

An Action Research Approach to Expand the Roles of Community Health Workers in Illinois

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DISSERTATION

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DEDICATION

This dissertation is dedicated to, Yashica, my loving and supportive wife; my daughters, Yesenia and Yesmeen; and many family and friends. To Welborn and Peggy Danner, you are the best! Thank you for your love, support, and initiative to be so instrumental in my life. Your words of encouragement and push for tenacity ring loudly in my ears. The members of my dissertation-writing group—Linda and Jim—thank you for the support and the motivation. I am appreciative for all you have done. Last, I give a special thanks to my mentor, Dr. Julius Scott, for being a great supporter and role model in academia. Dr. Scott taught me the value of *carpe diem*.

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LIST OF ABBREVIATIONS

ACA	Patient Protection and Affordable Care Act
APHA	American Public Health Association
CDC	Centers for Disease Control and Prevention
CHR	Community health representative
CHW	Community health worker
CMS	Centers for Medicaid and Medicare Services
FQHC	Federally qualified health care centers
HB-5412	Illinois House Bill- 5412
HRSA	Health Resources and Services Administration
ICCB	Illinois Community College Board
ROI	Return on investment
SSC	South Suburban College
UIC	University of Illinois at Chicago
WHO	World Health Organization

SUMMARY

BACKGROUND: Community health workers are becoming widely used across the United States. However, individual states have approached the utility of this workforce differently. For several years within Illinois, different organizations have taken the leadership to mobilize this workforce. However, to address the sustainability of this workforce, an effective strategy must be cleared before receiving legitimacy for community health workers in Illinois.

OBJECTIVE: The objective was to conduct a policy evaluation of a CHW training program addressing practical problems by creating a college credit, stackable curriculum for community health workers in Illinois. This policy evaluation will explore statewide provisional drivers, which would guide the clarification and expansion of the roles of community health workers in Illinois; and make recommendations for action based on the research findings.

METHODS: Action research was the methodological approach used in this study. This approach was used to solve three practical problems. The first was the need for the development of a statewide CHW curriculum to support the creation of a workforce development policy for community health workers. Second was to support a research study that used a qualitative approach to assess the value of community health workers. The third was how to effectively mobilize this workforce by identifying drivers for readiness. Data was collected using semi-structured interviews, focus group discussions, literature review, and document review. The audio data collected was then transcribed, and themes were identified based on the interviews and focus groups. The interviews and focus groups included employers and leaders of community health workers familiar with the roles of CHW.

RESULTS: A statewide curriculum was developed, approved by the Illinois Community College Board (ICCB) and the Illinois Board of Higher Education (IBHE). The

SUMMARY (continued)

qualitative data revealed themes that would provide drivers available in Illinois that would clarify and expand the roles of community health workers. The salient themes that emerged across participants communicated the readiness to adopt community health workers in Illinois: policy; financial and sustainability; academic; and attitudes, values, and belief drivers.

CONCLUSION: Research supports the unique role of community health workers. The literature advocates for stronger community health worker networks to support underserved communities that are in need of change. Relevant factors include the following: providing formalized academic options for community health workers in Illinois; identifying formal and informal models of standardized training in Illinois; illustrating drivers for community health workers to facilitate the readiness and adoption by employers to engage this workforce; validating the knowledge, attitudes, beliefs, and perceptions of community health workers in Illinois; involving public health leadership with workforce-development activities of community health workers; informing public health leadership of the utility of community health workers; filling gaps of knowledge; and dispelling misperceptions. Lastly, in order to establish a community health worker infrastructure in Illinois, the stackable credentials and the qualitative inquire with leadership must lead to changes in how we value community health workers, then you will see real policy change for community health workers.

I. INTRODUCTION

A. Statement of the Problem

There are barriers nationally to the adoption of a standardize curriculum and to securing sustainable funding that supports community health workers' employment as well as training. These were also identified and remain as barriers in developing a statewide workforce of CHWs in Illinois. In moving toward health equity using a more sustainable and well-funded community health workforce, public health leaders may have divergent views on how CHW training can be structured and legitimized to reflect quality and impact while responding to traditional barriers in low-income communities.

In Illinois, community health workers (CHWs) are trained in a variety of ways - community-based/informal training or formal in traditional institutions of higher learning. Both approaches serve a purpose and are relevant. In addition to training, intentional funding is needed to sustain the work of community health workers.

B. Purpose of the Study

The purpose of this study was to solve practical problems by developing a statewide college credit curriculum for community health workers, to explore statewide provisional drivers to clarify and expand the roles of CHWs in Illinois, and to make recommendations based on the described resources. The action research approach used to explore the drivers to expand the CHWs' role in Illinois employed a qualitative research approach to measure perceptions, attitudes, and beliefs of public health leaders and to identify the drivers for readiness and adoption of CHWs in Illinois.

My inquiry objectives were as follows:

1. Discuss a historical overview of attitudes, beliefs, perceptions, and knowledge of the use of CHWs in Illinois.
2. Synthesize what other states have done with respect to drivers for readiness and adoption of the CHW workforce.
3. Conduct a policy evaluation of a CHW training program by interviewing public health leaders on workforce development drivers for readiness and adoption of a CHW workforce.

CHWs are more popular than ever, and organizations are using CHWs and *promotores de salud* (the Spanish term for the CHW position in Spanish-speaking communities) to report the lack of health equity in underserved communities (Satterfield, Burd, Valdez, Hosey, & Eagle Shield, 2002). In 2002–2003, the need for CHWs in the Chicago metropolitan area also expanded. A robust infrastructure that addresses sustainable funding, training, evaluation, and education is necessary to integrate community health workers into the health care delivery systems respectfully and effectively (Witmer, 1995). The mention of CHWs in the Patient Protection and Affordable Care Act ([ACA], 2010) gives the research significance as a mechanism to expand CHW roles in the state of Illinois.

C. Significance of the Study

The significance of this study relates to the need for a wide-ranging review of the factors that impact the promotion, development, implementation, and maintenance of CHWs. These factors relate to the roles and responsibilities of personnel at different institutions, including academic, government, nonprofit, and professional health care organizations. The process for the creation of CHW workforces is complex and requires perspectives from multiple stakeholders.

This study gains insight into the vast body of knowledge held by those with direct experience in CHW promotion, development, implementation, and maintenance.

D. Background

The literature states there is great need for CHWs in underserved communities.

Comorbidities such as high blood pressure and diabetes have a disproportionately high impact in the underserved, low-income, minority communities where CHWs live and work. An emphasis on quality might reduce readmissions and, therefore, assist community hospitals, whose clients are from underserved communities that continue to experience higher rates of health inequity.

Underserved communities qualify for federal and state entitlements. Up-to-date information is critical within low-income communities in order to secure funding. CHWs serve as a tool to ensure the delivery of up-to-date information to underserved populations. CHWs also navigate underserved communities to provide access to health care services and educate community members on the complexities of choosing a health care plan through the Affordable Care Act. (ACA).

At least five states (Alaska, Massachusetts, Minnesota, Ohio, and Texas) have created statewide mechanisms to expand CHWs' role. In those respective states and from a policy perspective, the ACA has given CHWs a platform to be recognized as members of the medical team that addresses health equity. In addition, the ACA has raised the profile of CHWs by authorizing leaders at the Centers for Disease Control and Prevention (CDC) to promote the use of CHWs in medically underserved communities. The ACA has allocated federal funds to expand community-based-care settings in which CHWs may live and work (ACA, 2010).

CHWs have historically had challenges with standardized training opportunities. These challenges have made it difficult for credits for trainings to be portable. Illinois is home to a

diverse workforce whose job functions are similar, but whose job titles vary greatly. CHWs are working under many job titles. These titles are a result of grant writing creativity. Titles are developed based on the grant being sought after, which is unfortunate for legitimacy purposes. A sample of these job titles are listed below in Table I.

TABLE I
COMMUNITY HEALTH WORKER TITLES OVER TIME

Care coordinator	Addiction treatment specialist
Caseworker	Asthma educator Advocate
Community-based doula	Asthma family support worker
Community follow-up worker	
Community health advisor	Case management technician
Community health advocate	Diabetes family support worker
Community health outreach worker	HIV/AIDS family support worker
Counselor	Mental health aide
Cultural interpreter	Natural researcher
Cultural mediator	Nutrition advisor
Eligibility worker	Nutrition educator
Family advocate	Pre-perinatal health specialist
Family support worker	Outreach worker
Health advocate	Patient navigator
Health aides	Peer educators

CHWs are part of the nonclinical staff of a health or social services organization. Community health workers navigate their clients through these systems by supporting, strengthening, and expanding programs in underserved communities to improve community health by reducing barriers in health services, promoting health equity and working to improve the social determinants of health (SDOH).

Funding has also been a challenge in sustaining and expanding the roles of the CHW workforce. To create a more sustainable and well-funded community health workforce, leaders of statewide organizations and other stakeholders believe that standardization may address the challenges of inconsistent training and funding.

Government-generated appraisals of the number of CHWs in the United States range from 38,000 to 121,000 (Bureau of Labor Statistics, 2016; Health Resources and Services Administration [HRSA], 2007; O*NET Online, 2016). The projections of employer demand are favorable for an increase of 20–28% between 2010 and 2020. This rate is higher than the projected national average for all occupations and places CHWs in the fourth fastest growing job group among community and social service jobs (Locker & Wolf, 2012).

According to the BLS, Illinois has the third largest number of currently employed CHWs, in the United States. Nationally, the average hourly wages for CHWs are \$18.02; in Illinois, average CHW hourly wages are \$17.99 (Bureau of Labor Statistics, 2016). Conservative estimates indicate there were at least 2,130 CHWs in Illinois in May 2012 (Bureau of Labor Statistics, 2012). To follow the historical progression of the community health worker efforts, Table II was created.

TABLE II. HISTORICAL PERSPECTIVES ON COMMUNITY HEALTH WORKERS IN ILLINOIS

Dates	Activities
1997–1998	Meetings held with Rosalind Frye, Daley College Early Childhood Education Program, at the Chicago Department of Public Health to discuss the possibility of developing a CHW curriculum at Daley College.
1999–2000	An expanded group of professionals who had either trained or employed CHWs held several meetings to continue to discuss the feasibility. Ms. Frye from Daley College attended all group meetings. Some members solicited and reviewed curricula from places around the country (see below) or shared materials obtained from American Public Health Association and other conferences they had attended. In August 2000, Daley College was ready to proceed with the program. In preparation, Daley decided to survey potential employers to determine the knowledge and skills workers should have either to enter the employment market or to improve their existing skills.
2002	The working group completed the feasibility study and surveyed employers of CHWs in the area about their attitudes and experience with CHWs. The names of most agencies derived from the 1999 edition of the United Way Directory of Organizations providing services in Northern Illinois and Indiana.
2002–2004	A working group met and identified core areas of study, curriculum for each area, and potential instructors and students for the courses. Examples of resources used: <i>Standards of Practice Manual for Community Health Workers and Community Health Occupations</i> , a resource created by the Community Health Workers of San Francisco, San Francisco State University, and City College of San Francisco, as a model for achieving certification. The Arizona AHEC Program, University of Arizona, for CHW areas of work competency. U.S. Department of Education, Fund for the Improvement of Postsecondary Education for learning objectives and assessment measures. A curriculum developed for the internal training of public health aides at the Chicago Department of Public Health.
2003	Under Rachel Abramson, the Chicago Community Health Worker Local Network was established with staff and offices at Health Connect One with Laura Bahena, network coordinator, and Alfredo Lopez, network organizer. Meetings were held approximately every Friday to discuss CHW training; the local network board meeting is a working committee meeting focused on training and certification.

TABLE II (continued). HISTORICAL PERSPECTIVES ON COMMUNITY HEALTH WORKERS IN ILLINOIS

Dates	Activities
2005	<p>A version of the basic course was taught to students at the West Side Technical Institute (Richard J. Daley College). Some members of the working group collaborated with Daley College staff to obtain permission from the Illinois Community College Board to offer the course.</p> <p>Instructors for this course were paid by Daley College and included Cynthia Williams (Sinai Community Institute) and Michael Hunter, Bertha W. Toney, and Jamila- Ra (Chicago Department of Public Health).</p> <p>In July, the final review of the CHW curriculum for finalization of the application to the Illinois Community College Board took place. The Illinois Community College Board ultimately approved the curriculum.</p>
2006	<p>The CHW course was published in the Spring-Summer Catalogue of the West Side Technical Institute (Richard J. Daley College). It would have been offered under Continuing Education. No students enrolled in the program.</p>
2009–2010	<p>Citywide meetings held to discuss CHW issues. As has been true since 1997, major disagreements focused on the value and need for certification and needs for different work settings: community-based organizations, public health settings, clinics, and hospitals. Two divergent views prevailed. One saw the CHWs working for health as part of community development but not leading to a career within a health or social service system. The other position viewed certification as an important step to create a career path for CHWs to become supervisors or to be eligible to study for another health position.</p>
2011	<p>Laura Bahena, committee members, and CHWs visited Truman College, St. Augustine's College, and other area colleges to determine interest in a CHW training course.</p>
2012	<p>Jeffery Waddy, Dean of Health Professions, Communications, Humanities and English at South Suburban College, expressed an interest in the CHW curriculum and began collaborating with the group to establish a CHW Training Program at South Suburban College. He planned to submit the curriculum to South Suburban College and then to the Illinois Community College Board for statewide approval. CHW Local Network solicited letters of support that South Suburban College can use for the submission to the Illinois Community College Board. CHW Local Network hosted focus groups to determine CHW interest in the Daley</p>

TABLE II (continued). HISTORICAL PERSPECTIVES ON COMMUNITY HEALTH WORKERS IN ILLINOIS

Dates	Activities
	College/South Suburban College Course.
2013	Illinois House Bill 5412 was passed, a bill created to form a CHW Advisory Board.
2015	IL Community Health Worker Advisory Board was created by the Governor with 15 appointed members.
2016	The IL Community Health Worker Advisory Board submitted the report with recommendations to create a solid CHW infrastructure.

E. Leadership Implications and Relevance of Policy Drivers

A developing body of literature supports the distinctive roles of CHWs. The literature supports the use of CHWs to strengthen access to health care services, opportunities for uses in social service support, conducting health education, and creating health equity in communities with a stimulus for action. As a requirement for the DrPH program, my research must demonstrate Public Health Leadership Implications. Therefore, in the discussion chapter of my dissertation, I will expound on the bullet points below, which illustrates the relevant leadership activities including the following:

- Provide formalized academic options for CHWs in the state of Illinois.
- Validate the knowledge, attitudes, beliefs, and perceptions of CHWs in Illinois.
- Identify formal and informal models of standardized training in Illinois.
- Illustrate drivers for readiness and adoption of CHWs that will facilitate the readiness of employers to engage this workforce.

- Involve public health leadership with workforce development activities of CHWs.
- Inform public health leadership of the utility of CHWs and fill gaps of knowledge and misperceptions.
- Evaluate statewide policies that address community health workers.
- Lead policy makers in meaningful discussions about creating an ideal infrastructure for community health workers in Illinois.

F. Research Questions

Based upon my study purpose, my research questions were as follows:

1. What are the statewide drivers for public health leaders in moving toward readiness and adoption of a CHW workforce?
2. How are Illinois employers using CHWs in health care workplaces? What are the drivers of readiness and adoption and restraining factors related to policy?
3. What are public health leaders' perceptions and knowledge of the value of CHWs in addressing health equity in Illinois? What are the perceptions of CHW leaders to the stackable credentials for CHWs?
4. How can the leaders of academic institutions, such as community colleges, respond to the workforce drivers to promote quality public health outcomes through stackable career laddering and pathways?

II. CONCEPTUAL AND ANALYTICAL FRAMEWORK

A. Literature Review

1. Early Mentions of Community Health Workers

In 1949, Chinese Chairman Mao Tse Tung created a class of medical workers called the

barefoot doctors. They were mobilized to travel the underserved areas of China to deliver medical care to Chinese people who had no access to health care. The program provided basic primary health care and outreach (Perez & Martinez, 2008).

In 1950, the *promotoras* model was utilized within Latino underserved communities. Mexico and the United States recognized chronic disease and domestic violence were on the rise. In response, both nations attempted to promote access to health care in underserved communities (Wiggins & Borbon, 1998).

The World Health Organization (WHO), during the Alma Ata International Conference, recognized community health workers. WHO brought the work CHW do to the forefront by acknowledging the important service they provided by promoting primary health care, enhancing access, and creating a strong infrastructure of health systems around the world (HRSA, 2007).

The United States further pushed the CHW movement in the 1960s. The New York City Health Department first mentions of community health workers in relation to working with the tuberculosis program. This program employed health aides to improve the health outcomes in underserved communities. The government began to support CHW programs and to assist with addressing health care issues within underserved communities. With government collaboration, it was mandated that outreach workers work in underserved communities and camps for migrant workers. This mandate produced positive outcomes with regard to physical health (Wiggins & Borbon, 1998).

In 1968, another program was created that was centered on health equity in the American Indian and Alaskan Native communities. The government named these workers community health representatives (CHRs). The CHR is one of the oldest and largest programs to improve health outcomes in at-risk communities. This program employed approximately 1,400 CHRs

from a number of American Indian and Alaskan native tribes (Indian Health Services, 2011).

The Resource for Mothers Programs were established in 1980 by the Virginia Task Force. These programs were created to prevent infant mortality in underserved communities in the US. The programs provided case management services and made home visits to expectant mothers and babies. This strategy was directed toward improving health outcomes of mothers in the prenatal and postnatal stages (HRSA, 2007).

In 1990, Dr. Harold Freeman witnessed a large number of poor patients recently diagnosed with cancer during the late stages. Dr. Freeman believed these same patients did not have access to preventive care and screening. Therefore, the first patient navigation program was created at Harlem Hospital (Freund, 2010).

The CDC may be the biggest supporter of CHWs and developing training to improve the work of community health workers. The CDC developed the first comprehensive depository for CHW trainings, journal articles, and research practice information. This national database served as a resource for the promotion of the work of community health workers (CDC, 2005).

2. Significant Advancements in the CHW Profession

The Institute of Medicine (2010) recommended including community health workers in the health care delivery systems to address racial and ethnic disparities (Smedley, Stith & Nelson, 2003) and stated that CHWs work within minority communities where there is little to no “access to health care and to serve as a liaison between health care providers and the communities they serve...” (p. 15).

The ACA, 2010 recognizes the work of community health workers. It highlighted the important aspects of community health and the opportunity for continued education, training, and empowerment of the CHW workforce. This distinction in the ACA gives relevance and urgency

to the legitimization of CHWs' contribution to the health care workforce and the efforts to standardize training, education, and certification.

The need for CHWs is not only a local issue, but also a national problem. In light of the ACA, the employment of CHWs by health care and social service providers has grown, and CHWs' effective contributions to health outcomes have been extensively described. For example, in managing diseases such as hypertension and diabetes, improving birth outcomes, and maintaining child wellness (Rosenthal et al., 2010). As a result, there has been increasing recognition by health care and social service providers and by the government regarding CHWs' important role. At the federal level, the U.S. Office of Management and Budget approved the Standard Occupational Classification 21-1094 expressly for CHWs (Bureau of Labor Statistics, 2010). This gave the CHW role nationally the same employment status as other roles such as health educators, nurse assistants.

3. Scope of Practice for Community Health Worker

CHW's scope of practice has extended around the world in underserved communities where health care is limited and access is nonexistent. Researchers have demonstrated the effectiveness of using CHWs globally. For example, Brazil, Iran, India, Tanzania, Mali, and Mexico have all used CHWs to improve the health outcomes within the communities served (WHO, 2011).

Even in developing countries, the work of CHWs is to bridge the gaps of access to health care in underserved communities. CHWs identify the barriers to accessing care and solve problems by using innovative ways to link their clients to adequate care and resources. CHWs have value in underserved communities by assisting residents to navigate through the complexity of the health care system (New York State Health Foundation, 2014).

Research has shown that CHWs are becoming more involved with research teams.

However, they need more formal training in research methodology and ethics. The standardization of CHWs scope of practice in Illinois will bridge the gap for training and will assist CHWs with their roles in supporting better community health outcomes (Dumbauld, Kalichman, Bell, Dagnino, & Taras, 2014).

CHW programs in the United States seem to have become relevant because of health inequity or lack of health equity in black/brown communities, location, and underserved communities. There are three impactful events that direct the development of the CHW workforce; the National Labor Statistic Survey identified the following: (a) community college formal education provides opportunities for CHWs; (b) formalized on-the-job training improves standard of care and improves the livable wages of CHWs, and (c) certification at the state level legitimizes the work of CHWs (Kasha, May, & Tai-Seale, 2007).

Employers have questioned CHWs' cost-effectiveness, even though research has demonstrated the value of engaging CHWs in underserved communities. This position is moving in favor of using more CHWs. As the literature grows, there will be more definitive research with regard to the cost-effectiveness of using CHWs. Current trends involve evaluating the existing research, which validates the use of CHWs and the value they bring to underserved communities (Rush, 2012).

4. Community Health Workers and Care Coordination

Several states have partnered with managed care organizations to provide a model that involved a more direct approach to individualized care. The states that led this initiative have seen positive results in overall health outcomes in the communities that used CHWs for coordination of care. Some of these tasks involved home visits and monitoring health after

discharge from the hospital. These would be examples to follow as Illinois develops its CHW workforce.

5. Use of Community Health Workers' Approach to Chronic Diseases

Data show some promising results with CHWs addressing morbidity. There is significant research that demonstrates positive outcomes with CHWs addressing asthma, diabetes, and maternal and child health issues. Many researchers have cited the efficacy of CHWs with various populations (Chang, Taylor, Masters, Laifoo, & Brown, 2008). The positive outcomes range from increased rates of immunizations to compliance with controlling chronic illness, and higher breastfeeding promotion to more preventative health screening (Lewin 1958). In addition, research studies have shown that CHWs can be credited with positive outcomes such as increased mammography, improved diets, increased asthma self-management for children, improved management of hypertension and addressing depression (Dale, Caramalau, Lindenmeyer, & Williams, 2008).

Coordination and prevention of care are functions CHWs have performed for many years, especially in communities that lack health equity and other resources. For these functions CHWs are mostly employed by two systems—the managed care organizations (MCOs) and primary care medical home (PCMH) models (Martinez, Ro, Villa, Powell, & Knickman, 2011).

6. Community Health Worker Workforce

CHWs have become strategic tools in the United States health care delivery system. Their roles are expanding into noteworthy responsibilities in health literacy. However, the absence of standardized training is a barrier to employment. The CHW profession requires standardized training and education in the community and in formal settings to address the skills and knowledge of CHWs (Love, Legion, Shim, Tsai, Quijano, Davis, 2004). As an example, the

CDC Division of Diabetes Translation has endorsed the use of CHWs to deliver health information within low-income communities that lack health equity. The CDC continues to make strides and innovation when it comes to incorporating community health workers in underserved communities. The overall outcome is to improve health and eliminate inequity. (Cherrington, Tang, & Ayala, 2012).

Employing CHWs have value in addressing health equity in low-income communities and disseminating health information in terms their clients can understand. Typically, CHWs have very little formal education. They are, however helpful with providing subtle, impactful interpretations of health care to specific ethnic groups (Foster, Taylor, Eldridge, Ramsay & Griffiths, 2008).

CHWs have become a popular workforce for addressing social determinants of health through policy change associated with health equity. They have also worked to improve the health care delivery services to reduce health inequity for more than 60 years (Balcazar et al., 2011).

HRSA (2007) defined CHWs as:

Lay members of communities who work either for pay or as volunteers in association with the local healthcare system in both urban and rural environments and usually share ethnicity, language, socioeconomic status, and life experiences with the community members they serve. They have been identified by many titles such as community health advisors, lay health advocates, *promotoras*, outreach educators, community health representatives, patient navigators, peer health promoters, and peer health educators.

CHWs offer interpretation and translation services, provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individual and community health needs, and provide some direct services such as first aid and blood pressure screening.

CHWs improve consumer access to health insurance coverage, model and encourage clients in healthy behaviors, monitor health status, educate consumers with basic information about disease prevention or reduction, and make consumers aware of resources to improve

health. They are trusted frontline public health workers. The value is that CHWs live in the same place they serve or work in similar communities. They have a unique vantage point from which to understand and explain the health problems that members of their communities face and to identify and implement workable solutions (American Public Health Association, 2015).

7. Community Health Worker Workforce Development

Traditional workforce models have been used as a strategy to change the economic status of CHWs. Developing a strong workforce of CHWs from the community will increase the ability for underserved community residents to earn competitive living wages. Workforce development could also provide opportunities for further education, which is a direct path to increasing living wages (Giloith, 2000).

Moreover, the American Workforce Investment Act of 1998, was created to show the importance of leveraging developed concepts throughout the marketplace, on the state and local level, to encourage community participation by creating worker skills and addressing training gaps. The act also supported the increasing credibility of CHW's as professionals through the creation of industry clusters that foster collaboration between groups with similar skill sets (Conway, Blair, Dawson, & Dworak-Munoz, 2007).

