>
<td></td>
<td>Language: ... I don't think this certification program should require of all CHW, since it will most likely only be available in English.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Requirements: Just one more thing for volunteers to do.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Literacy levels</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Job-specific certification previously in place</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Not necessarily if someone has a degree related to the work of a community health work, such as a degree in Public Health and so on.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>...as a Community Support Worker in the mental health &amp; addiction field in Nebraska we already have Medicaid DBHHS Service Definitions &amp; standards set by CARF that we adhere to within our agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We already have a certification process in our business...</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Lack of evidence</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>There is no evidence that CHW with certification perform better job. The relationship and trust-building involve skills and traits that are no easily taught.</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Lack of definition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Because 'community health worker' is an extremely broad term, that covers nurses, interpreters, breastfeeding counselors, housing specialists, legal aid, etc. It would be hard to identify who actually needed to attend the certification program.</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Not enough information provided</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I am unaware of such programs and have no true educated opinion.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am not against it just not sure I have all the information to say one way or another</td>
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<tr>
<td>Certification Preference</td>
<td>Theme</td>
<td>Quote</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Yes</td>
<td>Accountability</td>
<td>“I like the idea of, um, the certification because it does, um, provide some accountability for those people that are working as a community health worker and some continuity in what they're, they're learning and what they know.”</td>
</tr>
<tr>
<td>Yes</td>
<td>Standardization of skills</td>
<td>“...The call to public health and the nuance skillset that it has, that goes into this kind of work... it's ever changing. That's like the one thing you can count on is like trends and advances and things like that. So, it only makes sense to have, um, a certification process. A formalized road for education and ongoing education. So, I would support that hands down.” “I would want to be careful that we make sure that we keep our perspective of community health workers really broad. And I've also said to entities as you hired my health workers, if they have that foundational training, then you can train them based on what you want them to do within your entity.”</td>
</tr>
<tr>
<td>No</td>
<td>Barriers</td>
<td>Transportation, Time, Literacy levels, Language barriers, Not wanting to return to school</td>
</tr>
</tbody>
</table>
| No | Lack of organizational structure | Lack of employment opportunities: *Why have a certification if you don't really have an established framework to, to sustain them, you know, what you kind of, if you're going to have an established framework to have to reimburse for them and um, you know, financially support the operation of them, then you probably want some sort of, um, standard in place.*

Lack of core competencies: *When we think about certification, I think we've got to make sure we're not getting too far into the realm of, of maybe a specialty. Um, and just think really foundational. What would any community health worker get would need to be dependent on database but not dependent on the populations that may be serving.* |
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<tr>
<td>5</td>
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</tbody>
</table>
Jessica Ern received her Bachelor of Science from Creighton University in 2011, with a major in Biology and minors in Mathematics and Environmental Science. After graduation, she worked as a Behavioral Analyst for the State of Colorado Department for Health and Human Resources. She then worked as a respite caregiver for at risk youths for the State of Illinois Department of Health Human Services. At this time, Jessica returned to receive a graduate certificate at the University of Michigan School of Public Health at Ann Arbor in the Foundations of Public Health in 2015.

In 2016, Jessica attended the University of Nebraska Medical Center School of Public Health to obtain her Master of Public Health degree in the Maternal and Child Health Concentration, where she is in her final semester. In 2017 – 2018, Jessica was Leadership Education in Neurodevelopmental and Related Disabilities (LEND) Trainee, at the Munroe-Meyer Institute at UNMC. In 2018, she began a graduate research position at UNMC’s Center for Reducing Health Disparities, where she focused on the first statewide assessment of Community Health Workers in Nebraska. In her time at UNMC, Jessica’s interests have included refugee health, racial and ethnic health disparities, and cultural competencies. In 2019, she won the Student Senate Student Impact Award.
Jessica Ern

Curriculum Vitae
jessica.ern@unmc.edu
(303) 775-1445

Education

Master of Public Health
University of Nebraska Medical Center, College of Public Health
Maternal and Child Health Concentration
Expected May 2020
Omaha, NE

CAPSTONE: A Statewide Needs Assessment of Perspectives on Training and Certification of Community Health Workers in Nebraska.