8. The U.S. Workforce: Power, Politics, and Policy

The policies that govern the profession of CHWs are very similar to all other workforce policies. These policies are developed on the state or federal level. These policies are factors that determine workforce production and influence the need for specialized work (Kok et al., 2015).

9. Federal Mechanisms

The federal government usually takes a hands-off approach when it comes to developing policy related to professions. There is indirect involvement of the federal government through

oversight agencies and accrediting agencies. These accrediting agencies are charged with the regulatory standards of quality (Easton, 2010).

10. State Mechanisms

State legislation and executive policymakers affect standards for professionals such as CHWs. For CHW to become a legitimate profession, state laws should be explored and created. CHW credentialing, scope of practice, and professional disciplinary authority ensure a basic level of quality in the CHW professional workforce and provide stability with larger organizations that hire them (Safriet, 1992).

11. Marketplace Mechanisms

Marketplace mechanisms are critical to the CHW workforce development model. Health management organizations (HMOs) or managed care organizations (MCOs), hospitals, clinics, social agencies, and others that employ CHWs are bases of sustainable revenue. The work that CHWs do is not reimbursable by Centers for Medicaid and Medicare Services (CMS). Including these stakeholders in workforce development discussions can lead to models that include methods of reimbursement for the work of CHWs (Bovbjerg, Eyster, Ormond, Anderson, & Richardson, 2013).

12. Credentialing and Supervision

CHWs often work as auxiliary employees and usually have minimum training or none at all. They are valued in whatever system they work. In addition, adequate professional development and training are necessary for them to thrive.

In the CHW workforce, there has always been some contention regarding formalized training. However, for the workforce to expand its roles, standardized training and credentialing will be necessary. Four states—Texas, Minnesota, Indiana and Alaska—have state certification

programs. Arizona, Oregon, Massachusetts, Virginia, and Southern California have created CHW certification and standards for training. States without an infrastructure are now developing mechanisms to address CHW certification and standardization (HRSA, 2007; Nichols, Barrios, & Samar, 2005).

For various reasons, states continue to be divided on developing a scope of practice and core functions of CHWs. Some states believe community health workers should do clinical practice and some states believe they should remain non-clinical. A few states have moved forward with developing the mechanisms that expand the roles of CHWs. Those mechanisms are the competencies, skills, and training required for certification, which legitimizes the work of CHWs.

13. Educational Institution Mechanisms

Educational organizations have a critical part in determining methods of training for CHWs. Educational institutions are generally responsible for curriculum development, instructional design, quality of delivery, and communication to federal and state accrediting agencies with regard to upholding professional standards. More colleges and universities are moving toward a competency-based curriculum in response to the growth in response to these trends in the community health worker field (Fortier, Taylor, Convissor, & Pacheco, 1999).

14. Community Colleges

Leaders of community colleges have traditionally focused on issues of workforce development and exploring more career options in the allied health occupations. Although nursing and some allied health occupations remain extremely popular programs, the work of CHWs is much broader than just one program. The work of community health workers transcends into other programs—social work, nursing, and health education, to name a few

(Skillman, Keppel, Patterson, Davis & Doescher, 2012).

Community colleges have a robust transfer degree partnership with four-year colleges and universities. Most of these partnerships are mutually beneficial for both institutions. These transfer opportunities allow students to transfer most, if not all, of their credits from the community college, thus reducing the cost of obtaining a four-year bachelor's degree in public health sciences. Partnering involves bringing the experience of both parties to the table. Each community college has unique expertise in different areas; thus, partnering is an effective method of filling the training gaps and providing the best services to residents of a community, county, region, or state (Skillman et al., 2012).

Most community colleges have well-established contacts with public safety and health providers, local and state governmental bodies, community-based organizations, industry, workforce initiative associations, and volunteer organizations in their service area and are able to deliver training in a timely, efficient manner on site and throughout communities. Community colleges are the logical partners to address the awareness of public health as a career choice using the systems approach. Some models in the literature demonstrate the best practices of collaborations and partnerships. However, leadership dynamics are always metamorphic (WHO, 2011).

15. Community Health Workers as Educators

CHWs are often looked at as being public health educators. Supervisors for CHWs in communities and clinics and CHW trainers identified CHWs as educators. CHW responsibilities include performing ongoing education and teaching community workshops. The three categories of health promoter, outreach worker, and educator are not necessarily mutually exclusive, and differentiating among the three may be difficult. A Lake County Spanish-speaking focus group

participant illustrated this ambiguity by noting that participants conducted outreach and prevention education in the community (Chicago CHW Local Network [CCHWLN], 2012). Participants in the CCHWLN study identified other roles and responsibilities for CHWs that were also significant. The additional roles and responsibilities included the following:

- Research,
- Advocacy,
- Public health assessments,
- Empowerment.

Online respondents were asked in Question 6 if there should be a difference in the recognized levels of CHWs, such as basic, advanced, and trainer/managers. There was a significant difference in the response rate. Although 81.8% ($n = 63$) of the participants agreed that there should be a recognized difference in the levels of CHWs, 18.2% ($n = 14$) disagreed. According to the participants, there should be a difference in the recognized levels of a CHW because the different levels of roles and responsibilities have the potential to increase CHWs' opportunities to become more valued by their employers. The different levels or stackable credentials also allow CHWs to feel a sense of achievement, legitimacy, and pride at the completion of each stage. Stackable credentials in an academic setting are opportunities to acquire multiple credentials by building on each other. In this case, stackable credentials were developed (basic, advanced and Associate of Applied Science) for training CHWs. In addition, the different levels/stackable credentials could help reduce the number of CHWs who may become disillusioned about their prospects for advancement.

16. Synopses of Related Literature

Drivers of workforce development for CHWs reflect ongoing needs and challenges in

public health, including how evidence-based curriculum must reflect needs and standardization. The development of a fully competent public health workforce has always been a top priority in public health practice. Access to the workforce, no matter the discipline, have created economic growth in underserved low-income communities.

The training approaches to CHWs have been fragmented and piecemeal, depending upon funding (Chen, Evans, & Anand, 2004). Evidence-based curriculum allows teaching and learning to happen on a prescribed level to create a baseline of knowledge that all CHWs should obtain and enables evaluation (Gebbie & Turnock, 2006). To move from a paraprofessional position to a professional position, standardization must occur (Dumbauld et al., 2014; Love et al., 2004). An evidence-based curriculum for CHWs legitimizes the profession.

B. Conceptual Framework: Action Research

Through my portfolio process, I created and implemented an inquiry project that became my dissertation utilizing an action research methodology. I used the leadership principles of the doctorate in public health program and considered the implications below. I recreated an academic pathway for CHWs that built upon the previous generation of CHWs and educators. At the same time, I used the current and expanding roles and capabilities of CHWs through action and dialogue with CHW leaders. An important element of the design of the curriculum was sustainability and movement on health equity. The theories of Paulo Freire and others served as inspiration for my conceptual framework.

Participatory action research as described by Paulo Freire has had a critical impact on the concept of empowerment based on the shared creation of knowledge. Shared knowledge and shared control create a valuable role in developing the frameworks of engagement and research

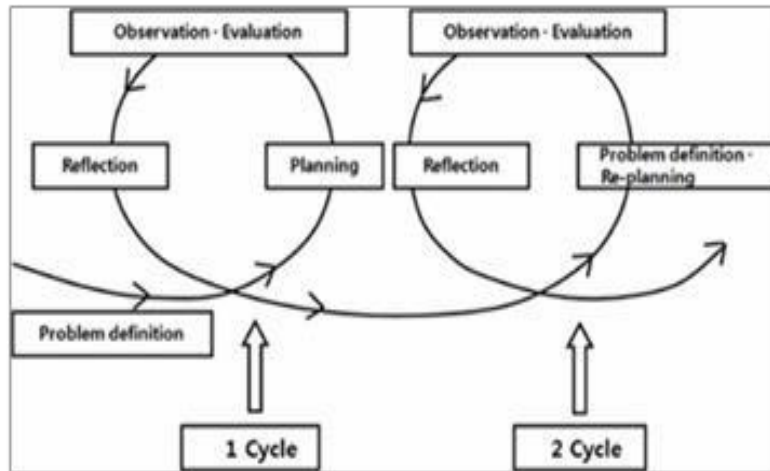
(Greenwood & Levin, 1998). While working with small focus groups of CHWs and educators, the researcher found that there was an equal balance of contribution, and all participants felt empowered in the curriculum development.

Action research intends to solve a practical problem using a reflective process of progressive problem solving. The problem is usually subjective to a person or group it directly affects. As noted by Kurt Lewin, action research involves “comparative research on the conditions and effects of various forms of social action and research leading to social action” (Noffke, 1997, p. 73). Implementing a series of reflections, plan, and actions in action research is a repetitive process of fact finding about the results (McTagger, 1991).

The purpose of using action research in this study was to engage CHWs in the policy evaluation of a statewide CHW curriculum in Illinois. In addition, action research was intended to solve the immediate practical problem of the need for a statewide curriculum, by taking advantage of this research challenges. Therefore, the workgroups assembled to address the problem of creating a standardized statewide CHW curriculum in Illinois or to promote action research methods to address progressive problem solving by CHWs.

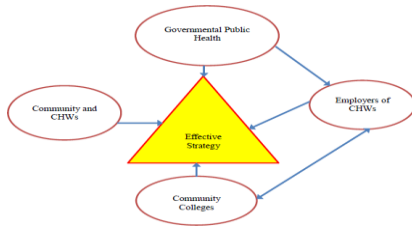
Figures 1 and 2 provide a visual and textual illustration of the theories and concepts that represent the foundation of this study. Figure 1 illustrates a series of spirals and circles, each of which includes circles of planning, action, and fact finding. Figure 2 illustrates the result of the action- and evidence-based curriculum for CHWs.

Figure 1. Action research cycles. From “Professional, Personal, and Political Dimensions of Action Research,” by S. Noffke, 1997, *Review of Research in Education*, page 22.



There were certain systems with naturally established relationships. As shown in Figure 2, all the systems sought to find some form of effective strategy to improve operations. However, community colleges and employers have had a mutually beneficial relationship with supply and demand. Community college missions include a focus on training individuals for the demands of employers. CHWs have traditionally trained in community-based organizations, often in the communities where they live, which brings value to the work that they do.

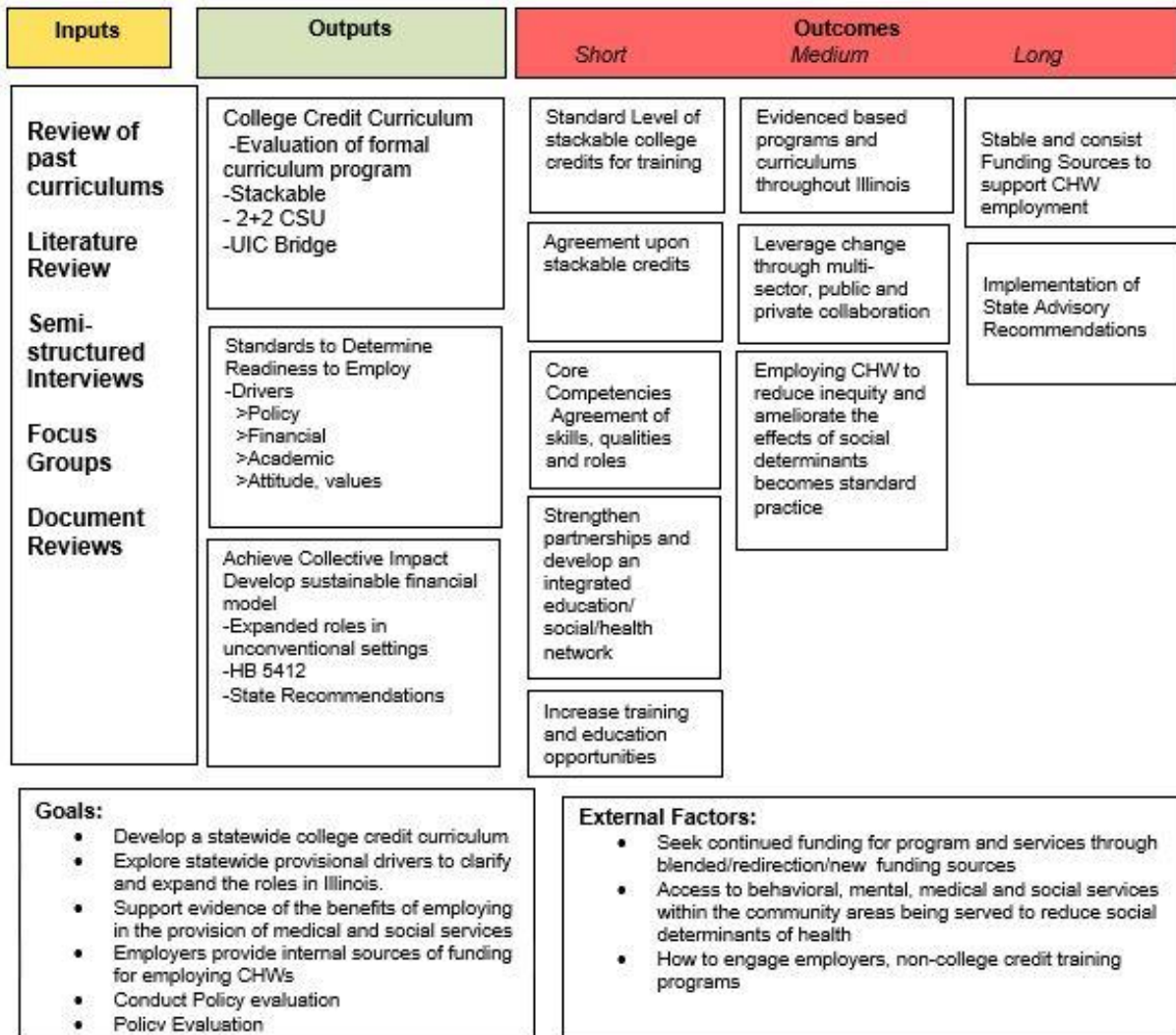
Figure 2. Conceptual model of creating effective strategy for CHW training.



A logic model was created to inform the reader regarding the key processes of my research. In keeping with the standard logic model design, the three categories are inputs, outputs, and outcomes. The inputs were the resources that I felt were imperative. The outputs of my study focused on the college credit, standardization and achieve collective impact for community health workers in Illinois.

Figure 3. Logic Model - **Research: An Action Research Approach to Expand the Roles of Community Health Workers in Illinois - Logic Model**

Focus: An Action Research orientation, approach and purpose of inquiry for standardizing training and explore statewide drivers to clarify and expand the roles of community health workers in Illinois.



Outcomes were designed to demonstrate short, medium and long-term goals. The main outcomes were achieving stackable college training, employing CHWs to reduce inequity and implementation of the State Advisory Board. For policy evaluation purposes, I felt the logic model should also demonstrate goals and external factors to creating policy.

III. STUDY DESIGN, DATA, AND METHODS

A. Study Design

The study design chosen was an action research model, using qualitative methods. Focus groups and semi-structured interviews were conducted with a variety of key stakeholders, including persons in positions to make hiring decisions; policy makers; educators; and public health practitioners, including community health workers (CHWs). However, action research is a method that was used in the early stages of this research. It was a deliberate method used to engage community health workers and other stakeholders with the development of a statewide CHW curriculum. The participants engaged in the process—beginning with the researcher, along with practitioners and other stakeholders—collectively determine the focus of the research and are the primary consumers of the findings as well (Sagor, 2000). This methodology is often used in educational research activities, and has a seven-step process, which Sagor (2000) enumerates:

1. Select a focus
2. Clarify theories
3. Identify the research question(s)
4. Collect the data
5. Analyze the data
6. Report results
7. Take informed action

Raising the status and practice value of community health workers was identified as an important focus, and, stakeholders, including me, the researcher, agreed that the pathway to accomplish

that was to develop a curriculum for CHWs for application throughout the statewide community college and university system. The action research model provided a framework to clarify the theories and policy analysis for shaping the research question. Data collection Prioritized measurement of the attitudes, perceptions, and beliefs of public health leaders to ascertain their readiness as employers to support expanded roles of CHWs in Illinois and to compensate accordingly. Analysis of the data and results obtained were used to develop the CHW curriculum in order to implement it and strengthen the legitimacy of the CHW workforce.

The purpose of the action research model utilized in this study was to engage CHWs in the policy evaluation of a statewide CHW curriculum in Illinois. Workgroups were assembled to create a standardized statewide CHW curriculum for Illinois and promote CHWs as legitimate health workers.

B. Data Sources, Data Collection, and Data Management

1. Data Sources

a. Literature

My literature review showed a need for focused and sequenced competencies for CHWs that reflect emerging needs and tools that are easy to navigate (Rosenthal et al., 2010).

Navigation of systems is a central theme in health care delivery, and facilitating navigation of workforce development is an important innovation that this inquiry evaluates. This research involved developing an evidence-based curriculum to use in a college credit program to provide options for individuals who choose to be CHWs. This program is a stackable program that allows seamless entry into the basic certificate, the advanced certificate, and, ultimately, the associate's degree. Recently, there has been an articulation with a four-year bachelor's degree program. The stackable credential allows entry and exit points throughout the basic, the advance certificate,

and the AAS degree. These programs also provide opportunities for an affordable education at a community college.

Credentialing provides legitimacy to CHWs. The purpose of credentialing is to gain greater respect for the work done by CHWs. In addition to respect, credentialing can develop sustainability of CHWs' employment through ongoing funding of their work from insurance reimbursements, which is a developing practice in Illinois (Baté-Ambrus, Waddy, et al., 2015).

Credentialing distinguishes between individuals who have completed all competencies and those who have yet to complete education specific to that profession (Manchanda, 2015). Community health workers must "value credentials and the competencies upon which they are based, [and] employers and health agencies must find value in them as well and base decisions about hiring, promotions, salaries, and the like on an individual worker's demonstration of those competencies" (Turncock, 2006, p. 48). Although credentialing CHWs in Illinois will lead to a legitimacy of the profession, some CHWs believe that mandatory credentialing could disenfranchise or displace the existing CHW workforce.

CHWs deliver financial value. The literature showed how effective CHWs are with regard to positive outcomes in poor communities, which is a cost savings for the health care system. Savings estimates range from \$2 to \$7 for every \$1 spent on a CHW (Rush, 2012). However, many programs are designed using the value of low-cost CHWs, and the wages of CHWs may not accurately reflect the value of what they are providing to people in communities and the resultant value to the health care system (Berwick, Nolan, & Whittington, 2008; Swider, 2002).

CHWs deliver transferability of indigenous practices (Arvey & Fernandez, 2012) and learn skill sets that cannot be taught solely in a classroom. Community health workers also live

in the communities in which they work and reflect the communities ethnically, socioeconomically, and experientially. Community health workers have a unique understanding of health behaviors and benefit from the trust of the community. The established CHW college credit program involved developing mechanisms to provide CHWs who worked in the field experiential credit or a fast-track option through stackable credentials. One open question is how well CHWs who have developed their skills and practice in one community may transfer their practice to other communities. Practices indigenous to one setting may not transfer to people in other locations (Arvey & Fernandez, 2012). Table III represents a scan of the research and the preliminary themes with their sourced data.

TABLE III
THEMES FROM PUBLIC HEALTH LITERATURE WITH SOURCES

Theme	Sources
Evidence-based curriculum reflective of needs and standardization	Chen, Evans, & Anand (2004) Love et al. (2004) Dumbauld, Kalichman, Bell, Daginio, & Taras (2014)
Avoidance of sole reliance on experience and trial by fire	Reinschmidt et al. (2015) Haines et al. (2007) Sawaengthong & Sanguanprasit (2015) Martinez (2015)
Creating health equity calls for expanding and strengthening community participation by targeting workers in those communities	Angier, Wiggins, Gregg, Gold, & DeVoe (2013) Smedley, Stith, & Nelson (2003) Allen, Brownstein, Jayapaul-Philip, Matos, & Mirambeau (2015)
Focused and sequenced competencies reflecting emerging needs and tools that are easy to navigate	Martinez, Ro, Villa, Powell, & Knickman (2011) Rosenthal et al. (2010)
Credentialing provides legitimacy	Turnock (2006) Baté-Ambrus et al. (2015) Manchanda (2015)
CHWs deliver financial value	Berwick, Nolan, & Whittington (2008) Rush (2012) Swider (2002)
CHWs deliver transferability of indigenous practices	Gebbie & Turnock (2006) Gebbie, Merrill, and Tilson (2002) Arvey & Fernandez (2012) Frenk et al. (2010)

b. Structured Interviews

A small organization in Chicago hosted a meeting with health, academia, corporate, and community-based organizations in August 2011. During this meeting, the host organization and the other organizations identified a list of CHW priority initiatives: certification, curriculum development, research, policy development, workforce development, sustainability, and funding.

The host organization asked the 27 organizations present to rank the priority list according to their organizations' critical initiatives to work on for the next couple of years.

The host organization held a follow-up meeting in November 2011. The meeting began by prioritizing action items based upon key areas of interest: certification, training, workforce development, funding, research, collection and dissemination of best practices [a depository of CHW practices], and clinicians' support for CHWs; each listed as priorities during this discussion.

After reviewing the specific areas of interest, the group articulated definitions for each key interest area, and workgroups were formed to address each of them. After discussion of each topic, decision makers voted on which topics they thought were important enough to take action on. Table IV illustrates the final votes and initiatives that will soon be the CHW agenda for the next couple of years. These initiatives developed into workgroups over time.

TABLE IV
PRIORITY OF STATEWIDE INITIATIVES

Initiative	Votes
Certification	25
Research & Policy	17
Development	
Training	16
Funding	13
Workforce development	11
Best practices repository	8
Clinician support for CHWs	7

The workgroup held monthly meetings to plan, act, and reflect on the revision of Daley College's original curriculum. Elements of the project used for the analysis were the deliberations and actions of the curriculum task force, the CHW Advisory Committee, the SSC Curriculum Committee, and the final application approved by the Illinois Community College Board (ICCB) and the Illinois Board of Higher Education (IBHE). South Suburban College (SSC) took the lead in the approval process.

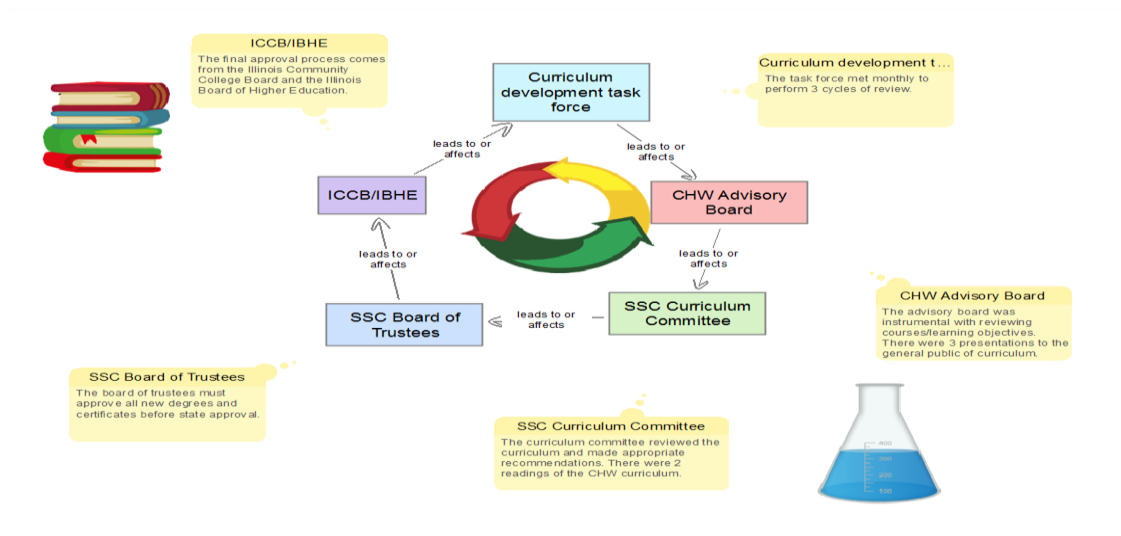


Figure 4. Conceptual model describing process and stakeholders.

Data available from the action research project included meeting minutes, workgroup reports and products, the ICCB application, and the responses from the ICCB. Ten workgroup discussions were conducted with regard to updating the CHW curriculum. Minutes were taken at each of the academic team discussions.

Environmental scanning included curriculum workgroups with CHWs and stakeholders. The host organization sought to gather information on CHW roles and responsibilities, core competencies, supervision, and certification to facilitate development of a statewide policy to recognize and advance occupational opportunities. In addition, a document review was conducted. An example of a document review showed a side-by-side curriculum illustrating the completed revisions of the updated curriculum. The newly developed curriculum became a part of HB-5412, which was the legislative bill introduced to define criteria for the recognition of CHWs as health professionals in the State of Illinois.

As the workgroup continued to bring more data to the group, the barriers identified were addressed and resolved. Community Colleges are open campus and are not allowed to exclude students based on citizen status. The workgroup then added an advisory board. The purpose of an advisory board was to work closely with the community college and have representation from employers and other stakeholders who could assist with identifying skills gaps and other demand from the CHW workforce. The workgroup collected additional data at a regional meeting. During the regional meeting, surveys were administered and a presentation of the proposed curriculum was shared. Feedback was given and additional revisions were made to the curriculum. At this point, the curriculum was ready for the South Suburban College (SSC) Curriculum Committee to review and make recommendations. After two reviews of the CHW curriculum from institutional faculty members, the committee approved the curriculum. Since the curriculum was new to South Suburban College, the SSC Board of Trustees was given a presentation for approval. Once the SSC Board of Trustees approved the community college curriculum, the CHW curriculum was ready to be sent down for review by two state agencies (Illinois Community College Board and Illinois Higher Education Board) for approval. The state agencies approved the stackable credentials for CHW for the following offerings:

- Basic certificate – 15 credit hours (Table V)
- Certificate – 32 credit hours (Table VI)
- Associate of Applied Science (AAS) – 61 credit hours (Table VII)

In addition to the credentials above, the workgroup articulated the AAS degree with three universities (Chicago State University, Governors State University, and University of Illinois at Chicago). The articulation of the AAS degree allows those credits to become

transferable/portable to other institutions of higher learning, which then could lead to a baccalaureate degree in related fields of study.

TABLE V
COMMUNITY HEALTH WORKER BASIC CERTIFICATE

Course (s)	Title and Description	Credit Hours
CHW-101	Introduction to Community Health Worker This course provides an overview of the health care system and community health work. Students will gain an understanding of the role of community health workers, the scope of their function and services, and how they interact with other health personnel and resources. It includes principles of effective verbal and nonverbal communication to assist students in encouraging positive interaction.	3
CHW-105	Assessing Community Resources This course will provide students with a brief overview of public health, its services, and core functions in the protection and promotion of health and prevention of disease and injury. It will include selected international, national, and local health organizations that influence the public health.	3
CHW-110	Community Health Development This course is designed to help students develop personal, client, and community capacities to protect and improve health. Emphasis is on building individual and community participation in health through information sharing, informal counseling social support, health skills instruction, community-wide assessments, and promoting changes in negative behaviors.	3
CHW-115	Nutrition & Disease This course will provide students with the information necessary to promote healthy eating styles and proper food preparation for all age groups. This course gives the students information about identifying the relationship of diet to disease. Attention is given to the treatment of disease by diet modification.	3
CHW-200	CHW Case Management This course is designed to provide the student with the basic case management skills. The focus of this course is on the main components of case management, outreach screening intake, referrals, and follow-up. Students will learn about home visits and universal precautions.	3

TABLE VI
COMMUNITY HEALTH WORKER ADVANCED CERTIFICATE

Course (s)	Title and Description	Credit Hours
CHW-101	<p>Introduction to Community Health Worker</p> <p>This course provides an overview of the health care system and community health work. Students will gain an understanding of the role of community health workers, the scope of their function and services, and how they interact with other health personnel and resources. It includes principles of effective verbal and nonverbal communication to assist students in encouraging positive interaction.</p>	3
CHW-105	<p>Assessing Community Resources</p> <p>This course will provide students with a brief overview of public health, its services, and core functions in the protection and promotion of health and prevention of disease and injury. It will include selected international, national, and local health organizations that influence the public health.</p>	3
CHW-110	<p>Community Health Development</p> <p>This course is designed to help students develop personal, client and community capacities to protect and improve health. Emphasis is on building individual and community participation in health through information sharing, informal counseling social support, health skills instruction, community-wide assessments, and promoting changes in negative behaviors.</p>	3
CHW-115	<p>Nutrition & Disease</p> <p>This course will provide students with the information necessary to promote healthy eating styles and proper food preparation for all age groups. This course gives the students information about identifying the relationship of diet to disease. Attention is given to the treatment of disease by diet modification.</p>	3
CHW-118	<p>Communicable, Environmental, & Occupational Disease</p> <p>This course will provide students with an overview of communicable, environmental, and occupational disease. It will provide the student with information on prevention, referral sources, and treatment.</p>	3
CHW-200	<p>CHW Case Management</p> <p>This course is designed to provide the student with the basic case management skills. The focus of this course is on the main components of case management, outreach screening intake, referrals, and follow-up. Students will learn about home visits and, universal precautions.</p>	3
CHW-215	<p>Introduction to Community Health Research</p> <p>The goal of this course is to develop basic “research literacy” and/or scientific literacy and to empower people as research team members. This course will use a workshop model in which students work in teams, conceptualizing, designing questionnaires, conduct a research project analyzing data, and disseminating a small-scale research study.</p>	3

TABLE VI (continued)
COMMUNITY HEALTH WORKER ADVANCED CERTIFICATE

Course (s)	Title and description	Credit hours
CHW- 220	Fieldwork I This course is an introduction designed for entry-level workers in the health care field. This course will include field experience and basic skills for working effectively with coworkers and agencies, and awareness of basic research and interviewing skills. It will provide basic skills in performing CPR and first aid.	3
CHW- 230	CHW Leadership This course builds on the leadership skills taught in CHW 110 by blending leadership theory and practice. It empowers CHWs to identify their own leadership styles by exploring models such as service leadership, visionary leadership, transactional leadership, transformative leadership, and others. Opportunities will be provided to enact the various leadership styles discussed in class through role-playing and other interactive exercises. Students will be able to recognize their own leadership capacity and learn how to use it to improve themselves, their communities, and the CHW movement.	3
	Elective	3
Total		32

TABLE VII
COMMUNITY HEALTH WORKER ASSOCIATE'S DEGREE

Course (s)	Title and Description	Credit Hours
BIO-115	Human Body Structure Organization, control, and integration of the human body systems. Covers cells, tissues, and the integumentary, skeletal, muscular, endocrine, nervous, respiratory, digestive, cardiovascular, urinary, and reproductive systems. With an emphasis on anatomy.	4
CHW-101	Introduction to Community Health Worker This course provides an overview of the health care system and community health work. Students will gain an understanding of the role of community health workers, the scope of their function and services, and how they interact with other health personnel and resources. It includes principles of effective verbal and nonverbal communication to assist students in encouraging positive interaction.	3
CHW-105	Assessing Community Resources This course will provide students with a brief overview of public health, its services, and core functions in the protection and promotion of health and prevention of disease and injury. It will include selected international, national, and local health organizations that influence the public health.	3

TABLE VII (continued)
COMMUNITY HEALTH WORKER ASSOCIATE'S DEGREE

Course (s)	Title and description	Credit hours
CHW- 110	Community Health Development This course is designed to help students develop personal client and community capacities to protect and improve health. Emphasis is on building individual and community participation in health through information sharing, informal counseling, social support, health skills instruction, communitywide assessments and promoting changes in negative behaviors.	3
CHW- 115	Nutrition & Disease This course will provide students with the information necessary to promote healthy eating styles and proper food preparation for all age groups. This course gives the students information about identifying the relationship of diet to disease. Attention is given to the treatment of disease by diet modification.	3
CHW- 118	Communicable, Environmental, & Occupational Disease This course will provide students with an overview of communicable, environmental, and occupational disease. It will provide the student with information on prevention, referral sources, and treatment.	3
CHW- 200	CHW Case Management This course is designed to provide the student with the basic case management skills. The focus of this course is on the main components of case management, outreach screening intake, referrals, and follow-up. Students will learn about home visits and universal precautions.	3
CHW- 215	Introduction to Community Health Research The goal of this course is to develop basic "research literacy" and/or scientific literacy and to empower people as research team members. This course will use a workshop model in which students work in teams, conceptualizing, designing questionnaires, conduct a research project, analyzing data, and disseminating a small-scale research study.	3
CHW- 220	Fieldwork I This course is an introduction designed for entry-level workers in the health care field. This course will include field experience and basic skills for working effectively with coworkers and agencies, and awareness of basic research and interviewing skills. It will provide basic skills in performing CPR and first aid.	3
CHW- 230	CHW Leadership This course builds on the leadership skills taught in CHW 110 by blending leadership theory and practice. It empowers CHWs to identify their own leadership styles by exploring models such as service leadership, visionary leadership, transactional leadership, transformative leadership and others. Opportunities will be provided to enact the various leadership styles discussed in class through role-playing and other interactive exercises. Students will be able to recognize their own	3

TABLE VII (continued)
COMMUNITY HEALTH WORKER ASSOCIATE'S DEGREE

Course (s)	Title and description	Credit hours
	leadership capacity and learn how to use it to improve themselves, their communities, and the CHW movement.	

Course (s)	Title and description	Credit hours
ENG-101	Composition and Rhetoric Theory and practice of narrative, descriptive, expository, and argumentative writing. Thematic/rhetorical method. Sentence development, paragraphs, compositions, diction, mechanics, analysis, and interpretation of pose models.	3
HAS-113	Issues of Diversity This course focuses on cultural diversity as a positive force in a global world. The students will examine the influence of culture in their own lives and on the lives of others. Through understanding of the importance of cultural differences, human service personnel will be better prepared to bring sensitivity and objectivity to the helping process.	3
HIT-102	Fundamentals of Medical Terminology This course is for students who intend to apply to any allied health program or any program with a medical emphasis.	1
MIS-101	Computer Literacy and Applications An exploration of how the computer impacts all aspects of society: the home, job place, and business, scientific and allied health careers. Course content includes an overview of operating systems software and computer hardware.	3
PSY-101	Introduction to Psychology This course is an introductory survey of the current subject matter and methods of psychology. Specific topics include research methods, the biological basis of behavior, learning, memory, personality, life-span development, motivation, emotion, social behavior, and abnormal behavior and therapies.	3
PSY-211	Human Growth and Development An introductory survey into the field of developmental psychology emphasizing the cognitive, physical, personal, social, and emotional development from conception through adulthood to death.	3
SPE-108	Oral Communication Introduction to basic oral communication principles and skills. Focuses on study and practice in public speaking and discussion, revision organization, and delivery techniques. Emphasis in critical-listening skills, reading, thinking, and writing.	3

TABLE VII (continued)
COMMUNITY HEALTH WORKER ASSOCIATE'S DEGREE

Course (s)	Title and description	Credit hours
SPN-115	Spanish for Healthcare Providers A course designed for health care providers working with Spanish-speaking patients that emphasizes oral communication, medical terminology, and cross-cultural awareness.	3
	Elective	3
Total		61
Community Health Worker Course Electives		
CHW-100	Health and the Public In this course, students will examine both historic and contemporary public health stories to begin to understand the contexts, systems, professions, tools, and skills associated with the public health enterprise. Students will learn basic public health principles and will recognize an array of factors that shape the health of individuals and populations	3
CHW-120	Disease and Epidemics This course introduces basic principles surrounding the distribution of disease and epidemics in human populations. Through lectures and field exercises, students will learn fundamentals of epidemiology, the basic science of public health.	3
CHW-125	Public Health and Global Societies This course introduces students to global public health through an exploration of global health challenges from the local population to global society perspectives.	3
CHW-205	Parenting Skills This course will focus on providing students with the most-up-to-date information and skills on parenting, including the concept and application of anticipatory guidance. The student will be able to help clients identify the importance of their role as parents in the health of their children and their family.	3
CHW-235	Introduction to Maternal/Child Health This overview of maternal and child health allows students to gain an understanding of the various stages of human development and the differences and recognizing their role in working with the different age groups. This course will provide students with information on the course of pregnancy and newborn care.	3

Because of the work I had done with the statewide stackable credentials, I was appointed to the Illinois Community Health Worker Advisory Board, the 17-member group responsible for creating recommendations in the following areas: Core Competencies and Roles, Training and Certification, Finance and Reimbursement, and Workforce Development. Since I facilitated the workgroup for certification, I was chosen to chair the Training and Certification workgroup on the IL Community Health Worker Advisory Board. The IL Community Health Worker Advisory Board concluded its work by submitting the final report: “*Community Health Workers in Illinois—A Value-Driven Solution for Population Health.*”

In addition to establishing a statewide CHW curriculum, this dissertation was designed as an exploratory, systematic, qualitative action research policy evaluation approach. My design seeks the in-depth perspectives of the curriculum actors and other key decision makers. The sectors and actors who offered their views about the drivers include a state-appointed board, mental health providers, CHWs, community-based organizations (CBOs) addressing health, colleges and universities, health care providers, hospitals, managed care organizations (MCOs), and policy makers.

Data analysis included the review of barriers and restraining factors identified by focus groups and interview participants in CHW workforce development. The curriculum workgroup began its work by using the antiquated Daley College community health curriculum. A side-by-side comparison of the Daley College curriculum and the statewide curriculum was conducted. There were significant differences between the old Daley College courses and those in development. The learning objectives, the internship component, and the seamless transitions of creating a stackable credential just made the statewide curriculum a “new curriculum” by the ICCB definition of a reasonable and moderate extension versus a permanent new curriculum.

There was a massive change in the curriculum because the roles, scope of practice, and responsibilities of CHWs have changed over time. Therefore, there were courses that were developed (Community Development, Case Management, CHW Leadership, CHW Research, Internships, and a Portfolio component) to reflect the CHW's new scope of practice.

As the curriculum workgroup was developing the stackable credentials, the other workgroups (policy, research, sustainability, and funding) were collecting data by surveys and small focus groups. For the purpose of this study, the data from the other workgroups became secondary data to support the development of the curriculum. For example, Figure # illustrates a regional meeting, and, at that regional meeting, the researcher presented the draft of the curriculum. The feedback associated with that meeting was used to free the basic certificate from any math or reading prerequisites, and the instructional methods were changed to hybrid and online methods for accessibility.

c. Focus Group

An additional data source was the use of focus groups. Focus groups are a conceptual framework was developed reflecting the drivers, described constructs based upon the drivers, created interview guides for individual interviews and focus groups, recruited participants, conducted the groups, and then completed the project by analyzing the narrative data and presenting the findings here. The focus groups consisted on an average of seven participants. The focus groups met on the college campus and varied in times to accommodate the participants.

2. Data Collection

Data were collected from 15 individual interviews and four focus group discussions. The study procedures were iterative and included an action research approach. The study involved

exploring the facilitators and barriers to provisional drivers that would expand the roles of CHWs in Illinois by interviewing public health leaders and the group of actors who created the policy. The unit of analysis elements included sampling methods, recruitment strategies, and participant responses, which were coded and described. Ethical review involved applying to the UIC Office of the Protection of Research Subjects (OPRS), Institutional Review Board (IRB), for an exemption and amendment related to the doctoral inquiry, Protocol No. 2016-0546, “An Action Research Approach to Assess Workforce Drivers of Community Health Workers in Illinois.” The IRB approved the amended exemption on September 23, 2016. Details of the approval are in Appendix A.

Documents relevant and applicable to the research questions were also examined. Documents included *Community Health Workers in Illinois—A Value-Driven Solution for Population Health*. This document was a report with recommendations from the Illinois CHW Advisory Board. All documents are publicly available on the SSC-CHW website: (<https://www.ssc.edu/academics/programs-of-study/allied-health-careers/community-health-worker/>).

a. Sampling

A purposeful sampling was achieved by identifying leaders/employers of CHWs. Purposeful sampling is a term used to describe the “strategic and purposeful selection of information rich cases, with the goal of making sure that the selected sample provides the necessary depth, but at the same time meets the goal of a preferably high degree of breadth” (Patton, 2015). The following sampling procedure was applied in this study.

Sampling Procedures

Once the leaders/employers were identified, participants were recruited and scheduled for

one of the four focus groups; the individual interviews followed the focus groups.

Recruitment of Participants

Patton's purposeful sampling strategy was used (Patton, 2015). The key informants relate to and may have stakes in the SSC CHW program in their roles as employers or actors in the public health system. The following categories of informants reflect actors and stakeholders in the SSC's CHW program:

- Members of the appointed statewide CHW advisory board
- State-appointed board
- Mental health organizations
- Community health workers
- Community-based organizations
- Colleges and universities
- Providers
- Hospitals
- Managed care organizations (MCOs)
- Policy makers

The purpose of the qualitative analyses was to provide detailed descriptions of the themes related to provisional drivers to expand the roles of CHWs in Illinois. The researcher also sought to capture the broader structure and constructs that further describe factors that may influence how stakeholders interact, work together to organize, and improve how employers value CHWs in Illinois. It is an approach that identifies themes and patterns in qualitative data. In this study, the researcher conducted four separate focus group discussions and 15 individual semi-structured

interviews.

Focus groups are active group discussions used to collect rich data. Focus group and interviews are also the best methods to resolve seemingly conflicting information, because the researcher can ask about any conflicts. For the purpose of this study there were four focus groups held at a small community college in the south suburbs of Chicago. Each focus group is listed below with the date the group was held:

Focus Group 1 (FG-1): July 23, 2016

Focus Group 2 (FG-2): July 26, 2016

Focus Group 3 (FG-3): September 21, 2016

Focus Group 4 (FG-4): September 29, 2016

Each focus group had at least six participants. The only criteria for participants and the interviews were that they had to be in a CHW leadership position or an employer who hires CHWs. TABLE VIII.

In addition to the small focus groups, there were 15 individual semi-structured interviews. According to Patton (2015), interviews are discussions, usually one-on-one, between the interviewer and the individual meant to gather information on a specific set of topics. In this study, interviews were done in person and over the phone. Many of the policy makers and the participants who lived in other states opted to have phone interviews. The majority of the interviews were in person.

TABLE VIII
RECRUITED PARTICIPANTS

Organization(s)/Sectors	Position
State-Appointed Board	Chair, statewide CHW Advisory Board Senior epidemiologist, Urban Hospital System CHW, Urban Community Health Center Network
Mental Health	Executive director, Community Mental Health Services
CHWs	CHW, Urban Community Health Center Chief operating officer, Suburban Primary Health Care Non-Government Organizations (NGO)
Community-Based Organizations (CBOs)	Executive Director, Urban Health NGO, Daley Curriculum Author Chief executive officer, Statewide NGO
Colleges and Universities	Associate professor, Public University Professor, Private Academic Medical Center CHW faculty, Community College
Providers	Chief Executive Officer, Urban Community Health Center Retired chief medical officer at Governmental Public Health Director, Suburban Hospital System
Hospitals	Chief Executive Officer, Urban Hospital Supervisor of Program Initiatives, Urban Hospital System
Managed Care Organizations (MCOs)	President, Statewide MCO Director
Policy Makers	Elected State Officials

Table IX provides detail characteristics of the 15 persons recruited. Data were generated from the interviews and focus groups using the interview guide presented in Appendix B for both the focus groups and individual semi-structured interviews. Interviews and focus groups were audio recorded and transcribed in NVivo, which resulted in written accounts of discussions with individual interviews and focus group.

By the conclusion of the second focus group, an observation was made that the focus group participants were mainly comprised of CHWs with too few organizational leader participants. Therefore, individual interviews were scheduled with leaders of health care and public health organizations. Some participants voiced that time was a considerable factor with their participation and preferred a 30-minute interview to participating in a focus group discussion. In addition, policy makers requested an interview and selected time slots arranged to assure their participation. However, there were cases that allowed some high-status individuals who were not likely to participate in the focus group to participate in the semi-structured interviews. The literature states this to be a common strategy of using multiple methods to enhance the quality of the research. Semi-structured interviews are often used in policy research (Patton, 2002).

TABLE IX PARTICIPANTS' CHARACTERISTICS

Sectors	Subjects	Years of Experience	Age Range	Race	Gender	Date Interviewed
MCOs	AA	30	60-65	White	Male	November, 2016
MCOs	BB	10	45-50	White	Female	November, 2016
College/University	CC	20	50-55	Black	Male	September, 2016
CBOs	DD	15	45-50	Latino	Female	November, 2016
Hospital	EE	5	40-45	White	Male	September, 2016
Provider	FF	25	50-55	Black	Female	July, 2016
State Appointed Board	GG	10	35-40	Black	Female	October, 2016
MCOs	HH	10	50-55	White	Male	August, 2016
College/University	II	20	55-60	White	Female	September, 2016
MCOs	JJ	30	55-60	White	Female	July, 2016
Elected Policy Maker	KK	15	40-45	Black	Male	October, 2016
Elected Policy Maker	LL	20	40-45	White	Female	August, 2016
Elected Policy Maker	MM	25	45-50	Black	Male	November, 2016
CBOs	NN	45	65-70	Black	Male	August, 2016
Mental Health	OO	10	40-45	Black	Female	October, 2016

The interview guides were created and used for both the individual interviews as well as the small focus groups. Based on the interview guide, most of the questions were structural questions. These structural questions assisted the researcher with understanding the relationships between things, categories, and processes.

3. Data Management

Using the action research approach acting in concert with validating this project's inquiry for CHW leaders and employers of CHWs description of statewide drivers that could potentially expand their roles and responsibilities in Illinois. For the purpose of this study, qualitative methods were used because of the rich and abundant data that could be collected through semi-structured interviews and small focus groups addressing the research questions, the questions are exploratory in nature and require a qualitative approach, and, last, it makes it possible, to gain perspectives into a topic for which there is not much existing literature. Because this study is exploratory, it will require a specific subject pool of CHW leaders or employers who hire CHWs.

Before analysis, all audio-recordings from the focus group data and the individual interview data were transcribed in NVivo. Nvivo is a qualitative data analysis computer software package produced by WSR International. Once the audio files were organized into digital folders, they were transcribed. NVivo software was used to store and transcribe data. This allowed a greater level of comfort with the data and ensured integrity of the transcription process (Riesman, 1993).

Data analysis began with a careful reading of the transcripts and identifying common themes from the focus group data and the individual interviews. These big-bucket themes were designated by families of codes that were expanded and differentiated through emergent discovery in the data. Comparative analysis validates and enhances codes and themes that emerged (Patton, 2015). The analysis used qualitative data-analysis software that facilitated data coding and enabled the visualization of different cross-sections of data. Analysis of data is organized according to research questions presented and the apriority codes and themes related to major workforce drivers identified in the conceptual model. These codes and themes included

values, attitudes, beliefs, academic drivers, policy drivers, and financial drivers. Table X describes the approach to analysis.

The action research policy evaluation was designed to uncover the real practices currently enacted. The unit of analysis for my action research policy evaluation was the group of leaders and actors in Illinois public health that could provide insights into the research questions proposed with relevance to SSC's CHW program.

a. Content Analysis

Analysis began with a careful reading of the transcripts and noting the apriority and theory-based codes. These big bucket themes were designated by families of codes that were expanded and differentiated through emergent discovery in the data. Content analysis validated and enhanced the codes and themes emerged, as identified by Patton (2015). The analysis involved using NVivo for the ease of data coding and ability to create visualization of different cross sections of data. Data analysis was organized according to the research questions presented and the apriority codes and themes related to the major workforce drivers identified in the conceptual model. These included values, attitudes, beliefs, academic drivers, policy drivers, and financial drivers. Table X describes the approach to the a priori analysis.

The audio files were stored on a jump drive until transcription occurred. Braun and Clark 2006, also described a step by step process on managing qualitative data:

1. The researcher transcribed audio data from focus groups and semi-structured interviews to get acquainted with the data.
2. The researcher generated initial codes that captured meaningful or unique features of the data (see Table X).
3. The researcher searched for initial thematic categories by reviewing each transcript.

4. The researcher reviewed themes for coherence patterns and validated the fit of individual themes across the entire data set (see Tables XI and XII).
5. The researcher defined and named themes by identifying the essence of each theme.
6. The researcher produced a report (Braun & Clarke, 2006).

According to the steps above, in step 1, the researcher began to transcribe the audio data using NVivo software. The audio files were uploaded into the software. Using the software allowed the researcher to pinpoint places in the audio recording where certain phrases were said, it allowed the researcher to control the speed of the audio recording, and it gave the researcher a platform to also transcribe the data into a Word document. In addition, NVivo allowed the researcher to maintain logs of coding changes, track how analysis changes occurred over time, code data, retrieve portions of text using keywords, and create reports and figures. In step 2, the researcher generated initial codes based on the uniqueness of the data (see Table XI). Moreover by step 3, the researcher was more familiar with the transcribed data and able to form themes around the transcribed focus group data and the semi-structured interview data. In steps 4 and 5, the researcher began to review the themes for coherent patterns across the entire data set and then began to define the themes based on the qualitative data. The last step was to produce a report based on the defined themes.

Consulting with Dr. Phillip Adu at the National Center for Academic and Dissertation Excellence (NCADE) at the Chicago School of Professional Psychology strengthened validity with regard to the use of NVivo. Dr. Adu was consulted about the process. Workings with Dr. Adu strengthen the project's validity by becoming savvier with using appropriate reports and learning the features of NVivo.

b. Development of Codes and Themes

Through literature searches and environmental scanning, the drivers and gaps in literature became apparent. While developing a statewide curriculum, these gaps were inclusive with addressing legitimacy within the CHW workforce. Even though the curriculum development was one area, it would soon demonstrate value with policy, sustainability, funding, certification, and academic standards. The intended policy was to create a statewide infrastructure for the CHW workforce. Unfortunately, recommendations were developed and were not implemented because of a change in state leadership.

The codes and themes that were anticipated are based on the drivers and elaborated from the drivers. When the researcher began the analysis, additional codes were identified from within the code families. The researcher also noted codes that emerged from his reading of the data and gaps and conflicts with the a priori codes to challenge his assumptions and viewpoints. Please see Table X for a presentation of the drivers and code families.