Student Alliance for Global Health Medical Immersion Program
University of Nebraska Medical Center
March 2016
Estelí, NI

Graduate Certificate in the Foundations of Public Health
University of Michigan School of Public Health
May 2015
Ann Arbor, MI

Bachelor of Science in Biology
Creighton University
August 2011
Omaha, NE

Minors in Mathematics and Environmental Science

Study Abroad: St Louis University Madrid Campus
Spring 2010
Madrid, Spain

Teaching Experience

Spring 2020  Teaching Assistant, Program Planning and Evaluation, Department of Health Promotion, University of Nebraska College of Public Health, Omaha, NE

Fall 2019  Teaching Assistant, Program Planning and Evaluation, Department of Health Promotion, University of Nebraska College of Public Health, Omaha, NE, Online

Spring 2019  Teaching Assistant, Program Planning and Evaluation, Department of Health Promotion, University of Nebraska College of Public Health, Omaha, NE

March 2017  Student Alliance for Global Health Medical Immersion Program Leader, University of Nebraska College of Public Health, Omaha, NE

Spring 2011  Teaching Assistant, General Biology: Cell and Molecular, Biology Department, Creighton University, Omaha, NE

Fall 2010  Teaching Assistant, General Biology: Organismal and Population, Biology Department, Creighton University, Omaha, NE
Professional and Community Engagement Experience

2018 – Current  Center for Reducing Health Disparities Research Assistant, University of Nebraska Medical Center, Omaha NE

2016 – 2018  Kohll’s Pharmacy Durable Medical Equipment Manager, Omaha, Nebraska

2017 – 2018  HRSA Maternal & Child Health Bureau Leadership Education in Neurodevelopmental and Related Disabilities (LEND) Trainee, Munroe-Meyer Institute (MMI), Omaha, Nebraska

2017 – 2018  Student Alliance for Global Health Nicaragua Medical Immersion Program Leader, University of Nebraska Medical Center

2017  Planned Parenthood of the Heartland Policy and Advocacy Intern, Planned Parenthood of the Heartland, Lincoln, Nebraska

2016 – 2017  Department of Epidemiology Graduate Assistant, University of Nebraska Medical Center College of Public Health, Omaha, Nebraska

2015 - 2016  Kohll’s Pharmacy and Homecare Wellness Plan Coordinator, Omaha, Nebraska


2011-2013  Behavior Analyst, Colorado Department of Human Services, Wheatfield, Colorado

Research Experience

February 2019 – Present  Statewide Assessment of Community Health Worker Workforce: Nebraska, UNMC

January 2018 – Present  Assessing the Biopsychosocial Needs in Rural Nicaragua, Estelí, UNMC

August – December 2019  Assessment of Parental Sexual Health Education Classes, OneWorld, Omaha NE

October 2018 – August 2019  Strengthening the Community Health Worker Workforce to Improve Maternal and Child Health in Nebraska: A Qualitative State-Wide Assessment of Needs, Barriers, and Assets; Nebraska, UNMC
October 2017 – May 2018  Qualitative Assessment of Refugee Disabilities in Nebraska, Munroe-Meyer Institute, UNMC

October 2017 – May 2018  Assessment of Legal Needs of Refugees in Lincoln, Nebraska, Munroe-Meyer Institute, UNMC

October 2017  Analysis of Gang Violence in North Omaha, YouTurn; Omaha, Nebraska

August 2016 - March 2017  Physical Activity and Food Availability Assessment of Omaha, NE, UNMC COPH Department of Epidemiology

2011- 2013  Denver Museum of Nature and Science Research Assistant, Genetics of Taste Laboratory under Nicole Garneau, PhD and Richard Mattes, PhD

Publications, Posters, and Presentations


Su, Dejun; Toure, Drissa; Do, Kandy; Latt Nlam, Naw; and Ern, Jessica, "Refugee Health Needs Assessment in Omaha, Nebraska" (2017). Reports: Center for Reducing Health Disparities. 2.
Professional Development

**Computer Skills:** Microsoft Office Suite, SPSS, SAS, Stata

**Memberships:** Global Health Council (2016-Present), Public Health Association of Nebraska, Student Section (2016-Present), American Public Health Association (2016-Present), Student Alliance for Global Health (2016-Present)

**Volunteer:**

2019 – 2020  Bridge to Care, Refugee Adolescent Professional Development Program Coordinator, University of Nebraska Medical Center

2016 - 2019  DoJustice, HIV/STI Counselor, University of Nebraska Medical Center

2015 - 2019  Nebraska AIDS Project, HIV/STI Counselor, Omaha, Nebraska

2017 – 2018  Fostering the Future, Health Educator and Health Fair Coordinator, University of Nebraska Medical Center

2017 – 2018  SHARING Clinic, College of Public Health Representative, University of Nebraska Medical Center

2016 – 2018  Public Health Association of Nebraska, Student Section Chair, Nebraska

2016 – 2018  Bridge to Care, Health Educator, University of Nebraska Medical Center

2016 - 2017  Refugee Health Care Navigation Program Leader and Volunteer Coordinator, DHHS and UNMC’s Bridge to Care; Omaha, Nebraska

2015 - 2016  Child Life Volunteer, University of Nebraska Medical Center

**Honors and Awards**

Spring 2019  University of Nebraska Medical Center Student Impact Award