TABLE X
DRIVERS, CODES, AND DATA SOURCES

Criteria/driver	Anticipated code families	Data source
Policy drivers	<p>Policy and academic partnerships</p> <p>Creating health equity calls for expanding and strengthening participation with community – targeting workers where they are for the value that the workforce brings to endeavors</p> <p>Professional experience, policy development</p> <p>Examining transferability of indigenous practices</p>	<p>Minutes from curriculum team</p> <p>Illinois Community College Board application</p>
Financial drivers	<p>Finance and sustainability/policy credentialing providing legitimacy</p> <p>Financial and sustainability paying or reimbursing</p>	<p>Minutes from curriculum team</p> <p>Illinois Community College Board application</p> <p>Secondary data/focus group transcripts</p>
Academic drivers	<p>Academic and curriculum development</p> <p>Evidence-based curriculum reflective of needs and standardization</p> <p>Academic and employer partnerships</p> <p>Focused and sequenced competencies reflecting emerging needs and tools that are easy to navigate</p>	<p>Secondary data/ focus group transcripts and minutes from curriculum team</p>
Attitudes, values, and beliefs drivers	<p>Academic pathways</p> <p>Attitudes and beliefs of CHWs</p> <p>Not relying solely on experience and trial by fire</p>	<p>Secondary data/ focus group transcripts</p>

Table X illustrated the original family codes, sub-codes, and meanings. The a priori codes were identified through my literature review. The sub-codes were then identified by the semi-structured interviews, focus groups, and document review. Last, codes were building blocks into similar themes.

Table XI describes the drivers identified with specific themes. Examples of quotations illustrated the themes identified.

TABLE XI
CODE BOOK OF FAMILIES AND SUBCODES

Code families and codes	Definitions
Attitudes, values and belief drivers	
Attitudes--core--qualities	CHWs have qualities that reflect their core competencies.
Attitudes--diverse	CHW are a diverse group of front line workers.
Attitudes--norms	CHWs respond to local societal cultural norms and customs.
Attitudes--community acceptance	CHWs ensure community acceptance and ownership.
Attitudes--advocate by training	CHWs advocate by training community members.
Attitudes--self-efficacy	CHWs enable self-efficacy and sufficiency through needs identification and implementation.
Attitudes--holistic health	CHWs have a strong motivation and commitment to improve the holistic health of communities.
Academic drivers	
Academic--core--roles	CHWs have roles that reflect their core competencies.
Academic--situated knowledge	CHW have situated knowledge and cultural insight.
Academic--change agents	CHWs are agents of change and advocacy.
Academic--core _qualities	CHWs have qualities that reflect their core competencies.
Academic--core competencies--skills	CHWs have skills that reflect their core competencies.
Academic--behavioral	CHWs have capabilities with behavioral and mental health issues.
Academic--health literacy	CHWs build health literacy and self-sufficiency.
Academic--BMH--practices	CHWs use promising practices in behavioral and mental health from experts.
Academic--learning	CHWs have academic- and community-based learning opportunities.
Academic--work--field	CHWs learn from work-based and field training.
Academic--on the job training	CHWs learn from employer and on-the-job training.
Academic--theories	CHWs learn through instruction based on social ecological and social cognitive theories.
Academic--adult learning theory	CHWs learn through certified programs that reflect adult learning theory and flexibility.
Academic--certified--approved competencies	CHWs learn through certified programs that reflect approved competencies.
Academic--certified--standardization	CHWs learn through certified programs that support standardization and transferability.
Policy drivers	
Policy--future	Policies supporting CHWs are an example of sustainability for future generations.
Policy--IL leadership	Illinois may take a leadership opportunity with CHWs.
Policy--IL--APHA	Illinois adopts the American Public Health Association's definition of CHWs.

TABLE XI (continued)
CODE BOOK OF FAMILIES AND SUBCODES

Code families and codes	Definitions
Policy-IL-disseminates	Illinois adopts CHW terminology and disseminates this.
Policy-funders	Funders adopt CHW terminology and use it in RFPs.
Policy-education campaign	Education campaign for multiple roles and uses of CHWs roles

Code families and codes	Definitions
Policy-certification impacts acceptance	Certification of CHW programs brings recognition and acceptance of CHW role and value.
Policy-ICCB-IBHE	Certification is related to ICCB and Illinois Board of Higher Education CHW program approval.
Policy-expand role	There are multiple policy opportunities to expand role of CHWs.
Policy-voluntary certification	Certification is voluntary, not mandatory.
Policy-grand-mothering	Certification would enable CHWs currently practicing to be grand-mothered into approval.
Policy-balanced board	IL governor creates certification board with balanced representation.
Policy-improving personal health	CHWs improve their own personal health.
Policy-improve health for vulnerable	CHWs improve health for vulnerable populations.
Policy-improve health equity	CHWs impact health disparities for low-income and minority people.
Policy-triple aim	CHWs promote the triple aim of the ACA.
Policy-disease prevention	CHWs work in disease prevention.
Policy-disease management	CHWs work in chronic disease management.
Policy-health system value	Health system is moving to value from volume.
Policy-integration in health teams	CHW seeks integration in health care teams and other organizations.
Policy-integration health system	CHWs lead the process for integration in health system.
Policy-collaboration	CHWs increase integration and collaboration.
Policy-FQHC-medical home	Federally qualified health care centers using CHWs promote patient medical homes.
Policy-IL lack of integration	IL lacks policy and infrastructure for CHW integration.
Policy-infrastructure	Strong supportive infrastructure is needed for CHW sustainability.
Policy-sustainability	Sustainability relates to funding and formalization.
Policy-supervision	CHW supervision is defined and supportive.
Policy career ladder	CHWs advance through a career ladder.
Policy-living wage	CHWs are paid a living wage.
Policy-IDES	Illinois Department of Employment Services (IDES) generates stats on CHWs.

TABLE XI (continued)
CODE BOOK OF FAMILIES AND SUBCODES

Code families and codes	Definitions
Financial drivers	
Financial-Medicaid	CHWs provide health and cost saving to Illinois Medicaid.
Financial-_ROI	There is evidence of return on investment.
Financial-_medical home	CHWs increase efficiency of a patient-centered medical home.
Financial-_sources of funding	The need for expanding public and private sources of funding
Financial-_HFS_MCE	Illinois Department of Healthcare and Family Services (HFS) contracts with managed care entities (MCEs) to fund CHWs.
Financial-_HFS-Medicaid state plan	HFS-State Plan Amendment-Medicaid
Financial-_HFS_MCE-hospital discharge	HFS_MCE_hospitals for discharging patients
Financial-_community benefit	CHWs support hospitals and federally qualified health care centers with Chicago Housing Authority (CHA) and community benefits
Financial-_home visiting	Home visiting programs should offer incentives to CHWs.

Inductive analysis explores the data to assess what unexpected relationships or issues have emerged from the data. This analysis includes a word find to determine the most common topics mentioned in each interview.

Table XII illustrates the frequency and some unexpected findings. For example, some of the codes below were not anticipated:

Policy Driver-Policy Drivers- Sustainability-Wage Income-Infrastructure-Collaborative

Policy Driver-Academic Drivers-Certified Approved Competencies

Policy Driver-Financial Drivers-Funding Sources-Return on Investment-Medicaid State Plan

Policy Driver-Attitudes, Values and Belief Drivers-Self -Efficacy drivers, Constructs, and Analysis

TABLE XII - CODING REFERENCE FREQUENCIES

Theme	Reference(s)	Barriers – from Table XIV
A. Policy driver	1,131	
1. Sustainability	1,129	finding sustainable funding
a. Expanded roles	363	we have to have openings for them to go to work job.
b. Infrastructure	346	One of the things that the State of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. We're number 49 on the list of states in terms of Medicaid funding
c. Collaborative	236	We should be fighting hard to the federal government to provide us more funding. In that fight you can kind of advocate things and say we need a certain pool of money to fund community health workers.
B. Academic drivers	305	need for certification – don't believe it is necessary
1. Certified standardization	226	organization will train their CHWs on disease-specific issues doesn't make them a CHW
2. Certified approved competencies	78	no standardization around certification
C. Financial drivers	267	So, the biggest barrier is finding sustainable funding.
1. Funding sources	266	the payment for training
2. Return on investment	77	employers are still trying to figure out how to pay for the work of CHW
3. Medicaid state plan	75	Need to bring in more dollars from Medicaid
D. Attitudes, values, and belief drivers	173	
1. Community acceptance	172	Many of the respondents when describing their view or what they think certification means highlighted that there is still a great deal of difference in what is being discussed when leader, educator, or CHW mean when the talk about certification.

TABLE XII (continued) - CODING REFERENCE FREQUENCIES

Theme	Reference(s)	Barriers – from Table XIV
2. Self-efficacy	82	Still difficult for them, “CHW,” to get paying jobs in that role.

There were certain systems with naturally established relationships. Based on Figure 5, all the systems sought to find some form of effective strategy to improve operations. However, community colleges and employers have had a mutually beneficial relationship with supply and demand. Community college missions include a focus on training individuals for the demands of employers. CHWs have traditionally trained in community-based organizations, often, in the communities where they live, which brings value to the work that they do

This research query of public health leaders with regards to workforce drivers may compel employers to consider hiring CHWs to improve health outcomes in low-income communities. Figure 6 shows that these anticipated drivers could be a potentially effective strategy that will engage all systems to promote the activation of the CHW workforce and provide sustainability.

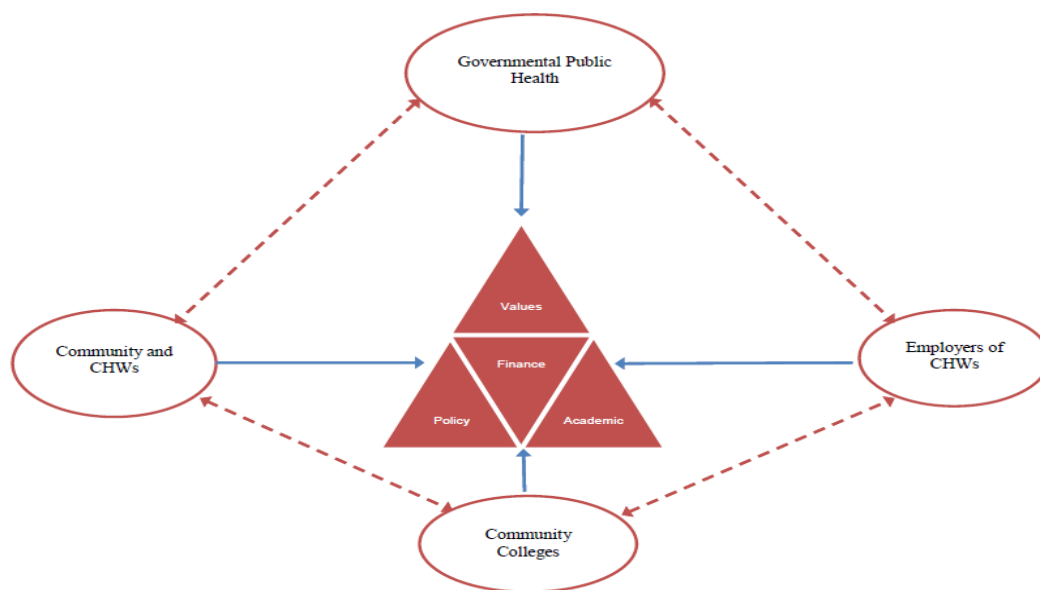


Figure 5. Discuss the Illinois approval process with stakeholders identified.

This figure displays the structure with major drivers that support sustainability of community health workers in Illinois. These themes- values, policy, academics and finance take the place of creating effective strategy displayed in the conceptual model.

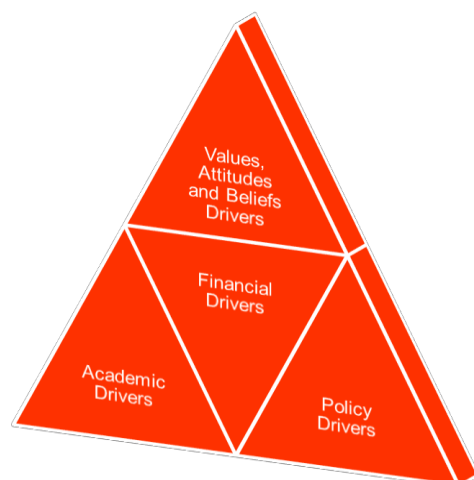


Figure 6. CHW Framework Model merging drivers with stakeholder dialogue

c. Policy Evaluation

Curriculum development through the work group, which included the researcher, along with indirect participation from other workgroups, set the foundation for the State of Illinois House Bill (HB-5412). The curriculum development workgroup concluded its work before HB-5412 was passed into law. Thus, most of the language of stackable credentials and the different levels of employment became incorporated into the policy (legislative language). The drivers were identified through the literature review as potential barriers to expanding CHWs as legitimate, valuable members of the health care workforce. Therefore, by addressing the barriers with employers, conversations occurred and can still occur within those systems to adjust operational changes that could sustain the CHW workforce. Mintzberg's (1987) strategy aligns to the methodological strategy used in this project, by engaging CHWs with developing a stateside curriculum that evolved into policy. CHWs are practitioners who know their craft intimately. Out of this work, House Bill 5412 was created (Mintzberg, 1987).

While developing the statewide curriculum, gaps identified in the literature included addressing legitimacy within the CHW workforce. Research has identified that when CHWs go through a formalized training program and the more training a CHW obtains, their self-efficacy is stronger. Similarly with a profession, if standardization occurs, then the workers assume legitimacy from a more regulated/standardized profession. Even though the curriculum development represented just one interest area, it would soon demonstrate value with the other prioritized interest areas of policy, sustainability, funding, certification, and academic standards.

The intended policy was to create a statewide infrastructure for the CHW workforce.

Unfortunately, recommendations that were collectively developed were not all implemented as intended due to a change in state leadership. The former governor and his staff (which includes the State Health Department Director) were extremely supportive and progressive with the CHW movement. Now, with new leadership, those previous state priorities are no longer priorities. There is a state budget impasse, state bills are not being paid, and there are national and state threats to the ACA, which made most of the provisions to create and sustain CHWs.

Last, the researcher has been working with the Centers for Disease Control and Prevention to launch an initiative on how to get more states involved with creating a CHW workforce infrastructure in other states.

C. Validity Consideration

The aim of this action research was to explore statewide provisional drivers, to expand the roles of CHWs in Illinois, and make recommendations based on the described resources. The action research approach addressed the implementation of a CHW program in the community college setting, which was the main focus of this study, to describe the perceptions, attitudes, and belief of public health leaders and to explore statewide provisional drivers to expand the roles of CHWs in Illinois. In addition, the use of action research solved an immediate practical issue and seized an opportunity to create socio-economic change and address health equity in the underserved communities that use CHWs.

D. Limitations

This study involved interviewing CHWs in leadership roles and leaders in health care who employed CHWs. In future research, employers who employ CHWs should be the focus. In that same spirit, there could have been more employers interviewed; however, the sample was purposeful and drew upon my current partners who were able to participate in my inquiry.

The lesson that can be drawn from this research is that employers want to hire more CHWs because they see the value CHWs bring to communities they serve; however employers are compelled by financial restraining forces that overrule human resources.

The needed action is policy to push the recommendations created by the Illinois Community Health Worker Advisory Board. Making these recommendations law gives the employers the tools they need to expand the roles of CHWs. In addition, it provides the needed stability that will create sustainability and a solid infrastructure for CHWs in Illinois. The major lesson that can be drawn from this study is that policy is needed for employers to feel comfortable about the expansion of roles of CHWs in Illinois. Even though state leadership has to act to move the recommendations into law, there are other activities that should take place simultaneously. An association should be created to continue to hold policy makers accountable, to create a CHW agenda, and to develop activities that support the use of CHWs and create value on the regional and local levels.

Moreover, this study is consistent with the perception, attitudes, and beliefs of CHWs and the intrinsic value they bring to underserved communities. The value is not placed on how many hours of training, the number of certificates or degrees you have, but the relationship that the CHW has with the community served. It was surprising that employers articulated this perception and valued the contributions of CHWs in their communities.

IV. RESULTS

This chapter includes a description of the results of my research as described in the previous chapters. The results include the areas from which data was collected and analyzed: literature review, curriculum development background information and the qualitative data from the structure interviews and focus groups. In addition, the transcribed data presented four thematic drivers: (a) policy; (b) financial; (c) academic; and (d) attitudes, values, and beliefs. This study included exploring these statewide thematic provisional drivers to expand the roles of CHWs in Illinois and make recommendations based on the described resources.

A. Literature

1. Competencies

Proper preparation or training is crucial for CHWs working in all types of settings and communities. Therefore, it is imperative to identify, describe, and delineate CHW core or basic competencies to provide adequate training, guidelines for supervision, and standards for program evaluation. Expressing the desire for standardization, one supervisor in a Lake County focus Group of Spanish-speaking stakeholders remarked (translated) “that having standards would have helped her develop their training program . . . and make better use of their resources” (CCHWLN, 2012, p. 32). The word *standard* or *standardization* was explicitly stated in at least half of the focus groups and implied in the others.

A related concept, the belief that all CHWs should have basic common training related to their work, even if their areas of specialization differ, was explored in Online Survey Question 5. A majority of the respondents (78.9%) to the CHW supervisor survey indicated that a common, basic training for all CHWs was important, and 93% of CHW survey respondents indicated the same. A couple of attendees at the South Suburban College (SSC) focus group made critical

observations, as indicated in the following responses: “Before talking about training, we should first ask what the qualifications of a CHW are?” and “We come in with experiences and qualifications before we get hired—what are those? Then, we can talk about training” (CCHWLN, 2012, p. 22). These responses illustrated a self-awareness of their own intrinsic value as CHWs and the need to acknowledge these competencies prior to any discussion of training.

Question 11 in the online survey sought to identify the essential skills or competencies necessary for CHW work. Sixteen different skills were presented in the multiple-choice question that encouraged respondents to mark all that apply. Of these 16 categories, ranging from health-related skills to generic workplace skills, communication skills received the highest percentage of responses at 93.1% of CHWs and 100% of CHW supervisors. Among CHW supervisors, survey respondents’ interpersonal/people skills tied communication skills at 100%. Conversely, interpersonal skills received the fourth highest response percentage among CHWs at 69%. Health-related or medical competencies barely made the top five choices expressed by CHWs and CHW supervisors’ online respondents alike. Among CHW supervisors, basic health science knowledge was in a three-way tie for fourth place at 84.2%, along with advocacy skills and professionalism or ethics. Basic medical skills were in a four-way tie at 62.1%, receiving the fifth highest response percentage among CHW survey respondents, along with leadership skills, capacity-building or patient-empowerment skills, and professionalism/ethics.

The importance of core competencies was a theme across focus groups and survey responses. Focus group participants identified several competencies, with the most common being cultural competency, knowledge of the community served, and leadership. Regarding cultural and community competency, respondents in the South Suburban focus groups

commented, “They need competency on whatever condition/topic they’re working on, as well as resources available for that condition/topic in the community,” and “Cultural competency is very important, specific to community/cultural events” (September 6, 2012). Of the leadership competency, Lake County’s Spanish-speaking focus group proffered (translated), “*Promotoras* are influential in their community; their leadership includes being able to bring people into the organization, but also [to] identify other potential leaders” (June 16, 2012). A key finding across the focus groups and surveys was the imperativeness of professional core competencies, many of which are broad and not necessarily specific to health or medical conditions. The latter can be developed in specialized training based in an organization’s mission and specific tasks performed by the CHW.

With regard to preferred qualities and competencies in hiring CHWs, Question 21 in the online survey queried how a good CHW is determined. Only 4.1 percentage points separated CHW (90%) and CHW supervisor (94.1%) respondents who contended that having experience working with the community served was the most desired characteristic of the nine multiple choice (mark all that apply) options. The notion of CHW core competencies is greatly valued by CHWs and stakeholders in that it is perceived as (a) standardizing and professionalizing the occupation or vocation, (b) facilitating portability and transferability, and (c) increasing job opportunities, both hiring and advancement.

An academic setting was one of many locations where CHW trainings are articulated. Focus group respondents specifically referred to training programs offered at the University of Illinois at Chicago (UIC), Harold Washington Community College, and development course offerings at SSC. One focus group participant at Sinai Urban Health Institute stated, “Trainings should be formal with credits and/or certificate of completion” (October, 2012). According to the

online survey, and second to a combination training program, 58.6% of CHW survey respondents to Question 6 suggested taking training courses at a community or technical college or a community-based training program in the core skills needed compared to 0% of CHW supervisor respondents. Question 13 of the online survey asked CHW respondents if they would be interested in receiving college credit for training, and 75.9% indicated that they would. It might appear as though the desire for community-based training and academic training were incongruent, but this was not necessarily the case. Novel partnerships between community-based organizations can be developed to offer college credit training in settings that are familiar to CHWs.

2. Areas of Training Received (Health)

Community health workers and their employers in focus groups reported a myriad of health-related and disease-specific areas of training. The most common health-related or disease-specific trainings reported are, according to prevalence, (a) diabetes, (b) general health, and (c) women's health. Other reported trainings include, but are not limited to, cardiovascular disease, asthma, and cancer. Online Survey Question 24 asked respondents which CHW competencies their organizational training covered. Of 17 multiple-choice (mark all that apply) responses, in a four-way tie for second, are basic health science and disease- or condition-specific training, reported by CHW supervisors at 78.6%. In response to the same question, and in a six-way tie for fourth place, CHWs reported basic health science knowledge and medical terminology at 70%.

3. Other Areas of Training Received (Non-health Related)

Advocacy, community-based participatory research, and organizational mission-based or task-related training were also alluded to in some of the focus groups. The most prevalent non-

health-related areas of training identified by CHWs in Survey Question 24 were (a) communication skills (100%), (b) leadership skills (90%), and (c) interpersonal skills (80%). Advocacy tied for fourth among CHW respondents at 70% with service coordination skills, teaching skills, and cultural competency. CHW supervisors responded to the same question with interpersonal skills, service coordination skills, and professionalism, tying for first place at 85.7%, followed by a tie for second with communication skills and capacity-building or patient-empowerment skills at 78.6%. The high response percentages for non-health-related CHW training buttress a point previously stated, which was that basic core competencies can be broad, whereas health-related or disease-specific competencies can be specialized training based on organizational need and job-related tasks.

4. Training Areas of Interest and Need

Community health workers have a wide range of training that they would like to receive or feel that they need. The health or condition-specific training areas of interest indicated by focus group respondents included asthma, heart health, diabetes, nutrition, and fitness. Self-care, stress management, and how to remain safe in the field are training areas mentioned at least three times during the South Suburban focus group. One respondent confided, “CHWs may be in dangerous conditions/situations so they should know how to deal with this and not get burned out overwhelmed” (CCHWLN, 2012, p. 19).

Training considered to develop the CHWs more broadly and lead to occupational advancement were also discussed across multiple focus groups, as exemplified in the following statement by a Sinai Urban Health Institute focus group participant: “Would like additional trainings in the following areas: counseling experience, learn another language (e.g., Spanish), medical terminology, cross-training in different diseases, health reform requirements,

presentation skills/PowerPoint, speech writing” (CCHWLN, 2012, p. 19). Ethics was also mentioned as an area of interest for CHW trainings.

5. Training Length and Methods

The length of the trainings ranged from a half day to 16 weeks and was contingent upon organizational needs or program goals. Focus group participants used a variety of methods, including “formal/didactic, popular education, experiential, etc.” This various length of trainings spanned across focus groups and online survey responses. The most common training methodology according to the focus groups was on-the-job-training, mentoring, shadowing, and apprenticeship, with a minimum of 10 responses referencing this form of training. Question 23 of the online survey asked, “If CHW training is provided, what does it look like?” CHWs (55.6%) and CHW supervisors (56.3%) answered that a combination of classroom-style learning and supervised mentorship is used. Similarly, Question 6 of the online survey asked in what ways CHWs should evaluate the core skills of CHW work. CHW supervisor respondents noted a combination of a training program and supervised work-training hours at 84.2%, whereas CHWs recommended the aforementioned at 58.6%.

6. Data Collection and Analysis

In this study, the researcher interviewed 15 participants for the semi-structured interviews. The participants varied in number of years of experience, race, educational attainment, diverse community residents, and a diverse representation of organizations (see Table XI). The participants presented themselves as having a considerable awareness and experience of working with and as CHWs. The organizations were among managed care organizations, safety net hospitals, community-based organizations, state public health organizations, and the Illinois

Legislative Assembly.

B. Findings and General Discussion

The following are some of the salient findings from my data that address each of my research questions:

1. What are the statewide drivers for public health leaders in moving toward readiness and adoption of a CHW workforce?
2. How are Illinois employers using CHWs in health care workplaces? What are the drivers of readiness and adoption and restraining factors related to policy?
3. What are public health leaders' perceptions and knowledge of the value of CHWs in addressing health equity in Illinois? What are the perceptions of CHW leaders to the stackable credentials for CHWs?
4. How can the leaders of academic institutions, such as community colleges, respond to the workforce drivers to promote quality public health outcomes through stackable career ladder and pathways?

Based on the participants' responses, the following themes emerged regarding statewide readiness and adoption; they are the policy drivers with sub-codes that included sustainability, expanded roles, infrastructure, and collaborative codes. Using Lewin's force field analysis, the researcher considered the themes in three policy levels: statewide, regional, and local (Lewin, 1958). For the state level, I argue that sustainability and the possibility of an expanded role for CHWs in the Medicaid program would be positive forces pushing against lack of state leadership with policy, the demand of funding for positions, and the needs for employers to demonstrate their return of investment when using CHWs. Policy gives direction not only to CHWs but to the employers who hire them. Policy and funding are restraining forces that are critical and should

be tackled before any other issues are addressed. At the regional level, such as with South Suburban College, the demands to enhance the infrastructure for CHWs and the outcomes of standardization of training programs would push against the positive demonstration of competencies and enhancements of skill development aligned with practicality for the stackable model of credentials. Finally, at the local level, the support of community acceptance creates that foundation that meets the expectations of self-efficacy, expanded roles, and collaboration. Figure 7, below, illustrates the tensions in the data revealed in the analysis. However, Lewin suggests that the best way to help the change to occur is to decrease the restraining forces (Lewin, 1958).

Force Field Analysis

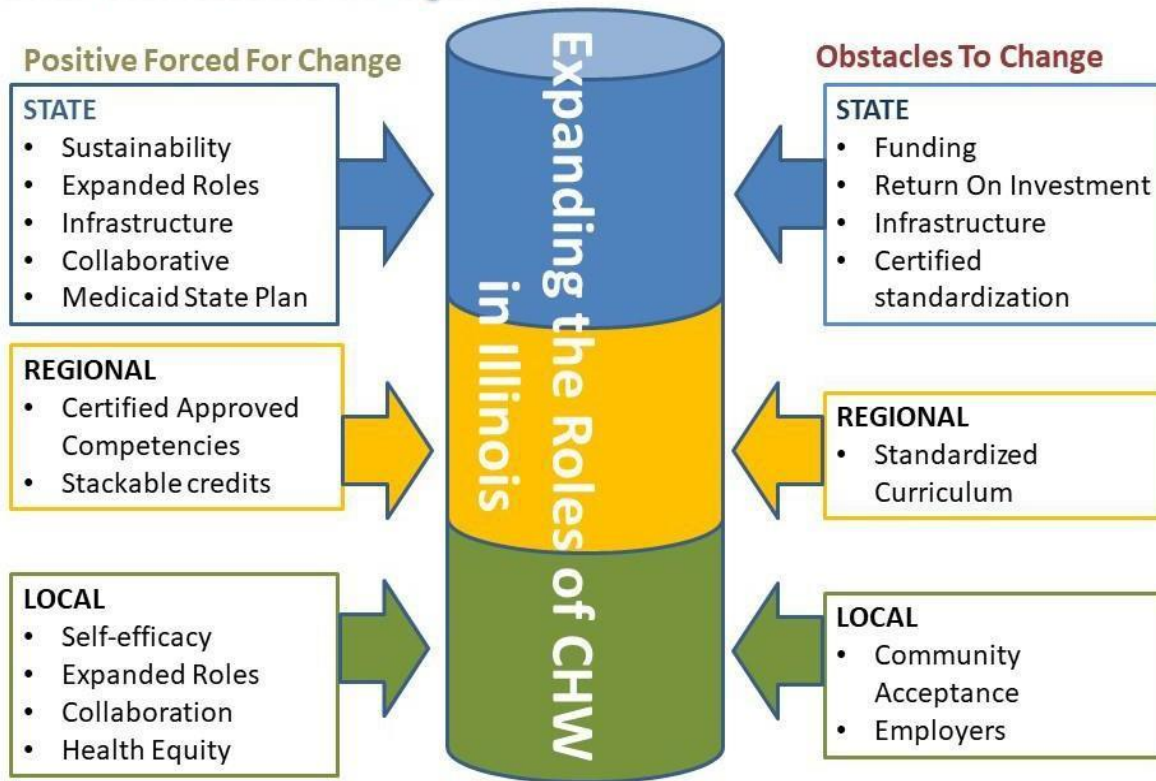


Figure 7. Themes displayed according to Lewin's force field analysis

This figure was included to illustrate the obstacles to change that need to be offset with identified opportunities for change with the expanding roles of CHWs in Illinois. Therefore, in order to break from the status quo, the equilibrium must be disrupted by strengthening the driving forces or weakening the restraining forces. “To bring about any change, the balance between the forces which maintain the social self-regulation at any given level has to be upset” (Lewin, 1958, p. 47.)

Table XIII summarizes my research questions in relation to the four thematic drivers: policy, academic, financial, and attitudes-values-beliefs:

TABLE XIII
THEME REFERENCE FREQUENCY TABLE

Research Question	Theme	References	Example participant responses
	A. Policy drivers		
Q # 1	1. Sustainability	1,129	Well, I think it's going to be key for prevention efforts, key in reducing readmission rates because, you know, social determinates of health are drivers, they're going to be a part of the solution.
Q # 1	2. Expanded roles	363	I also look at managed care, I also know that the role of the care coordinator is quite unique, and the roles of the care coordinator and CHW are crossing over. There is a lot of uniqueness going on with that, and there are some great models out there that are successful.
Q # 1	3. Infrastructure	346	As of now, the governor did not approve those recommendations; it's not off the table but it might just take some time and understanding on what needs to be changed. I believe we should still keep pressure on the Governor's Office.
Q # 1	4. Collaborative	236	HUD, they really want to have community health workers in subsidized housing developments and as a role for members of resident councils and things like that to move into the roles as CHWs to be aware of monitoring, promoting, hot spotting to support the health, with the broadest definition of health in terms of jobs and education and all those kinds of things for the residents of that housing.
Q # 1	5. Employer		
Q # 1	6. Restraining factors		
	B. Academic drivers		
Q # 3	Certified standardization	226	On the state level, if we're looking at Illinois, which currently has no official certification (because I've also worked on certification efforts here in the state), I think there should be a mechanism where an individual can earn the basic advanced or associate's degree.
Q # 3	Certified approved competencies	78	Then I think some policy work to say community health workers if they need certain core competencies and skill set and this is the type of person that is needed and based on the skill set they are you know well and capable of doing this type of work on the state level, and, if we can get that type of legislation passed, then that will open the door for some sustainable funding for CHW
Q # 2/Q # 3	Stackable credits		
# 3	Respond to workforce		

TABLE XIII (continued)
THEME REFERENCE FREQUENCY TABLE

Research Question	Theme	References	Example participant responses
# 2	C. Financial drivers 1. Funding sources	266	More grants. They're helpful. One of the things that the State of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. We're number 49 on the list of states in terms of Medicaid funding. We should be fighting hard to the federal government to provide us more funding. In that fight you can kind of advocate things and say we need a certain pool of money to fund community health workers
# 2	Return on investment	77	Cost vs. benefit... we should see a return on investment. This funding source focused toward hiring CHW, would I see a decrease in my hemoglobin A1C, will I see fewer patients going to the emergency room, see my asthma patients not going to the emergency room. But the stuff that we are doing now is not working.
# 2	Medicaid state plan	75	HMO State Plans – Medicaid in the state also made some addendums to contracts, the HMOs are willing to pay for the services that CHWs do. I do know that CHW work is funded by HMO state plans in some organizations.
# 4	D. Attitudes, values, and belief drivers Community acceptance	172	Oh, my God, because community health workers are trusted members of the community and they are the ones who identify and know where you go get your groceries, some food, where do you go and get some Pampers where you can go, you know, they give you this if you participate in a health care research study or research study, they'll give you \$50.00 gift card and they know about things like this and they will communicate this to community residents.
# 4	Self-efficacy	82	But a community health worker will have its pulse on the health and areas that impact the patient that we serve. That's self-efficacy. You develop it. You expand. You become, I don't want to use the word empowered, but they know what they know, and they have no problems sharing it now because you don't feel well maybe I don't know enough or maybe I do. Yes, you do. You know a lot more than you've ever wanted to say you did to not go out and you have a responsibility to use it.
# 4	Health equity		

Table XIV is an illustration of the quotations about restraining factors that brings balance to the narrative. In this case, barriers were identified as anticipated obstacles that prevent change. For example, in Table XIV under the attitudes, perceptions, and belief driver—*“As far as the “need for certification—don’t believe it is necessary.” “The fact that they go and get a degree in CHW, I don’t think that is value per se.”*

TABLE XIV. THEMATIC DRIVERS – QUOTATION OF BARRIERS

Thematic Driver	Barrier/Quotations
<i>Financial drivers</i>	<i>More grants. They're helpful. One of the things that the State of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. We're number 49 on the list of states in terms of Medicaid funding. We should be fighting hard to the federal government to provide us more funding. In that fight you can kind of advocate things and say we need a certain pool of money to fund community health workers.</i>
<i>Financial drivers</i>	<i>HMO State Plans – Medicaid in the state also made some addendums to contracts; the HMOs are willing to pay for the services that CHWs do. I do know that CHW work is funded by HMO state plans in some organizations.</i>
<i>Financial drivers</i>	<i>The biggest barrier now is the payment for training and support positions of community health workers. So a lot of employers are still trying to figure out how to pay for the work of community health workers.</i>
<i>Financial drivers</i>	<i>So, the biggest barrier is finding sustainable funding.</i>
<i>Financial drivers</i>	<i>Any organization will train their CHWs on disease-specific issues, but that doesn't make them a community health worker"</i>
<i>Financial drivers</i>	<i>There have been pockets of funding from providers who internally fund (i.e., include funding for CHWs in their budgets) CHWs, but the funding has been unsustainable.</i>
<i>Academic drivers</i>	<i>If we are educating students for a specific job title and job function, and as a community, we have to have openings for them to go to work job.</i>
<i>Attitudes, perceptions, and beliefs</i>	<i>As far as the "need for certification – don't believe it is necessary". "The fact that they go and get a degree in CHW, I don't think that is value per say"</i>
<i>Academic drivers</i>	<i>To make it more structure of educational system, I think will defeat the purpose of CHW.</i>
<i>Attitudes, perceptions, and beliefs</i>	<i>There is no clear definition of what certification means. Many of the respondents when describing their view or what they think certification means highlighted that there is still a great deal of difference in what is being discussed when leader, educator, or CHW mean when the talk about certification.</i>
<i>Attitudes, perceptions, and beliefs</i>	<i>Still difficult for them, "CHW," to get paying jobs in that role.</i>
<i>Academic drivers</i>	<i>Really is no standardization around certification.</i>
<i>Academic drivers</i>	<i>There is still no clear agreement upon what skill sets are needed or being discussed.</i>

The restraining force is not buying into the stackable credentials as being a value to CHWs and seeing the true value as the lived experience and being a part of the community fabric in which CHWs serve and live. In addition to the attitudes, perceptions, and belief driver, the financial driver went against some of the natural operational procedures of corporations.

Many of the barriers discussed by participants fell within the financial driver's category because of concern about the financial support of CHWs. This concern is aligned with the literature, which addresses not having a consistent course of funding to support CHWs. Under the financial driver, a participant voiced:

More grants. They're helpful. One of the things that the State of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. We're number 49 on the list of states in terms of Medicaid funding. We should be fighting hard to the federal government to provide us more funding. In that fight, you can kind of advocate things and say we need a certain pool of money to fund community health workers.

Unfortunately, grants, because of their uncertainty of continuation are not the solution to supporting CHWs in Illinois. However, this barrier gives opportunity for corporations and other organization that employ CHWs to lobby for more federal Medicaid funding to support CHW work. A more collaborative approach to pooling funds for lobbying can also be a solution.

There are other tools that can be used with just having state agencies amend Medicaid dollars to support CHW work. For example, *"HMO State Plans – Medicaid in the state also made some addendums to contracts; the HMOs are willing to pay for the services that CHWs do. I do know that CHW work is funded by HMO state plans in some organizations."* The state leadership can show leadership by amending the Medicaid funding by a waiver to allow CHWs to do the work and allow CMS to recognize the work by reimbursement or amend state HMO contracts to allow reimbursement.

Last, the academic driver incorporated the competencies, the stackable credentials, and

the informal and formal approaches to certification. There were a number of participants who did not see the job demand aligning to the training needs of CHWs. For example, *“If we are educating students for a specific job title and job function and as a community, we have to have openings for them to go to work.”* The participant may have identified this as a barrier; however, the Bureau of Labor Statistics is responsible for identifying the workforce demand, and they state that for CHWs there is a demand. This goes back to the purpose of this research and the relevance of involving public health leaders. If employers observe the academic sectors’ taking the lead with training being a part of the supply, they will take the lead by filling the demand.

Part of the evolution of CHWs and their role relates to research projects where CHWs were utilized and evaluated as making important contributions to health. While we may be aware of the value and use of CHWs in the field there is a great gap between the innovative use of CHWs in research and practice and the institutionalization of their role within health care systems. Perhaps communities and employers are more accustomed to understanding traditional pathways in health care employment. Without the support and action of governmental public health and legislative policy initiatives, the wider adoption of CHWs within health care and public health is compromised. Employers may fill in the gaps with their own positions, roles and training programs, but these do not easily support the need for large scale institutional training of CHWs in the approach presented here.

C. Policy Drivers

1. Sustainability

Participants’ responses indicated sustainability was a significant driver when addressing the readiness and adoption of the CHW workforce. Based on this study, sustainability was defined as a strong supportive infrastructure needed for CHWs with regard to funding and

formalization. Policies are needed to support the sustainability of CHWs' work in the State of Illinois. For example, FF stated:

I think you know the movement can be sustained. I think if the State of Illinois would kind of move forward on the things of policies and changes around CHWs, like the recommendations that the Illinois CHW Advisory Board put forth.

Furthermore, GG noted, "Cook County Health and Hospital President, he voiced his support for CHWs and will be hiring them to cut cost on a county level. If we can get the Governor's Office [to] speak about it, it will help the movement." CHWs are no different from any other profession. They need an infrastructure that is able to sustain itself by having state policies that regulate their profession. Building a solid infrastructure provides an opportunity to be successful and upward mobility in education, training, and workforce-development activities. In addition to creating sustainability, a robust employability component should yield livable wages. Even though the state leadership change was a barrier, organizations have recognized the value of CHWs and have begun to take the lead in creating the sustainability through policy development within a collaborative effort.

2. Expanded Roles

In addition to sustainability, expanded roles was another emergent theme of importance when addressing the readiness and adoption of the CHW workforce. Expanded roles identify opportunities for CHWs to work in conventional and nonconventional settings. For example, researchers are conducting more research on integrating CHWs into health care teams. CHWs have a unique role on interdisciplinary teams because of their situated knowledge and cultural insight. CHWs have lived knowledge that complements the clinical or credentialed knowledge of other members of the interdisciplinary team and provides important insights into patients' strengths, challenges, access to resources, and ability and readiness to comply with providers'

orders. There is a trend toward integrating population health into health care and integrating behavioral health into primary care. There are many opportunities to show how CHWs assist with getting the work done. In addition, participants identified opportunities for CHWs as professionals doing home visits, working as professionals in the housing authority, and being cross-trained to meet the needs of the community.

BB stated, “The state should provide incentives to home visiting programs for hiring CHWs, e.g., preferential rating of public contract applications, demonstration project funding, etc., in all public agency contracting.” Illinois should start putting its money toward health care approaches that are effective with vulnerable communities. A part of the expanded role of CHW, home visits provide a process for other roles to be considered and explore roles that have demonstrated positive results. Participants shared countless stories with regard to home visits. They were able to report back to health care teams about the improvement or decline of the health status of clients assigned to them. The stories ranged from identifying asthma triggers in the home to finding grocery stores that offer fresh produce for reasonable prices.

AA noted:

They’re coming full circle now that they’re recognizing that in the area of affordable housing that the health care system is seeing the importance of housing and health that Medicaid will pay for housing assistance. They won’t pay for subsidized actual rent, for example, but there are programs now, there are states where they are authorizing Medicaid payment for helping people find affordable, quality housing. They recognize it has such a huge impact on health. They are closing the circle.

DD stated, “Cross-training and pathways to allied professions may also be a part of workforce development.” AA indicated that policy makers are closing the gaps in some areas of nontraditional settings for CHWs. Social determinants of health models are becoming more popular, and CHWs are understanding that adequate housing, low unemployment rates, access to

fresh produce, and access to health are opportunities to expand the roles of CHWs. With the expansion of roles, training and education are paramount. CHWs will need more specialized training within these expanded roles.

However, the barriers that come with expanded roles are expanded skills. If home visits and nontraditional roles are assigned to CHWs, then training and education will have to accompany these new roles and responsibilities. FF stated, *“There is still no clear agreement upon what skill sets are needed or being discussed.”* Therefore, standardization of scope of practice and competencies has to occur before expanded roles can occur. Put another way: advocates for expanded roles of CHWs will need to work to identify framing and arguments leading to discussion and dissemination of rationales for standardization.

3. Infrastructure

Yet another emergent theme was infrastructure, which is the underlying foundation of policy and resources to sustain a workforce that is demand driven by employers and policy makers. In 2014, Governor Quinn passed a bipartisan bill that allowed the formation of the Illinois CHW Advisory Board. The board was responsible for making recommendations to create a robust CHW infrastructure. OO described challenges and the strategy behind creating infrastructure for an “indigenous nonprofessional worker”:

What pains me greatly is that the barriers and challenges described by Drs. [RE] and [RI] were what we are still experiencing today. That is because of the lack of a really intentional infrastructure to support the work of CHWs around policy, around reimbursement, around finance, around all of the things that we need to engage this profession.

The focus group discussions continuously referred to the statewide recommendation that can be used to establish the needed infrastructure. HB 5412 addressed several areas: core competencies and roles, training and certification, financing and reimbursement, and workforce

development. There were extensive conversations about HB 5412 and the benefits regarding the infrastructure that state recognition could provide.

HB 5412 was designed to establish the necessary core competencies, skills, and knowledge of an effective CHW. The legislation recognized CHWs under state law as key components of the health care delivery system and created the Illinois CHW Advisory Board, an infrastructure to conduct research, provide expertise, and create recommendations to integrate the CHW model in Illinois. (Document 1).

Recognizing CHWs under state law provides a large, diverse group of frontline workers with a professional identity. HB 5412 started a legislative process that promoted the belief that CHWs must become a more integral and necessary part of any health care delivery model, Illinois like many other states, lacks some of the underlying policies, systems, and infrastructure to integrate CHWs effectively into the health care and social services systems. This report recommends that Illinois develop a strong supportive infrastructure to ensure the sustainability of this vital workforce and to strengthen the depth and breadth of its impact. (Document 2)

Having a robust infrastructure statewide would bring about additional opportunities for CHWs and the organizations that employ them. Infrastructure was a theme that strongly related to the other emergent themes from the study; it is the foundation that branches out to other emergent themes. The infrastructure leads into establishing an academic/training capacity arm informal or formal). I look at this as the supply and demand model. Traditionally, the supply and demand model is the relationship between academic institutions and employers. This collaboration provides a competent workforce for employers. There are organizations, academic institutions, and employers who already train CHWs. This or community-based organizations training CHWs for the work employers need them to do—the demand. One of the limitations of this approach is the variety of concentrations of community-based organizations, research centers and health care providers throughout Illinois. One of the arguments that needs to be made is how to address variation of demand and perceptions of the value of CHWs and their role in the health care workforce. In addition, the infrastructure establishes the financial driver, who will pay for the worker of CHWs? Currently, the Illinois Community Health Worker Advisory Board made some

recommendations that address this barrier. Last, establishing a statewide association can address ongoing activities supportive of CHWs statewide. These activities can continue the work for the Illinois Community Health Worker Advisory Board to collaborate with other organizations in Illinois or more well-developed associations outside of Illinois.

4. Collaboration

The next theme that emerged was collaboration. In this study, it was not difficult to see how CHWs collaborate with other organizations to achieve a shared vision. When asked who should be at the table, I heard the Department of Transportation, the Department of Housing, managed care organizations, hospitals, policy makers, academic institutions, Federally Qualified Health Centers, community-based organizations, the Department of Corrections, social service organizations, and the list goes on. Collaboration was also mentioned when discussing infrastructure. A participant stated, “If Illinois isn’t ready, then we can collaborate with other statewide agencies in behavioral health with well-established systems.” Based on the focus group responses, the following comment was noted:

I believe that there should be partnerships with insurance agencies, clinical offices, hospitals, school systems, jail system, mental health facilities, churches, and grocery stores. This is a partnership that services the community, so the partnership will have to touch on all of those at some point because that is what surrounds the patient to be successful or not to sustain CHW workforce. (FF)

The following quotations were aligned with themes:

The Network is moving on now is to really pull together our stakeholders around the recommendations. Representative [ZZ], who is a super woman and the champion for community health workers, is willing to work with them to try to figure out ways we can move those recommendations without legislation convening our stakeholder and community health workers all around so that we can know how to move things forward. (GG)

I think you need to continue to advocate with the Governor’s Office and the Department of Public Health on these issues. I think you should set up meetings as high as you can get. Whether

it is with the governor's chief of staff, with the governor, the head of the Department of Public Health, the head of DHS; continue to put pressure to get this done. I would also look at other advisory groups that might be allies in this and meet with them as well. There is a nurse advisory group and certainly the perinatal advisory group. (FF)

FF mentioned there should be opportunities to capitalize on partnerships established to gain movement in creating an infrastructure that is supportive of CHWs in Illinois. This partnership must have a shared vision and equal interest. In addition, it will be important to continue the efforts to move the recommendation forward by keeping the Governor's Office informed of the value of CHWs. Last, it will be important to continue the educational campaign to inform employers and other stakeholders of the roles of CHWs. Employers who value what CHWs do should organize this campaign.

5. Employers

Consider this quote from an employer:

One staggering statistic is that we only get, while only 10% of our patients are covered by commercial insurance, out of Hospital A community, we only get 18 percent of commercially insured people utilizing our hospital. That means a huge chunk of people are going outside of the community for their health care. That's one of the things we've got to figure out is how we make ourselves attractive to the commercially insured.

That would be another use for CHWs, connecting us to the commercially insured. One barrier is the goals and intentions of CHWs related to funding sources. CHWs may not take on a navigator role unless educated about the health system and funding expectations for consumers. This quote reflects a potential clash of ethics between the employer and certain community based CHW worldviews.

6. Restraining Factors

Lewin's force field analysis mentions two major forces: driving forces and restraining forces (Lewin, 1958). The driving forces are the positive direction of the forces leading to change. The restraining forces are the negative forces or barriers preventing the change from happening.

Absolutely. Go back to the emergency room. The more people we can convince the emergency room isn't their best option for primary care and CHWs can connect them with primary care physicians, that's a big savings for us. Our emergency rooms are going to be active with people

who truly need emergent care. We don't need the emergency room clogged up with people who are just coming in with the common cold or things that can be cleared up in the physician's office. That's where a community health worker can be very helpful.

D. Academic Drivers

1. Certified Standardization

So, most community health workers don't stay on the same level. Like myself, I'm pursuing a master's degree in social work. Because I want to be a licensed clinical social worker for my community because that is a passion to me, so education was the pathway for me to get there. But some community health workers just want to stay within their communities. So, I think allowing that process for career pathways and making it possible is definitely necessary and having the basic certificate and so many hours and if they want to continue a pathway into the advanced certificate and the associate's degree and leads to a bachelor's degree and so on and so forth, and it's a great opportunity for advancement, and we should be flexible because education is not for everyone. (GG)

II. stated, "What certification will bring us we'll have employment mobility, so that you know employers might think this is more important. Employers will have an idea of what the person knows based on the curriculum." HH responded, "It would be nice to see them with the associate's degree with a focus on basic health care knowledge. But yes, an associate's degree I think would be a tremendous asset for a community health worker."

On the state level, if we're looking at Illinois, which currently has no official certification (because I've also worked on certification efforts here in the state), I think there should be a mechanism where an individual can earn the basic advanced or associate's degree. (FG-3)

I think that's why we in the development recognize the different levels, the basic, the advanced, the associates of arts, and then, since it's stackable, you can go on to a bachelor's here or somewhere else. So, recognize that there are so many things that you can do if you finish the basics. But, you will be much more prepared if you finish the advanced and things like that. (FG-1)

This process of having portability is great. We think of it as a barrier. People go to junior college because we're stupid in this country, and if you're poor you can't afford to go to a four-year college. That's a dumb reason, but in order for my credentials to be portable, in case I want to go to Texas or some other place, then I have to have some credential, whatever it is...when I move to Texas. (FG-3)

The participants' responses addressed the importance of a tiered, stackable approach to

education or training and to workforce responsibilities and promotion. The sequence of the curriculum allows CHWs to reflect on their lived experience and incorporate their experiences along with their curricular learning into a maturing practice. Some CHWs are interested in moving to other states or having new experiences to expand their options and experiences. However, these components relate back to the development of a strong infrastructure that embraces the work of CHWs. Therefore, the recommendation of the Illinois CHW Advisory Board should be adopted.

2. Certified Approved Competencies

The following response was from FG-3: “This structure is also intended to provide opportunities for career development pathways, in a tiered system, where CHWs can attain specialized skills in certain roles and areas, such as diabetes, behavioral health, asthma, etc., while others remain generalists.” A response from FG-4 was as follows, “Develop a tiered career ladder for CHWs to achieve upward mobility/occupational advancement. Tiers should include CHW generalists, CHW specialists (may require additional education and/or training in specific topics), CHW trainers, and CHW supervisors.”

There should be multi-tiered training opportunities based on the needs of the communities CHWs serve and the demands of their workplace. a. Multi-tiered training opportunities should build off trainings on core competencies and roles. b. CHWs may need to undergo additional trainings, e.g., asthma, diabetes, maternal child health, and behavioral/mental health. Such additional, focused trainings should follow evidence- based best practices/guidelines in the content of their trainings. c. Furthermore, multi- tiered approaches should provide opportunities that build on each other and prepare CHWs for career pathways both within the CHW profession and within allied professions. (FG-2)

Well, that is the way that many occupations are organized with the stackable credentials. So, on that way, it seems that would be appropriate. If you want any type of certification that includes experiential learning, I think a tiered or stackable system would be helpful. (II)

I think for, think about it, high school diploma and two years for an AA degree. It takes you longer to become a plumber. You get more money. But it takes you longer to become a plumber or a bricklayer. I’m not arguing that the only way to get it is with an AA degree. If you’re

actually going to stay in a certain area for 30 years, then I expect you to know more at the end of five years than when you started. And know more at the end of 15 years than at the end of five. (FG-1)

3. Stackable Credentials

The curriculum development team emphasized creating credentials that students can build on and continue to move forward with a basic certificate to an advanced certificate and eventually an associate's degree. These credentials are also articulated with four- year institutions. Thereby, a CHW could accumulate an individual qualification over time to help him or her move along a career pathway. The purpose of this curriculum was also to credential portability and livable wages. The themes of certified standardization and certified approved competencies describe the quotations in this section.

4. Response to Workforce - Wage increase

The main theme reflected here is the policy driver of sustainability. FF stated, "I believe that students should get paid according to the level of degree they have. Stackable credentials should be recognized on each of the levels with increased pay."

The reason that I do help support credentialing efforts are because the community health workers I feel need some support and stability for their profession and ability to move between jobs and have a stable life. The only way large-scale payment for this workforce is going to happen is if there is some degree of certification around it. It really seems inevitable to me. (AA)

HH responded, "Absolutely, there would be opportunity for employees at this safety net hospital to make more money with stackable credentials."

There is one program at the University that brought their CHWs in at minimum wage. We told them they are not cool. At least give them some decent salary because they have to navigate some really tough systems to get to work. So, people who advocate for CHWs say they may not make as much as a doctor, but they should be equitable and able to live off the salary that they make. (FG-2)

The responses above indicated support for livable wages based off tiered training and

education. Many of the employers valued stackable credentials. Stackable and tiered training provides upward mobility in the workforce and aspiration for development.

Academic institutions such as community colleges have long-lasting associations with community workforce boards and deep roots with community residents and students. These employers communicate the needs of their respective organizations related to educational attainment, credentialing, and development of skills. Academic institutions will continue to engage employers with the demand related to the needs for CHWs. The theme of academic drivers—certified standardization—describes these quotations.

I would think that the burden would be on community college and whether or not they are interested in taking it on. What its own institutional priorities are would be a factor. I would think given how the educational system is structured, that's where the support would be. Community colleges have expertise in figuring out how to evaluate experience as part of the academic credit structure and acknowledging the experience of the person is of value. (II)

Making the options available is a great thing. Community college could serve as a valued partner with the formalized education part of this movement. Some people are just intimidated with college. I can remember the first time in high school that my mom just stressed taking courses at the community college. (GG)

FF responded, "I think community colleges are a great way to do that; there in the community they have the community feel and people can relate and be less intimidated. This is a way they can transition through college."

I'm also on the board of the [community college] CHW program. I would like to see more community colleges adopting CHW programming, but again it doesn't have to have an end in academia, but when you have the academic credential, it provides a nice pipeline if you choose to continue with your education. (OO)

My experience having worked in both universities, and now working in a college like this, universities are bureaucracies and it takes a lot to get something simple done. I'm not saying that South Suburban or junior colleges are not the same, but with my experience in implementing this program here is that this allows for more flexibility. I tried to do the same thing at University of Illinois, University of Chicago.

The responses above indicated community colleges are good partners with the

development of formalized stackable credentials. Community colleges are located in various communities that have affordable academic options in obtaining a career. Community college can also offer a pipeline to health science pathways.

E. Financial drivers

The financial theme also addressed readiness and adoption. The most important funding source when discussing CHW development comes from government agencies and charitable foundation grants. Some of the provisions of the ACA may help enhance financing of CHW roles. Section 5313 of the ACA requires the CDC to award grants to eligible entities to promote positive health outcomes for underserved populations through CHWs. Themes within this driver include return on investment (ROI), funding sources, and Medicaid state plans and are described by the participants' quotations below.

1. Funding Sources

Lots of interest in integrating CHWs into team-based care. I've heard antidotes [*sic*] about places where patient care teams, where their meetings are facilitated by the CHW on the team because they know more about the life of the patient than anyone else on the team. Why shouldn't they facilitate the meetings? There is a lot going on with that right now. (FG-3)

I believe that community health workers are able to save the organization money, depending on how we use them. Especially the direction of health is quality driven and so we're going to value-based health care in this country so it doesn't matter about the volume of patients that you see—have you made them healthy, are the numbers better and the incentive dollars tied to that? (FF)

The research on ROI when using CHWs has already been established. The employers interviewed also acknowledged seeing an ROI when they hired CHWs. For example, HH stated, "Absolutely, community health workers save us thousands of dollars working in the emergency room alone. This hospital can definitely expand the use of community health workers."

The absolute takeaway from ROI themes is grounded in research. Many organizations that use CHWs acknowledge the value in cost savings. Employers supported CHWs' roles within

their organizations and, if need be, employers would support hiring CHWs by using operational funds. HH stated,

No, I don't have a problem with paying for [CHWs]) out of the operational budget. When going through the budgeting process, I will make sure that we concentrate on the fact that not having them will be a negative impact on our budget. That's one way that we can create sustainability.

The following participants' quotations are aligned with the research on CHWs and their return on investment. The positive outcomes demonstrated in the underserved communities with respect to improvement of chronic illness have created the ultimate value—saving lives. However, if employers don't recognize the savings by hiring CHWs, then employers could possibly see an adverse response to their operation budgets by having adverse health outcomes— readmissions, infant mortality, and health inequity of chronic illnesses.

HH stated, “We hope to hire two additional CHWs in our next budget in July. The future of CHWs is promising for our vulnerable populations.” Cook County Health and Hospital Systems' president voiced his commitment for CHWs and supports hiring them to cut cost on a county level. If we can get the Governor's Office [to] speak about it, it will help the movement. (FF)

GG responded, “We have case managers and we would like to train them as CHWs. Next budget that starts in July and we will bring on two additional CHWs.”

2. Return on Investment

CHWs make key contributions that enable health care systems to achieve the Triple Aim (improved patient care, improved population health, and reduced health care costs). CHWs are proven effective in enhancing health care service delivery through more efficient patient-centered care. CHWs reduce health care costs in a number of ways, including complementing clinical services as members of an integrated care team, connecting individuals with a primary

health care home for preventive services, reducing unnecessary emergency room visits through care coordination and system navigation. (FG-2)

The result from FG-4 was as follows: “Apply integrated and collaborative approaches in efforts to meet the Triple Aim.” FF stated, “So, I think for the cost that you spend for a community health worker, the value that you get for that is so world worth it.” FF continued:

Cost versus benefit . . . we should see a return on investment. This funding source focused toward hiring CHWs, would I see a decrease in my hemoglobin A1C, will I see fewer patients going to the emergency room, see my asthma patients not going to the emergency room? But the stuff that we are doing now is not working. (FF)

Even though the research is clear about the impact that CHWs have in underserved communities and working to improve chronic disease, there still needs to be research on the return on investment and how employers benefit by hiring CHWs.

3. Medicaid State Plan

The recommendation is for the Illinois Department of Healthcare and Family Services (HFS) to submit a state plan amendment (SPA) to CMS to amend the agreement between Illinois and the federal government to include CHWs as practitioners under Medicaid and Children’s Health Insurance Program CHIP. The SPA would require a summary of practitioner qualifications for practitioners who are not physicians or licensed practitioners. CMS acknowledges the opportunity of expanding the scope of providers to enhance preventive services as another tool for states to leverage in ensuring robust provision of services designed to assist beneficiaries in maintaining a healthy lifestyle and avoiding unnecessary health care costs.

(FG-4)

CMS even made a federal ruling. It had to be about four years ago; they said that physicians can prescribe preventive procedures, preventive things, to be done by nonclinical staff, and that was an opportunity for people to utilize community health workers and they can bill for those

services. But our state did not adopt that rule just yet; even stuff like that could assist community health workers. CMS has done their part.

Now we're waiting on the state to adopt it. Illinois is on its own pace and they're working on the budget issues. (GG)

The community health workers are formally mentioned in the Affordable Care Act. I don't know how much the writers of the Affordable Care Act envisioned them. The question is transitioning the Affordable Care Act. I don't know if the people who wrote it were thinking specifically about community health workers, but there are provisions to allow for it. When CMS introduced the rule change to bring the Medicaid rules into compliance with the Act, which opened up the possibility to give it some explicit recognition. There were folks like CHWs and maybe some other occupations. (MM)

We've heard a number of mentions of Medicaid 1115 district waivers, and there are a bunch of those that have created opportunities for states to build bigger roles for CHWs. There have been, directly out of the ACA, the health homes that I mentioned. There are at least five of the states that have state plan amendments [that] have significant roles for CHWs within them. (AA)

Participants communicated some innovative opportunities to fund the work of CHWs in Illinois. Some agencies are incorporating CHWs in operational budgets, which is a more sustainable approach compared to grant dollars. In addition, there are opportunities with the expansion of Medicaid and the ACA that have funds allowable for the expanded roles of CHWs in Illinois. Employers who see the value in CHWs are taking the risk to move forward with hiring them. Employers see that there is an ROI by using CHWs in expanded roles, such as emergency rooms, home visits, and nontraditional agencies such as the Housing Authority.

F. Attitudes, Values, and Belief Drivers

In this study, I wanted to inquire about the attitudes, values, and beliefs of employers of CHWs. Humans have lived experiences that contribute to their attitudes, values, and beliefs. The emergent themes that came from this study were community acceptance and self-efficacy of CHWs.

1. Community Acceptance

Community acceptance is the trust and shared, lived experience of CHWs, which is valued by

the communities served. Many CHWs live and work in the neighborhoods they serve and make it a more comfortable setting. This trust leads to relationship building and turns into a stronger linkage to other resources and services. DD replied, “I think that part of our reasons for not being able to reach the population we’re servicing is because we need people that are trusted, that can navigate and provide education and provide that support working at that level.” CC stated, “That’s one element of what you’re saying about the vision of CHWs. They are networked in the community. They have the relationships and trust of the community members. They are good communicators.”

Relationship building is extremely important, so that’s what I did. I hired people out of three different communities, and I held on to those folks, and integrated them into community with that program over an eight-year period to build trust within the community. (GG)

You can trust me; you know me. So, when they get that invitation from the *promotor de salud* to come some place, they’re more likely to show up because they know that this is a safe place as opposed to just receiving a community outreach e-mail or e-blast or someone who is not from that community. (DD)

CHWs seek to improve the health of communities by promoting healthy lifestyles; collaborating in awareness campaigns; participating in research; and providing social support, informal counseling, and health education. They can play a role in increasing access to and coverage of health services in near and remote areas to improve health outcomes. (FG-4).

CHWs rely for their success on their shared life experience with the community that they serve. This is a unique capacity. This is a unique kind of expertise, and it really must be valued for what it enables the CHW to do. (FG-3).

Relationship development and trust are critical components of community acceptance.

CHWs must have social skills to engage in and some form of lived experience relative to the community served. This is a form of cultural capital that CHWs develop and use.

2. Self-Efficacy

In my study, CHWs demonstrated a high sense of self-efficacy. The participants’ responses indicated that CHWs are empowered to complete their task independently and have a broad base

of training and lived experience. CHWs have knowledge and insight regarding the vulnerable populations served. DD responded, “I think that part of our reasons for not being able to reach the population we’re servicing is because we need people that are trusted, that can navigate and provide education and provide that support working at that level.” FF stated, “But a community health worker will have its pulse on the health and areas that impact the patient that we serve.

Oh, my God, because community health workers are trusted members of the community and they are the ones who identify and know where you go get your groceries, some food, where do you go and get some Pampers, where you can go, you know, they give you this if you participate in a health care research study or research study they’ll give you a \$50 gift card and they know about things like this and they will communicate this to community residents. (GG)

FG-2 responded, “They are a great vehicle and a great linkage to resources and care to communities, and they have this unconditional love for their communities.”

With their expanded roles, CHWs continue to reflect the trademark characteristics of resourcefulness, trust, and compassion about the community they serve. They demonstrate a sense of purpose and responsibility for the collective and accept differences more easily than others.

3. Health Equity

Health equity should put everyone on the same playing field, on which quality and access to care is experienced by all. Everyone should have the opportunity to lead a healthy lifestyle.

Participants’ responses with regard to perceptions and knowledge of value of CHWs addressing health equity in Illinois follow. FF stated, “I think, I think they looked at social determinants of health. I think community health workers have to be an important part in delivering good care to this population at risk. FF also stated:

Remembering this is a population with the health care act, some of these people had never had health care. So, they are sicker than the general population, and so I think that the community health worker then can, again, can help facilitate, kind of navigate, them through the system as more knowledgeable as they become of the system because this is a group of people who need health care but was never able to afford health care, and then they show up to the doctor with a

health care and now you know what should be occurring.

Our vulnerable patients with mental health diseases, the other population is the patients with chronic disease care; what I mean by that is that we have several patients with comorbidity. They have hypertension, they have diabetes, high cholesterol, they can manage one of them, and they can't try to manage three. GG

I am going to begin by saying that I value the importance of community health workers. Because, before I came into the federal government, I worked at institutions where we were using community health workers, so this is not a new phenomenon. (FG-3)

V. DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

This chapter discusses the purpose of my study and provides a review of my data collection and methodology. This chapter will also discuss my results and the associated drivers identified with my research questions. Recommendations are provided for expanding the roles of CHWs in Illinois and the chapter concludes with a summary of my study.

A. Discussion

As stated in Section I. – Introduction, the purpose of this study was to solve practical problems: develop a statewide college credit curriculum for community health workers; explore statewide provisional drivers to clarify and expand the roles of CHWs in Illinois, and to make recommendations based on the described resources. What was found in my literature review was in this study, a formalized CHW curriculum was made an option to those pursuing training and was intended to move closer to sustainability. The literature emphasized the importance of relying on factors beyond mere experience.

This research study provided a pathway for CHWs to obtain a baseline knowledge of CHWs' roles and responsibilities. CHWs are laypersons grounded in community relationships and the conditions of others. They often have not begun their interest and engagement with health through traditional career choices or occupations.

Much of their knowledge has been gained through reflecting on life experiences and communicating with community members (Sawaengthong & Sanguanprasit, 2015). However, there are gaps in training or they may have gained their knowledge through reflection on trial and error. One way of describing this is trial by fire, which means that they or their community contacts may have been harmed in the process, even though, through reflection, the CHWs learned lessons to apply to future practice (Haines et al., 2007; Martinez, 2015).

Although reflecting on experience is an important part of adult learning, the public health literature emphasizes the need to create a curriculum through recognized processes and pathways that thoroughly and methodically examine the learning outcomes needed and expected for CHWs

(Reinschmidt et al., 2015). This inquiry documented the interactions of multiple stakeholders to create an intentional curriculum for CHWs that progressively builds upon evidence-based knowledge, skills, theory, and practice.

The literature emphasized the value of creating health equity, and it calls for expanding and strengthening participation with communities by targeting CHWs in those communities (Angier, Wiggins, Gregg, Gold, & DeVoe, 2013). CHWs and the strategic approach to their scope of practice has become a resurgent interest. In Illinois, their roles and responsibilities have expanded by thinking outside the box. This out-of-the-box thinking involved some unconventional roles—home visits, which are attractive to organizations that use the primary care medical home model. Furthermore, CHWs in Illinois are being integrated into these models to address quality of health care while bringing the cost of care down. Some researchers would say that CHWs are key factors when addressing the triple aim.

Through access to a quality education, CHWs are frontline workers in the underserved communities in which they live and work. The literature showed CHWs improve health care outcomes by strengthening health care teams, which enhances the health of residents who live in black and brown, low-income communities (Smedley, Stith, & Nelson, 2003b). CHWs are people who have a shared experience and live and work in the same communities and understand the background and cultural practices that bring about poor health and other factors contributing to the social determinants of health. This process is described in efforts to improve health care access and outcomes in local- and state-level networks (Allen, Brownstein, Jayapaul-Philip, Matos, & Mirambeau, 2015). In this section, I will restate my research questions, provide a synopsis of the results, provide a discussion of those findings, and highlight the relevant leadership activities. The statewide drivers for public health leaders in moving toward readiness

and adoption were policy drivers, academic drivers, financial drivers, and perception drivers. The drivers mentioned were not all weighted the same.

1. Driver: Policy - *Research Question 1: What are the statewide drivers for public health leaders in moving toward readiness and adoption of a CHW workforce?*

Policy was the most discussed driver, and more themes emerged from this category than the three others. I believe policy sets the stage for CHWs in Illinois. All professions are regulated by policy. The policy driver CHWs are part of and are influenced by is the larger cultural and political environment in which they work. They should be well trained in various health and social issues so that they are able to play their roles efficiently and effectively. Policy is the paramount driver to set the stage of workforce development and continues to be a tool to provide sustainability throughout Illinois. As illustrated in Table XII, the policy driver was further grouped into several areas: sustainability, wage increase, infrastructure and collaborative.

a. Sustainability

The main theme reflected here is the component of policy driver sustainability. Based on the literature, lack of sustainability was a barrier for CHW development. However, sustainability should be in a broader category of infrastructure. Components of infrastructure could possibly address the sustainability of CHWs and the work that they do. For example, the infrastructure considers the work that CHWs do as reimbursable by CMS, which would structurally address the sustainability barriers that exist within the CHW workforce. The recommendations developed by the Illinois CHW Advisory Board provided strategies that would ensure a sustainable workforce. These themes are reflected in the data.

b. Wage Increase

Participants believed that CHWs should be paid according to the level of the degree they

have. Stackable credentials should be recognized on each of the levels with increased pay.

The reasons that I do help support credentialing efforts are because the community health workers I feel need some support and stability for their profession and ability to move between jobs and have a stable life. The only way large-scale payment for this workforce is going to happen is if there is some degree of certification around it. It really seems inevitable to me. (AA)

HH responded, “Absolutely, there would be opportunity for employees at this safety net hospital to make more money with stackable credentials.”

There is one program at the University that brought their CHWs in at minimum wage. We told them they are not cool. At least give them some decent salary because they have to navigate some really tough systems to get to work. So, people who advocate for CHWs say they may not make as much as a doctor, but they should be equitable and able to live off the salary that they make. (FG-2)

The responses above indicated support for livable wages based on tiered training and education. Many of the employers valued stackable credentials. Stackable or tiered training provides upward mobility in the workforce.

c. Infrastructure

Another emergent theme was infrastructure. Infrastructure is the underlying foundation of policy and resources to sustain a workforce that is demand driven by employers and capacity supplied by educational institutions working in public health. Participants’ responses applied pressure to the Governor’s Office to accept the recommendations developed by the Illinois CHW Advisory Board. The governor has not yet approved those recommendations; they are not off the table, but it might take some time and understanding regarding what needs to be changed. There is still interest by advocates to keep pressure on the Governor’s Office. Some of the discussion addressed partnering with organizations that have relationships with the Governor’s office. Another activity is to engage in an educational campaign that would inform stakeholders of the value CHWs offer.

We need to put together some recommendations, and roles and responsibilities of this

worker, and we forwarded it to the Governor's Office. Of course, there are some bigger priorities than seeing if he's going to approve community health work right now. (HH)

I think you need to continue to advocate with the Governor's Office and the Department of Public Health on these issues. I think you should set up meetings as high as you can get. Whether it is with the governor's chief of staff, with the governor, the head of the [illegible], the head of the Department of Public Health, the head of DHS, continue to put pressure to get this done. I would also look at other advisory groups that might be allies in this and meet with them as well. There is a nurse advisory group and certainly the perinatal advisory group. (LL)

These themes are linked in some way, form, or fashion to policy. If the policy is written to reimburse CHWs for the work that they do, then the funding would be sustainable to continue the work of CHWs. There are states that have led with developing policy that allows CHWs to be paid or reimbursed for the work done in underserved communities.

In this case, policy development should be aligned to the public interest. We know CHWs improve the positive health outcomes in underserved communities. We also know that using CHWs is cost-effective for the employers. Therefore, policy must support the interest of the public, promoting practice-based evidence (Turnock, 2006). Illinois state government has a critical role to play with regard to state implementation of the recommendations developed by the advisory board. The quotations below illustrate the importance and power that state government could adopt to further the development of CHWs in Illinois.

But now people are just inching away because they don't want to take the risk, they don't want to say we took the risk and even though it's not going to fail but it's just not the type of society we're in right now. People just go for the worst and wait instead of being the leader. It has to be enough evidence to prove this, even though it is a lot of reach, but I don't know what's preventing employers from hiring. (GG)

Given the current situation now in Springfield, it's tough to get them to concentrate on anything, but it's that continued advocacy and finding the right person who would be the voice of reason and champion the cause. It's not just one. I think you have to get the African American caucus, the Latino caucus, and really get them to champion this. It's such an important thing and the right attention has to be focused on it. (HH)

Well, if we can get past this budget impasse in Springfield and get people focusing on how to serve people, is what they're supposed to be doing that there. (HH)

In order for Illinois to continue to advance the CHW workforce successfully, the Illinois CHW Advisory Board has developed a report with recommendations as a foundation for future policy changes and legislation. (FG-3)

There is too much uncertainty on the federal and state levels of government to make any predictions. On the federal level, the ACA might be repealed and replaced with another form of policy. On the state level, Illinois was going through a budget impasse, and currently has established a ratified budget for the fiscal year. Therefore, with regard to policy for CHWs, employers are afraid to act in this uncertain climate. HH stated, “Absolutely, I believe policy should be established before employers act on supporting CHW workforce.” This uncertainty has become a barrier for the CHW movement and creating these expanded roles in Illinois.

d. Collaboration

Collaboration is another activity used by adaptive leaders. In this study, participants believe that there is opportunity for the movement of CHWs to still move forward by collaborating with state agencies. Participants’ responses mentioned some creative ways to partner in Illinois that leverage the CHWs to accomplish a shared vision:

HUD, they really want to have community health workers in subsidized housing developments and as a role for members of resident councils and things like that to move into the roles as CHWs to be aware of monitoring, promoting, hot spotting to support the health, with the broadest definition of health in terms of jobs and education and all those kinds of things for the residents of that housing. (AA)

I believe that there should be partnerships with insurance agencies, clinical offices, hospitals, school systems, jail systems, mental health facilities, churches, grocery stores that services the community, so the partnership will have to touch on all of those at some point because that is what surrounds the patient to be successful or not to sustain CHW workforce. (FF)

This collaboration theme addresses the ability to partner with communities to attach meaning to collected, analyzed, and interpreted qualitative and quantitative data. This study demonstrated hallmarks of the public health leadership activities related to public health practice: analysis and assessment of competencies.

Participants in this study were confident in their skill set as frontline workers in the community. They were knowledgeable of the resources within their community and recognized the health equity issues in underserved, disadvantaged, or low-income communities. CHWs are knowledgeable on the *how*, and they know *how* to work around those health equity barriers to get the work done.

2. Driver: Financial – *Research Question 2: How are Illinois employers using CHWs in health care workplaces? What are the drivers of readiness and adoption and restraining factors related to policy?*

a. Affordable Care Act

Many of the participants discussed the ACA as a means to an end to fund the work of CHWs. Some of the provisions of the ACA or Medicaid expansion include Section 5313, which requires the CDC to award funding to underrepresented communities to promote positive health outcomes using CHWs.

More grants. They're helpful. One of the things that the State of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. We're number 49 on the list of states in terms of Medicaid funding. We should be fighting hard to the federal government to provide us more funding. In that fight, you can kind of advocate things and say we need a certain pool of money to fund community health workers. (FF)

One of the things that the state of Illinois needs to do is lobby very hard on the federal level to bring in more dollars for a Medicaid program. The state has not had a working budget for three years, and in this environment of uncertainty, CHWs are not on the state's priority list. In actuality, CHWs are an easier fix to address health equity issues in low-income communities. Illinois politicians should take a course in adaptive leadership and demonstrate measures of accountability.

b. Medicaid State Plan

The ACA with Medicaid expansion has some provision that would allow states to act and allow CHWs the ability to bill and be reimbursed based on the nonclinical services they provide. The state will have to communicate with CMS for this to take place. On a federal level, there is uncertainty regarding the ACA. If the ACA were replaced, then it would be a harder case for CHWs and the work that they do. The Medicaid state plans have been a major topic of discussion. OO stated, “HMO plans said even Medicaid in the state also made some addendums to contracts, the HMOs are willing to pay for the services that CHWs do. I do know that CHWS work is funded by HMOs through profits.”

When CMS introduced the rule change to bring the Medicaid rules into compliance with the ACA, it opened up the possibility to give it some explicit recognition. There were folks like CHWs and maybe some other occupations that this may be applicable to. (MM)

There is uncertainty with federal policy makers about the repeal and replacement of the ACA. This uncertainty means the government could freeze funding or eliminate existing funding sources. CHWs have traditionally been sustained by temporary funding in the form of grants or philanthropic donations to community-based organizations.

Philanthropy has been a key supporter so far. Medicaid reimbursement in some states has been important. Reimbursement from health plans, managed care organizations. Those are three ways I’ve seen it supported. In New Mexico, there is a tax levy that supports the use of a program that employs community health workers. (KK)

In this study, participants discussed alternative funding sources. Some of the alternative funding sources correlate to expanding the roles of CHWs by adding additional responsibilities, such as emergency room care coordination, home visits, behavioral health, and housing authority health coordination.

c. Return on Investment

It is an established fact that organizations that use CHWs save organizational dollars.

According to the respondents, employers are aware of the value of, and are interested in mobilizing, the workforce; however, there is still uncertainty on the federal and state level of government, even though the respondents indicated that new CHW hires will come from their operational budgets. Knowing that their operational budgets are tied into federal ACA appropriations and state-expanded Medicaid dollars, employers will be slow to act until the state of Illinois passes a budget and starts governing. I believe if the right ingredients and inputs are encompassed for infrastructure, CHWs' outlook in the workforce will be self-sustaining.

It is clear from the literature that CHWs save their respective organizations funds by providing good health outcomes in the communities they represent. There is no contention about the ROI, and the question of CHWs' value should not be a subject that takes away from other conversations. Many of the participants' responses supported the literature with regard to the ROI that CHWs provide.

The fact that it has already been shown that you already utilizing a CHW save dollars. I just cited some of the examples of some of the research. We had just come back from the community conference where they talked about return on investment and how organizations are now beginning to look at how you can put together formulas to see the cost benefit of having CHWs. (FG-2)

3. Driver: Academic - *Research Question 3* was as follows: *What are public health leaders' perceptions and knowledge of the value of CHWs in addressing health equity in Illinois? What are the perceptions of CHW leaders to the stackable credentials for CHWs?*

The academic drivers addressed the certified standardization, approved competencies, and stackable credentials for CHWs. It is critical that the recommendations developed by the Illinois CHW Advisory Board are approved by the Governor's Office. As leaders in public health, the Advisory Board validated that stackable credentials ensure the creation of pipelines

into the public health profession.

Well, that is the way that many occupations are organized with the stackable credentials. So, on that way it seems that would be appropriate. If you want of any type of certification that includes experiential learning, I think a tiered or stackable system would be helpful. (JJ)

In our research, we found out in surveys and focus groups that some employers will pay community health workers more money if they have a certificate or achieved a certain level of education. So hence, our educational institutions jump on board to be this place for education. (GG)

The curriculum ensures a competent CHW workforce. In the development stages, members of the curriculum committee insisted on aligning these roles, standards, and competencies with the evolving national standard. The members developed the learning objectives, course descriptions, and course outcomes. This development process relied heavily on the experiences and trainings of CHWs. The establishment of a standardized curriculum validated and legitimized the infrastructure of work and practice being done in Illinois by CHWs.

The perceptions of the participants' responses were positive. To obtain the same status as other professions, there has to be standardization with credentials and accessibility to the profession through academic offerings. The curriculum development team emphasized creating stackable certificates and a degree that would allow students to enter and exit at any stage of the basic, advance certificate, or associate degree. This flexibility benefits students with children or with full-time employment. Thereby a CHW could accumulate an evaluated and documented qualification over time to move along a career pathway. The purpose of this curriculum was also to offer credential portability and, with the possibility of current work and livable wages, to address the social and economic position of most community members seeking to be CHWs.

a. Certified Standards

The themes of certified, approved competencies and certified standardization are described in the quotations here. Entry-level CHWs who can demonstrate foundational core

competencies and skills should be able to qualify for an entry-level role. MM stated, “I know some organizations have a minimum of high school diploma/GED or certificate.”

We wanted them to get a certificate so that there could be some quality instilled so we knew what training people had and what ability they had or what level we thought they should be trained at and also have people hire them and possibly get them reimbursed by insurance or Medicaid so they can be full partners in what we think should be a group of people working together for people’s health care. (II)

b. Certified Approved Competencies GG noted:

There is the education piece, associates, bachelor’s degree, and how does it fit into the workforce development aspect, and what would be the salary ranges and certification and testing and competency, and who owns the role? Does it come out of public health or Medicaid managed care, but it’s so new, but it can be introduced two ways as a billable opportunity for the role. (GG)

The leadership implications for public health are the assurance that a competent pipeline exists for public health professionals. This study addressed a majority of the 10 essential public health services and activities.

The participants’ responses addressed the importance of a tiered stackable approach to education and training and to workforce responsibilities and promotion. However, these components related back to the development of a strong infrastructure that embraces the work of CHWs. Therefore, the recommendation of the Illinois CHW Advisory Board should be adopted.

c. Expanded Roles

Expanded roles identify opportunities for CHWs to work in conventional and nonconventional settings. CHWs have a unique role on interdisciplinary teams because of their situated knowledge and cultural insight. Their situated knowledge complements the clinical and credentialed knowledge of other members of the interdisciplinary team and provides important insights into patients’ strengths, challenges, access to resources, and ability and readiness to comply with providers’ orders. There is a trend toward integrating population health into health

care and integrating behavioral health into primary care. These are tremendous opportunities to show how CHWs can help to make that work.

There was also mention in the findings that CHWs are able to cross over from traditional roles to a nontraditional role as a managed care coordinator. Employers believe that, for certain roles or positions, CHWs can easily be cross-trained to provide the same quality of service to the community in which the CHW and health system are serving. Even though care coordination is becoming a major role of CHWs, appropriate cross-training, evaluation, and feedback are necessary. This quotation illustrates the value of care coordination.

These job functions might be similar to community health worker job responsibilities. We used CHWs to complete assessments in the home when the new enrollees are difficult to contact on the phone or they need to do a face-to face. Basically they go through health history questions, coordination of care, and writing of care plans and making referrals; there could be potential of overlapped duties. As far as the specific role and job functions of community health workers, would be a good fit for Aetna Better Health. (DD)

d. Collaboration

I suggest that health equity for marginalized populations, such as residents of poor communities and vulnerable populations, could be improved by expanding the role of CHWs in population health programs in Illinois.

Academic institutions such as community colleges have long-lasting relationships with employers. These employers communicate the needs of their respective organizations related to educational attainment, credentialing, and development of skills. Academic institutions will continue to engage employers with the demand related to the needs for CHWs. The theme of academic drivers—certified standardization—describes these quotations.

I would think that the burden would be on community colleges and whether or not they are interested in taking it on. What its own institutional priorities are would be a factor. I would think given how the educational system is structured that's where the support would be. Community colleges have expertise in figuring out how to evaluate experience as part of the

academic credit structure and acknowledging the experience of the person is of value. (II)

Making the options available is a great thing. Community college could serve as a valued partner with the formalized education part of this movement. Some people are just intimidated with college. I can remember the first time in high school that my mom just stressed taking courses at the community college. (GG)

I'm also on the board of a [community college] CHW program. I would like to see more community colleges adopting CHW programming, but again it doesn't have to have an end in academia, but when you have the academic credential, it provides a nice pipeline if you choose to continue with your education. (OO)

The responses above indicated community colleges are good partners for the development of formalized stackable credentials. Community colleges are located in various communities that have affordable academic options in obtaining a career. Community colleges can also offer a pipeline to health science career pathways.

4. Driver: Attitude, Values and Beliefs – Research Question 4: *How can the leaders of academic institutions, such as community colleges, respond to the workforce drivers to promote quality public health outcomes through stackable career laddering and pathways?*

This study confirmed that in the perception of participants, CHWs could effectively address the unique needs of underserved communities by increasing access and use of health services that will improve overall health equity. I believe in the roles CHWs play in their respective communities: they have potential to change the way the health care is viewed and delivered. This recognition throughout the State of Illinois would be advantageous for CHW certification.

Social determinants of health have become another topic of CHWs. Addressing social determinants of health has contributed to the expanded roles of CHWs. They are no longer being trained in once chronic disease and providing information about that disease. CHWs are visiting unemployment centers, finding grocery stores that sell fresh produce, and many other activities

that encompass the comprehensive wellness of their clients.

There are so many other social determinants of health that impact how they manage that, and you can't deal with this in a 15-minute window or even a 30-minute window. In fact, know the social determinate that they deal with at home put them vulnerable at risk when you don't know how the shop when you know what you should be eating and you when there are certain stressors that is aggravated your medical problems it puts this all of that at risk, not just the physical risk but the financial risk to the health care system that is already overburdened. (EE)

II. stated, "If you have capitated care, controlling social determinants of health is just going to be, I mean, you just have to get away from this disease-based model."

5. Implications for Practice and Adaptive Leadership

a. Provide formalized Academic Options for CHWs in Illinois

The initial project from the beginning needed an adaptive leadership approach to develop a statewide curriculum for CHWs. Adaptive leadership was needed to facilitate the development of the stackable credential. In the beginning stages, I facilitated the development of each course encompassed in the basic certification, the certification, and the associate's degree.

In addition, in Section I. Introduction – E. Leadership Implications and Relevance f Policy Drivers, I outlined some public health leadership tenets of this study and they are as follows:

- Provide formalized academic options for CHWs in the state of Illinois.
- Validate the knowledge, attitudes, beliefs, and perceptions of CHWs in Illinois.
- Identify formal and informal models of standardized training in Illinois.
- Illustrate drivers for readiness and adoption of CHWs that will facilitate the readiness and adoption of employers to engage the CHW workforce.
- Involve public health leadership in activities of CHWs' workforce development Inform public health leadership of the utility of CHWs and fill gaps of knowledge and clear up

misperceptions.

- Evaluate statewide policies that address community health workers.
- Lead policy makers in meaningful discussions about creating an ideal infrastructure for community health workers in Illinois.

As result of this study, additional leadership implications were identified. First the policy that was created out of this collaboration should be acknowledged. The stackable credential/standardized academic curriculum language was adopted in HB 5412. House Bill 5412 provided the authority to establish and appoint an Illinois Community Health Worker Advisory Board. In addition, the Board's propose the Department leadership and training and certification processes for community health workers be developed impacting the work of community health workers. The Bill lastly provides that the Board develop a workforce plan for the certification process of community health worker (HB 5412- DPH- Community Health Workers). The stackable credential created opportunity for other institutions of higher learning to develop their own standardized CHW curricula.

Moreover, as a result of HB 5412, I became a subcommittee chair on the state- appointed Community Health Worker Advisory Board. The Advisory Board was responsible for making recommendations to create a CHW infrastructure. January 1, 2017, the Community Health Worker Advisory Board concluded its work with a report of recommendations to the Governor's Office. I have been asked to replicate the standardized stackable credentials at other higher education institutions. The replication of the stackable credentials as a statewide initiative will continue to uphold the sustainability and create the CHW infrastructure needed for this workforce.

- b. Validate the Knowledge, Attitudes, Beliefs, and Perceptions of CHWs in Illinois.

In this study, the validation of the knowledge, attitudes, beliefs, and perceptions of CHWs in Illinois was solidified. This research documented that CHWs are valued members of their neighborhoods in which they serve. For the most part, the communities are low income, are underserved, and face barriers in the area of health equity. Residents of these communities accept CHWs who work in these communities and depend on the knowledge and resources linked to their circumstances. The use of CHWs can reduce costs in the organizations that hire them and for the communities they serve.

c. **Identify Formal and Informal Models of Standardized Training in Illinois** This study identified formal and informal methods of training for CHWs. These two forms of training seem to be accepted by CHWs; however, there isn't just one approach to how CHWs are trained. The formal approach would be stackable credentials that allow entry and exist at each level of the credentials, with portability to other colleges and universities. This approach provides educational credentials that employers may want to see and give the profession legitimacy that might be needed for reimbursement purposes.

The informal approach is also valued. The informal approach creates an environment void of intimidation, barriers of academic navigation, unnecessary prerequisites, and student loans.

However, in this study, the lived experience was valued over all other methods of training.

Participants in this study believed that the lived experience is the fire or passion that exists within each CHW. Formal educational programs should make every effort to recognize and harness the lived experience and informal education that CHWs have to maximize and invigorate the curriculum.

d. **Illustrate Drivers for Readiness and Adoption of Community Health Workers That Will Facilitate the Readiness and Adoption by Employers to Engage this Workforce.**

This study included several leaders who represented safety net hospitals, FQHCs, insurance plans, and agencies that hire CHWs on the state and federal levels. These participants valued the work of CHWs and either confirmed their continuous support or decided to include CHWs in their organization's budget for more sustaining support. Many of these organizations will continue to support CHWs in Illinois and understand the value and cost savings with hiring CHWs.

e. Involve Public Health Leadership with Workforce-Development Activities of Community Health Workers

HB 5412 referenced our work in this study. The bill references stackable credentials based on the SSC curriculum development. Adaptive leadership was needed to facilitate the development of the stackable credential approach. Later, the curriculum development work led to my appointment to the Illinois Community Health Worker Advisory Board. Members for this board were appointed by the Governor's Office.

f. Inform Public Health Leadership of the Utility of Community Health Workers and Fill Gaps of Knowledge and Misperceptions

In this current political climate, CHWs are more valued than ever before. Instead of providing funds to address health equity issues, there are forces to eliminate the resources established in the previous administration. However, the current partnerships and employers who value CHWs must be more diligent with political outreach and participation than ever before. Participants of this study discussed a health literacy campaign and ongoing meetings to discuss the roles of CHWs and bring value to the work that they do. SSC knows the value of CHWs, so there has been a forum for CHWs and employers to receive information on the scope of practice of CHWs. The forum is an annual meeting of experts, researchers, and CHWs that convenes to address the

statewide and national issues of CHWs. In May 2016, Mr. Carl Rush was the keynote speaker and provided information on scope of practice of CHWs and the ROI for organizations. SSC continues to support this event, and other events will be created and rolled out through the SSC Advisory Board for CHWs.

g. Collaborations

So far, this research has brought positive attention in the form of additional partnerships, grants, or training opportunities. The following partnerships were established based on my action research with CHWs:

- BlueCross BlueShield of Illinois—looking to establish statewide training for their CHWs. In addition, BCBS will be hiring additional CHWs to provide services throughout Illinois.
- Advocate Health Care Collaborative—SSC was able to train 15 Advocate Health Care employees as CHWs. These 15 employees will work with Advocate in a different job capacity with higher wages and benefits. SSC and the Advocate Health Care Collaborative are looking to continue this partnership on a yearly basis.

Illinois Department of Public Health (HIV/AIDS Section)—Illinois Department of Public Health was the source of our first cohort of students. Illinois Department of Public Health has used their Ryan White Fund to train HIV/AIDS peer educators. SSC has had the pleasure of seeing students from this program matriculate from the basic program through the AAS degree level. This organization is so vested in the work of CHWs that the leadership changed the titles of some positions in the organization to CHWs.

- Health Professional Opportunity Grant – Step-Up—In partnership with Chicago State University, SSC has received a federal grant of \$12 million over five years to train Temporary Assistance for Needy Families recipients in allied health careers, and CHW is the most

popular career choice.

- Presentation: Illinois Community College Board on the CHW stackable credential— SSC was selected by ICCB because of the great work with the development of the stackable credential.
- Organization of a CHW's Forum—the forum is funded by the Carl Perkin's federal funding to host employer engagement and CHWs.
- Institute of Medicine of Chicago— received a \$20,000 grant to provide training to CHWs in leadership.

This was an exploratory study with an action research approach used to expand the roles of community workers in Illinois. From an adaptive leadership perspective, the emergent themes are all relevant to the public health leadership.

As a leader in Public Health, it is rewarding to know that this study addressed the components of Public Health Workforce Preparedness Management Systems –

Assess competencies using consistent methods, and tools, enhance specific competencies based on assessment, verify competent performance in workplace via human resources management, and recognize system incentives such as –credentialing. (Turncock, 2006)

Adaptive leadership involves creative approach to a complex problem. In this case, creating an infrastructure for CHWs in Illinois will solve the issues with funding, provide consistent training opportunities, and legitimize the work of CHWs. All this has been demonstrated and documented through my doctoral inquiry.

h. Reflection of Conceptual Model

As it relates to this study, the conceptual model was altered slightly because of the emergent themes. After the study, the drivers were still a part of the fabric of readiness and adoption. However, if ranking the weight of each of the drivers is ever needed, the policy driver will be weighted substantially more than the others. In this study, infrastructure and collaboration

were emergent themes within the policy family of codes.

However, in the initial conceptual model, many of the organizations developed their own relationships with the driver respective to the organization. After my inquiry, all the stakeholders were aware of the value of CHWs and the health equity they bring to underserved communities. The systematic approach of reviewing the resources in concert with supporting the community health movement can be extremely effective.

B. Recommendations

As much as advocates value the work of CHWs there are many barriers identified in this inquiry that stop progress on the expansion of roles of CHWs in Illinois. While the advocates created strong policy and educational institution pathways to facilitate the expansion of roles of CHWs there are important barriers that need to be addressed. Some recommendations for addressing these barriers include: Illinois state government approved of recommendations developed by the Illinois CHW Advisory Board that will establish an infrastructure for CHWs. The work of CHWs addresses the health equity of all Illinoisans. In addition the development of a statewide association to address policy and other activities that will move this workforce forward. Some of the activities should include addressing the restraining factors found in Fig. 7. Force Field Analysis. These restraining factors/barriers on the state level are funding, ROI, infrastructure through policy, and certification standardization. On a regional level, establishing a curriculum standardization workgroups through the Illinois Community College Board for academic/community-based organizations to offer approved standardized training programs. On a local level, support strategic capacity building with employers and other organizations. Adaptive public health leadership is needed to develop strategies to address the drivers for expansion of CHWs in Illinois described here. This policy evaluation suggests that much work

is needed to address the limitations and gaps that participant responses to the drivers identified.

1. Reconvene State Advisory Board to make it a permanent structure that would be responsible for the following activities but not limited to these activities:
 - a. Become a facilitator to formal and informal training programs and ensure consistency, relevance, and rigor.
 - b. Work with employers to create value and demonstrate the benefits of community health workers within their operational system.
 - c. Continue to work with policy makers to demonstrate the evidence of positive health outcomes in underserved communities, when using community health workers.
 - d. Assist policy makers and state agencies with addressing opportunities for employer reimbursement when using community health workers.
2. Illinois can use the CMS waiver to include community health workers so employers can get reimbursed for the work done.
3. There is only one Community College with stackable credentials in Illinois; workshops can be facilitated to include other community colleges interested.
4. Employers can continue to provide internship opportunities to colleges.
5. Community health workers can expand their role by working in unconventional settings (housing authority, emergency rooms, rural communities, and home visitation).
6. From an advocacy viewpoint, the CCHWLN association development will continue to be the voice of CHWs statewide.

Future studies should investigate the effectiveness of CHWs outside their traditional role (crossover roles). For example, there was mention that there is a need for trained mental health advocates and CHWs are fulfilling the role. In these cases, participants suggested the need to keep their identity as CHWs even in a nontraditional capacity.

C. Conclusion

CHWs are being used more than ever in underserved communities. They have demonstrated their value with ROI, improving positive health outcomes, addressing social determinants of health, and addressing health equity. CHWs are being used in unique roles to

address certain community health needs. The literature advocates for building stronger associations to address access to care in underserved communities. Relevant factors included the following:

- Provide formalized academic options for CHWs in the state of Illinois.
- Validate the knowledge, attitudes, beliefs, and perceptions of CHWs in Illinois.
- Identify formal and informal models of standardized training in Illinois.
- Illustrate drivers for readiness and adoption of CHWs that will facilitate the readiness of employers to engage this workforce.
- Involve public health leadership with workforce development activities of CHWs.
- Inform public health leadership of the utility of CHWs and fill gaps of knowledge and misperceptions.
- Evaluate statewide policies that address community health workers.
- Lead policy makers in meaningful discussions about creating an ideal infrastructure for community health workers in Illinois.

Even though the title of this research addressed the provisional drivers, the findings of the study indicated that these drivers would ensure a healthy CHW workforce. CHWs are no different from any other profession; other professions have had to withstand the same vetting and validation. Therefore, the CHW movement should continue to demonstrate value and conduct outreach work within the drivers of this research: policy; attitudes, values, and beliefs; financial; and academic.

1. Adaptive leadership

As described in previous chapters, adaptive leadership was used to address the development of the statewide CHW curriculum. Action research was used to develop curriculum.

Action research is a method used by leaders in all settings to address practical problems and move toward resolution by consensus. The curriculum is a pipeline into the public health career pathways. The curriculum also addresses leadership activities of preparing a competent public health workforce.

The initial project advocates needed an adaptive leadership approach to develop a statewide curriculum for CHWs. Even though the curriculum was only one component of policy development, research and funding components addressed the larger picture of CHW workforce development.

Adaptive leadership was needed to facilitate the development of the stackable credential. In the beginning stages I facilitated the curriculum development of each course encompassed in the basic CHW certification, the advanced CHW certification, and the CHW associate's degree. This process was detailed in Chapter 3. After the curriculum development, adaptive leadership was needed to attain approval of the newly developed curriculum by the Illinois Community College Board, Illinois Board of Higher Education, and the SSC internal committees. Upon approval, the stackable credentials were articulated with other colleges for transferability. The articulation affords students the ability to transfer all 61 credits of the associate's degree to a four-year bachelor's degree. In the development stages, partnerships were established to make the work a reality.

Policy is a core function of public health and leadership. HB 5412 references the action research that is the basis of this study. The bill references stackable credentials based on the SSC curriculum development. Adaptive leadership was needed to facilitate the development of the stackable credential. Later, the curriculum development work led to a statewide appointment to

the Illinois Community Health Worker Advisory Board. Members on this board were selected by the Governor's Office.

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APPENDICES

APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

Exempt Research Amendment Approval Notice UIC Amendment #1

September 23, 2016
Jeffery J. Waddy, MS.Ed.

Environmental and Occupational Health 1603 W Taylor Street
Chicago, IL 60612
Phone: (708) 261-6769 / Fax: (708) 210-5792

RE: Research Protocol # 2016-0546
**“An Action Research Approach to Assess Workforce Drivers of Community Health
Workers in Illinois”**
Sponsors: None

Dear Jeffrey J. Waddy:

The amendment to your exempt research (UIC Amendment #1) was reviewed and approved on September 23, 2016, and it was determined that your amended research continues to meet the criteria for exemption. You may now implement the amendment.

Amendment Summary: UIC Amendment #1:

1. Addition of publicly available materials that were part of the Illinois Board of Higher Education South Suburban College Community Health Worker Program Application, the Illinois Department of Public Health Community Health Worker oversight committee and the "Driving CHWs to Sustainable Employment in Illinois" conference May 27, 2016 materials.
2. Revised research protocol (Version 2) including detail regarding the individual interviews and the document review.
3. Revised Claim of Exemption application (dated 08-04-2016, Version 1);
4. Informed consent for interview
5. Email recruitment document
6. Telephone recruitment script

Amendment Approval Date: September 23, 2016
UIC Exemption Period: September 23, 2016 – September 23, 2019

The specific exemption categories under 45 CFR 46.101(b) are:

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation; and
- (4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
07/01/2016	Amendment	Exempt	07/19/2016	Modifications Required
09/14/2016	Response to Modifications	Exempt	09/23/2016	Approved

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy. Please be aware of the following UIC policies and responsibilities for investigators:

1. Amendments You are responsible for reporting any amendments to your research protocol that may affect the determination of the exemption and may result in your research no longer being eligible for the exemption that has been granted.
2. Record Keeping You are responsible for maintaining a copy all research related records in a secure location in the event future verification is necessary, at a minimum these documents include: the research protocol, the claim of exemption application, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to subjects, or any other pertinent documents.
3. Final Report When you have completed work on your research protocol, you should submit a final report to the Office for Protection of Research Subjects (OPRS).
4. Information for Human Subjects UIC Policy requires investigators to provide information about the research to subjects and to obtain their permission prior to their participating in the research. The information about the research should be presented to subjects as detailed in the research protocol and application utilizing the approved recruitment and consent process and document(s).

Please be sure to use your research protocol number (2016-0546) on any documents or correspondence with the IRB concerning your research protocol.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact the OPRS office at (312) 996-1711 or me at (312) 355-2908.

Sincerely,
Charles W. Hoehne, B.S., C.I.P. Assistant Director, IRB #7
Office for the Protection of Research Subjects

cc: Samuel Dorevitch, Environmental and Occupational Health, M/C 923
Joseph Zaroni (faculty sponsor), Environmental and Occupational Health, M/C 923

APPENDIX B: INTERVIEW GUIDE

TITLE: AN ACTION RESEARCH APPROACH TO ASSESS WORKFORCE DRIVERS OF COMMUNITY HEALTH WORKERS IN ILLINOIS

Welcome and Introduction (start at _____ min end at _____)

- Thank you for agreeing to participate in this interview. My name is Jeff Waddy, I am Dean of Health Sciences at South Suburban College, and I'll be talking with you today about community health workers.

Purpose of the focus group

The purpose of our interview today is to learn more about the workforce drivers of CHWs in Illinois and to hear your thoughts about and recommendations related to CHWs.

- For purposes of this project we are interested in the broad range of titles that refer to frontline public health workers engaged in the delivery of community health-related service, which may include:
 - *Community health worker*
 - *Promotor(a) de salud*
 - *Community outreach worker*
 - *Navigator*
 - *Peer educator*
- Throughout the focus group, when we use the term “community health worker” or CHW” we are referring to this broader range of titles.
- The interview will last about 90 minutes.
- Let’s review the informed consent information sheet.
- Do you have any questions?

Ground rules

- Everything you tell me will be confidential. To protect your privacy nothing will be personally attributed to you. I will not be asking for you to share personal information or protected health information in our group today.
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also stop the interview at any time for any reason.
- Please remember that we want to know what you think and that there are no right or wrong answers, only different points of view.

- Is it OK if I audiotape this interview today?

[Turn on recording equipment.]

Background

(start at _____ min end at _____)

Please tell me your first name, your position with your organization, and how long you have worked there.

A. Context and Values

1. Do you currently employ other CHWs? Have you employed them in the past?
 - a. In what roles?
 - b. Please describe the training they received – who provided it?
 - c. If not, how well do you understand the potential roles and benefits of CHWs in your organization?
2. What type of organization do you manage?
3. What are the current demographics in the community that you work?
4. How do community residents get health information from your organization?
5. What are the specific vulnerable groups impacted by community health workers?
6. How do you envision utilizing community health workers in your organization?
 - a. What are the perceived barriers by employers who would benefit from integrating CHWs into their healthcare delivery team?
7. What is the extent of your involvement with community health workers in Illinois or other states?

B. Policy

1. Do you believe residents in your community have equal access to health services?

2. How could community health workers assist with improving community health outcomes?
3. To what extent is the use of community health workers related to the Affordable Care Act?
4. To what extent are policies and regulatory frameworks in place that will support community health workers?

C. Academic

1. What credentials should an entry-level community health worker have to be employed by your organization?
2. Will there be opportunities for CHWs at differing levels of credentialing?
3. What partnerships do you foresee creating to sustain a viable workforce of community health workers?
4. Could community college serve as a partner for producing well-trained community health workers?

D. Financial

1. Do you believe community health workers can save your organization money by improving community health outcomes?
2. What indications are there that community health workers will be sustained, e.g., through requisite capacities (systems, structures, staff, etc.)?
 - a. What resources will you need in order to sustain this workforce?
 - b. How can you assist with making the services CHWs provide as billable services through CMS?
4. At your organization, would community health workers be paid more with attainment of progressively stackable credentials (basic certificate, advanced certificate, and an AAS degree)?

E. Summation

1. What are some sustainable measures that can be implemented in your organization that will address job stability for community health workers?

2. With all you know about CHWs, will you hire, or continue to hire, community health workers in your organization?
3. How would you continue the professional growth of your community health workers?
4. What does the future hold for the CHW workforce?

Thank you very much for your time and participation in this interview. The information that you provided to me will be very helpful in this project.

(Record end time)

APPENDIX C: SEMI-STRUCTURED INTERVIEW QUESTIONNAIRE

Title: An Action Research Approach to Assess Workforce Drivers of Community Health Workers in Illinois

Welcome and Introduction (start at _____ min end at _____)

- Thank you for agreeing to participate in this interview. My name is Jeff Waddy, I am Dean of Health Sciences at South Suburban College, and I'll be talking with you today about community health workers.

Purpose of the focus group

The purpose of our interview today is to learn more about the workforce drivers of CHW in Illinois and to hear your thoughts about and recommendations related to CHWs.

For purposes of this project we are interested in the broad range of titles that refer to front line public health workers engaged in the delivery of community health-related service, which may include:

- > *Community health worker*
- > *Promotor(a) de salud*
- > *Community outreach worker*
- > *Navigator*
- > *Peer educator*

Throughout the focus group, when we use the term “community health worker” or CHW” we are referring to this broader range of titles.

The interview will last about 90 minutes.

- Let's review the informed consent information sheet.
- Do you have any questions?

Ground rules

- Everything you tell me will be confidential. To protect your privacy, nothing will be personally attributed to you. I will not be asking for you to share personal information or protected health information in our group today.
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also stop the interview at any time for any reason.
- Please remember that we want to know what you think and that there are no right or wrong answers, only different points of view.
- Is it OK if I audiotape this interview today?

[Turn on recording equipment.] Background

(start at _____ min end at _____)

Please tell me your first name, your position with your organization, and how long you have worked there.

A. Context and Values

1. Do you currently employ other CHWs? Have you employed them in the past?
 - a. In what roles?
 - b. Please describe the training they received – who provided it?
 - c. If not, how well do you understand the potential roles and benefits of CHWs in your organization?
2. What type of organization do you manage?
3. What are the current demographics in the community that you work?
4. How do community residents get health information from your organization?
5. What are the specific vulnerable groups impacted by community health workers?
6. How do you envision utilizing community health workers in your organization?
 - a. What are the perceived barriers by employers who would benefit from integrating CHWs into their health care delivery team?
7. What is the extent of your involvement with community health workers in Illinois or other states?

B. Policy

1. Do you believe residents in your community have equal access to health services?
2. How could community health workers assist with improving community health outcomes?
3. To what extent is the use of community health workers related to the Affordable Care Act?
4. To what extent are policies and regulatory frameworks in place that will support community health workers?

C. Academic

1. What credentials should an entry-level community health worker have to be employed by your organization?
2. Will there be opportunities for CHWs at differing levels of credentialing?
3. What partnerships do you foresee creating to sustain a viable workforce of community health workers?
4. Could community college serve as a partner for producing well-trained community health workers?

D. Financial

1. Do you believe community health workers can save your organization money by improving community health outcomes?

2. What indications are there that community health workers will be sustained, e.g., through requisite capacities (systems, structures, staff, etc.)?
 - a. What resources will you need in order to sustain this workforce?
 - b. How can you assist with making the services CHWs provide as billable services through CMS?
3. At your organization, would community health workers be paid more with attainment of progressively stackable credentials (basic certificate, advanced certificate, and an AAS degree)?

E. Summation

1. What are some sustainable measures that can be implemented in your organization that will address job stability for community health workers?
2. With all you know about CHWs, will you hire/ or continue to hire community health workers in your organization?
3. How would you continue the professional growth of your community health workers?
4. What does the future hold for the CHW workforce?

Thank you very much for your time and participation in this interview. The information that you provided to me will be very helpful in this project.

(Record end time)

APPENDIX D: FOCUS GROUP QUESTIONNAIRE

Title: An Action Research Approach to Assess Workforce Drivers of Community Health Workers in Illinois

Welcome and Introduction (start at _____ min end at _____)

- Thank you for agreeing to participate in this interview. My name is Jeff Waddy, I am Dean of Health Sciences at South Suburban College, and I'll be talking with you today about community health workers.

Purpose of the focus group

The purpose of our interview today is to learn more about the workforce drivers of CHW in Illinois and to hear your thoughts about and recommendations related to CHWs.

For purposes of this project we are interested in the broad range of titles that refer to front line public health workers engaged in the delivery of community health-related service, which may include:

- > *Community Health Worker*
- > *Promotor(a) de salud*
- > *Community outreach worker*
- > *Navigator*
- > *Peer educator*

Throughout the focus group, when we use the term “community health worker” or CHW” we are referring to this broader range of titles.

The interview will last about ninety minutes.

- Let's review the informed consent information sheet.
- Do you have any questions?

Ground rules

- Everything you tell me will be confidential. To protect your privacy nothing will be personally attributed to you. I will not be asking for you to share personal information or protected health information in our group today.
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also stop the interview at any time for any reason.
- Please remember that we want to know what you think and that there are no right or wrong answers, only different points of view.
- Is it OK if I audiotape this interview today?

[Turn on recording equipment.]

Background

(start at min end at _)

Please tell me your first name, your position with your organization and how long you have worked there.

A. Context and Values

1. Do you currently employ other CHWs? Have you employed them in the past?
 - a. In what roles?
 - b. Please describe the training they received – who provided it?
 - c. If not, how well do you understand the potential roles and benefits of CHWs in your organization?
2. What type of organization do you manage?
3. What are the current demographics in the community that you work?
4. How do community residents get health information from your organization?
5. What are the specific vulnerable groups impacted by community health workers?
6. How do you envision utilizing community health workers in your organization?
 - a. What are the perceived barriers by employers who would benefit from integrating CHWs into their health care delivery team?
7. What is the extent of your involvement with community health workers in Illinois or other states?

B. Policy

1. Do you believe residents in your community have equal access to health services?
2. How could community health workers assist with improving community health outcomes?
3. To what extent is the use of community health workers related to the Affordable Care Act?
4. To what extent are policies and regulatory frameworks in place that will support community health workers?

C. Academic

1. What credentials should an entry-level community health worker have to be employed by your organization?
2. Will there be opportunities for CHWs at differing levels of credentialing?
3. What partnerships do you foresee creating to sustain a viable workforce of community health workers?
4. Could community college serve as a partner for producing well-trained community health workers?

D. Financial

1. Do you believe community health workers can save your organization money by improving community health outcomes?
2. What indications are there that community health workers will be sustained, e.g., through requisite capacities (systems, structures, staff, etc.)?
 - a. What resources will you need in order to sustain this workforce?

- b. How can you assist with making the services CHWs provide as billable services rough CMS?
- 4. At your organization, would community health workers be paid more with attainment of progressively stackable credentials (basic certificate, advanced certificate and an AAS degree)?

E. Summation

- 1. What are some sustainable measures that can be implemented in your organization that will address job stability for community health workers?
- 2. With all you know about CHWs, will you hire/ or continue to hire community health workers in your organization?
- 3. How would you continue the professional growth of your community health workers?
- 4. What does the future hold for the CHW workforce?

Thank you very much for your time and participation in this interview. The information that you provided to me will be very helpful in this project.

(Record end time)

VITA

MY CORE COMPETENCIES

Knowledge of current technologies as they relate to both instructional and administrative practices, Knowledge of budget development and management, Knowledge of the Illinois Community College Board Rules and Regulations, Knowledge of curriculum development, Knowledge of program accreditation processes, Ability to interpret situations and move to resolution based on contracts and college policies and practices, Ability to interpret and communicate policies, practices, guidelines and expectations, Effective listening and understanding of cultural and individual differences among faculty, staff, and students, Ability to build partnerships, both internally and externally and Ability to analyze and interpret data and trends.

EDUCATION:

Doctorate of Public Health in Leadership Degree University of Illinois at Chicago, School of Public Health Concentration in Public Health Administration

Master's of Science Education Degree
Southern Illinois University, Carbondale, Illinois Concentration in Community Health Education and Prevention

Bachelors of Science Degree
Albany State University, Albany, Georgia Major in Biology with Minor in Chemistry

PROFESSIONAL EXPERIENCE

July, 2006–Present

Dean, Health Professions, English, Humanities and Communications, South Suburban College, South Holland, IL (changes in titles: Dean of Allied Health and Sciences,

Dean of Health Professions, English, Humanities, Communication and Business and Technology, Dean of Health Professions, English, Humanities, Communications, Music and Art)

- Analyze major internal and external trends in enrollment, instructional practices, academic issues, facilities, technology, and human resources. Lead and assist programs, division, and college in implementing and managing change efforts in curricula and instructional design/practices, staffing, and academic directions. Work with program directors, academic team leaders and faculty curriculum chair(s) to ensure quality instruction in programs. Oversee the internal (college) and external (regulatory agencies) program review processes.

- Provide leadership to programs in strategic planning to formulate goals and academic needs. Foster and implement creative ideas for offering new initiatives that support the programs. Evaluate options and recommend priorities and courses of action for addressing and implementing the identified needs of programs. Ensure that program goals and initiatives are clearly communicated and mutually supported at division and college levels.
- Work with faculty and administrators to foster continuous quality improvement in teaching and learning in support of student success initiatives. Supervise the work of program coordinators and directors in staffing and semester course schedule preparation that optimizes learning opportunities for students.
- Assist programs in recruitment of new faculty, including interviewing, selecting, orienting, mentoring, and evaluating, to ensure that all courses and programs have highly qualified instructors. Supervise part-time faculty in absence of a program director. Hire, mentor, and supervise all full-time faculties. Supervise all program staff and provide professional growth opportunities to faculty and staff.
- Model leadership that promotes a caring, committed connection to programs and the division, as well as an environment where open communication occurs. Provide problem solving and conflict resolution of a diverse group of faculty, staff, and students. Handle student issues and formal complaints. Advise students on course selection and evaluate courses for transfer so that students enroll in the correct course.
- Manage and develop program budgets, and identify potential funding sources through grants and other opportunities for the division. Provide stewardship to efficiently utilize the division and college resources and grant money. Provide recommendations that ensure instructional facilities, equipment, and supplies are in line with standards and requirements of the professions.
- Represent the programs and division to the college and community through contacts and service on college-wide committees, advisory boards, and teams. Engage in development/maintenance of external relations, with emphasis on oversight of division and program advisory boards, participation on community boards, and affiliation with accrediting agencies and committees. Build partnerships with community colleges and universities for student opportunities.
- Participate in professional development through a variety of methods to maintain and improve leadership and management skills.

June, 2005–July, 2006

Executive Director, Gilead Outreach & Referral Center, Chicago, IL

- Managed the daily operations of organization: financial management, grant management, community partner outreach, research, and advocacy.
- Developed and managed a yearly budget of \$1.2 million.
- Wrote federal grant applications, foundation proposals, and corporate grants.
- Pursued and developed new funding and Community Outreach Partners.
- Drafted, edited and approved the annual Uninsured Report: public relations, research, and graphic design.
- Scheduled, facilitated, and documented project team meeting with Community Outreach Partners.
- Coordinated meetings with the health benefit program directors, including Executive Directors of Federally Qualified Healthcare Centers.
- Facilitated the training of office staff and Community Outreach Partners.
- Communicated a monthly Executive Director's Report to the Board of Directors.
- Processed payroll for Community Outreach Partners.
- Evaluated the programmatic outcomes of Community Outreach Partners.

October, 2004–June, 2005

Program Coordinator, Street Outreach Program-Homeless Youth Delta Center, Inc. (Mental Health Agency), Cairo, IL

- Tracked all project objectives and outcomes to ensure timely completion.
- Scheduled, facilitated, and documented project team meetings.
- Managed the project's federal funding budget of \$500,000 per year.
- Conducted outreach efforts to identify local homeless youth.
- Communicated to the agency, residents, and participants regarding programmatic objectives.
- Drafted and submitted all required federal progress reports.
- Participated in required federal training and vetting necessary to work with youth.

August 2001-July 2004

Life Skills Manager, Brehm Preparatory School (Learning Disability School), Carbondale, IL

- Facilitated youth in learning how to understand their feelings, empathize, and control their anger through life-skill development.
- Taught youth how to problem solve and better communicate with peers and adults.
- Engaged families in activities to learn effective discipline and communication

skills.

- Coordinated the preparation of meals and food orders.
- Supervised male residents, tutors, and assistant dorm parents.
- Analyzed and reported Student Behavior/Tier Level Evaluations of residents.
- Facilitated weekly social skills meetings with residents.
- Implemented a 16-week curriculum regarding sex education, stress management, and positive relationships.

November, 1998–August 2000

Certified Analytical Microbiologist, J. Leek Associates, Inc., Albany, Georgia

- Performed microbiological assays on various food commodities for Coliform, Salmonella spp., Escherichia coli, Staphylococcus, Staphylococcus Aureus, and Peanut Allergens.
- Analyzed oil chemistry on various food commodities for peroxide value, free fatty acid, and oleic to linoleic composition.
- Applied near infrared assays on food commodities for fat, sugar, and moisture values.
- Administered environmental swabbing and other quality-control laboratory maintenance.
- Managed communicated routine data.
- Communicated the results to management and customers.
- Supervised weekly invoicing.

December 1997–November 1998

Nuclear Pharmacy Technician/Driver, NuMed, Inc., Albany, Georgia

- Supervised routine package of nuclear medicine.
- Performed quality control on nuclear medicine with liquid chromatography.
- Coordinated the order of office and medical supplies.
- Delivered nuclear medication to various hospitals.
- Administered environmental swabbing and other quality-control laboratory maintenance.

RESEARCH TRAINING, LEADERSHIP, AND FELLOWSHIP EXPERIENCE

May 2004–July 2004

Assistant Camp Director, Touch of Nature Environmental Center (Mild- Extreme Developmental Delay)

- Managed the day-to-day operations of the camp program.
- Provided support, leadership, guidance, and assistance to camp staff in areas of camper care, cabin coverage, program presentation, crisis management,

information processing, health and wellness concerns, etc.

- Assisted Camp Director with duties of administration, staff supervision, meetings, scheduling, program logistics, problem solving, documentation, evaluation, etc.
- Supervised inventories of program equipment and materials and camp key dispersal.
- Oversaw the documentation of such camper information as summer food program figures, special diet requirements, opening day photo and t-shirt purchases, and collections, etc.
- Provided leadership during out-of-camp trips and special events.
- Facilitated staff and program evaluation process.
- Managed and organized volunteer workers.

January 2003–January 2004

Student Fellowship, Egyptian Area Agency on Aging, Carterville, Illinois

- Developed and evaluated senior citizen computer tutorial classes.
- Facilitated a regional needs assessment of older adults over 65.
- Planned effective activities for local seniors.
- Collaborated with local mental health agencies to develop a directory of services for older adults.
- Communicated MediGap/Utility Assistants information to older adults.
- Monitored, analyzed, and projected the number of congregate meals needed at senior sites.

August 2002–February 2003

HIV/AIDS Outreach Worker, Jackson County Health Department, Carbondale, Illinois,

- Distributed condoms, HIV/AIDS literature, and safer sex kits to at-risk populations.
- Facilitated weekly presentations/outreach sessions concerning HIV/AIDS.
- Participated in continual training and education of HIV/AIDS research.

August 2002–June 2004

Teaching Assistant, Department of Health Education, Southern Illinois University, Carbondale, Illinois

- Prepared course syllabus, exams, quizzes, and assignments.
- Attended weekly teaching strategy development workshops.
- Lectured and discussed health education concepts.

August 2002–May 2003

Graduate Assistant, Black American Studies, Southern Illinois University,

Carbondale, Illinois

- Assisted professor with classroom management.
- Proctored exams and quizzes.
- Attended regular weekly meetings.
- Supervised tutoring sessions for students.

August, 2000–June, 2001

Teaching Assistant, Department of Microbiology, Biochemistry, Molecular Biology, Southern Illinois University, Carbondale, Illinois

- Prepared labs for class.
- Lectured on lab procedure/methodology.
- Administered laboratory test and quizzes.
- Attended weekly training meetings.

September 1996–June 1997

President, Student Government Association (SGA), Albany State University, Albany, Georgia

- Developed new programs and evaluated student activities, and fundraisers.
- Managed the student government office and office payroll.
- Served as student advocate/attorney and resource for 3,500 students.
- Represented Albany State University at local, state, and national events.
- Chartered a college chapter of Habitat for Humanity.

June 1996–August 1996

Minority International Research Training, Funded by NIH, Berlin-Buch, Germany

- Participated in 16-weeks of analytical and academic research in the area of molecular cell biology at the Max Delbruck Center for Molecular Medical.
- Designed a research topic with laboratory mentor.
- Communicated the methodology and results of research at a national MIRT conference.

Summer of 1994 and 1995

Minority Biomedical Research Services, Albany, Georgia

- Participated in 20 weeks of academic research in hypertension in rats.
- Shadowed a distinguished faculty member of international research.
- Managed the care of test rodents.

July 1993–August 1993

Health Career Opportunity Program, Paine College, Augusta, Georgia

- Participated in 6-weeks of detailed college preparatory classes.

PROFESSIONAL ORGANIZATIONS

- 2002–present, American Public Health Association (APHA)-Member.
- Eta Sigma Gamma, Health Education Honorary Organization, Member.
- Society of Public Health Education (SOPHE)-Presenter/Member.
- American Association for Health Education (AAHE)-Member.
- 2004–present, National Commission for Health Education Credentialing, INC, Member.
- Illinois Health Education Consortium, Member.
- Illinois Public Health Association, Member.
- 2006–present, Association for the Study of Higher Education, Member.
- American Community College Association, Member.
- Illinois Community College Administrators Association, Member.

PRESENTATIONS

2002 Southern Illinois University, Presenter. Poster Presentation: Examining the Attitudes of Intergenerational Relationships of Older Adults.

2003 Society of Public Health Education (SOPHE). Poster Presentation: Booming Medication-Related Problems Among the Elderly: A Current & Rising Concern for “Baby-Boomers.”

2004 Southern Illinois University, and SOPHE, Oral Defense and Poster Presentation. PowerPoint Presentation: Examining Attitudes and Cultural Identity of African American Elderly About Nursing Homes.

2009 Family Christian Health Center- Board of Directors, Boards That Make a Difference, Board Presentation on Board Governance. PowerPoint Presentation: Carver, John, 2006. Boards That Make a Difference. 3rd edition Jossey-Bass.

COMMUNITY BOARD MEMBERSHIP

2014–Present, Illinois Department of Public Health (IDPH) – Community Health Worker Advisory Board (Statewide Appointment)

The CHW Advisory Board is charged with developing a report with its recommendations regarding the certification process of community health workers, best practices, and reimbursement options. The report will also include proposed curricula, ensuring that the content, methodology, development, and delivery are appropriately based on cultural and geographic needs and reflect relevant responsibilities for CHWs.

2013–Present, Roseland Community Hospital, **Board Vice Chair**

The Roseland Community Hospital Foundation Board is a group of emerging corporate and civic leaders who share a common vision to promote excellence in health care at Roseland Community Hospital (RCH) at this unique time in the institution's history. RCH has long been a pioneer in patient diagnosis and treatment in every specialty. With its current capital campaign project, RCH will transform the landscape of the Chicago's Far South Side and beyond. The Foundation Board of Directors is committed to continuing to raise funds to support hospital programs, capital improvements, and services.

2005–2013, Thornton Township Youth Committee, **Treasurer**

Mission: This is a community-based, social service organization dedicated to the youth and families of Thornton Township. The primary focus is to provide youth and families with the interventions, opportunities, and skills necessary to expand their possibilities through counseling and youth development services.

2009–Present, Family Christian Health Center, **Board Chair**

Mission: To provide excellent health care to the community that communicates in words and deed the love and gospel of Jesus Christ.

CERTIFICATIONS

2004–2010/2010–Present

Certified Health Education Specialist (CHES) 11654, to **Master Certified Health Education Specialist (MCHES)**. The National Commission for Health Education Credentialing, Inc.

- Assessing individual and community needs for health education.
- Planning effective health education programs.
- Implementing health education programs.
- Evaluating effectiveness of health education programs.
- Coordinating provision of health education services.
- Serving as a resource person in health education.
- Communicating health and health education needs, concerns, and resources.

August 2001–May 2004

Certificate of Gerontology, Southern Illinois University, Carbondale, Illinois

March 2005–June 2005

Street Smart Training, Train the Trainer, Delta Center, Inc. (Street Outreach Program)

- Facilitated a cooperative agreement with grassroots HIV/AIDS and STI prevention programs for runaway and homeless youth. The goals of the program are to reduce unprotected sex, reduce the number of sex partners, and reduce substance use.
- Trained outreach workers with the Street Smart curriculum, including its objectives, content, and activities;
- Learned how to implement Street Smart with fidelity; and
- Understood and practiced the skills crucial to the successful dissemination and implementation of Street Smart.

HONORS AND AWARDS

2014-ASU 50 Under 50 Award; 2004-Prompt Fellowship Award; 2002-Eta Sigma Gamma Award; 1998-C.W. Grant Leadership Award; 1998-100 Collegiate Black Men of America Scholarship recipient; 1997–1998-National Collegiate Student Leadership Scholarship; 1997–1998-Habitat for Humanity Campus Initiator/President; 1997–1998-*The Student Voice*, Staff Writer; 1996–1997- Student Government Association, President; 1995–1998-Friday Father's Mentoring Program; 1995–1998-National Association of Student Affairs Professionals; 1995–1996-Student Government Association, Vice President; 1994–1995-Sophomore Class President; 1993–1998-Professional Student Leader; 1993–1996-Certified Campus Counselor; 1993–1994-Pre-Health Career Society, Treasurer; 1993–1994-Freshman Class President; 1993–1994-Xi Phi Professional Honor Society

References:

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Dr. Joe Zanoni	jzanoni@uic.edu	773-209-7110