A Study of the Community Health Worker In the Kansas City Region and Beyond

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I. Executive Summary

The purpose of the white paper is: 1) to educate key audiences on the role and value of Community Health Workers; 2) to provide insight into the necessary building blocks for successful Community Health Worker (CHW) programs and community-wide workforce development efforts; and (3) to document the work in the Kansas City region to increase the use and acceptance of CHWs. As such, the white paper has three components: a literature review on the role and value-add of CHWs; documentation of the successes and lessons learned of the Kansas City Regional CHW Collaborative's efforts to build a sustainable regional CHW workforce; and an analysis of emerging trends in the operation of successful CHW programs.

Literature Review: Role and Value-add of Community Health Workers

A comprehensive literature review revealed a common understanding of the core competencies any CHW must possess to be effective in his or her role regardless of the program model employed. CHWs add significant value to efforts to improve individual and community health through the development of relationships of trust in addition to the provider-patient relationships. The trusting relationships encourage open communication on health-related issues that ultimately leads to improved health care access and outcomes. Furthermore, the core competencies should form the basis of any CHW education program in order to enhance the value-added role CHWs play in their organizations. Finally, the literature review revealed a number of studies documenting the return-on-investment (ROI) of CHW services in a variety of settings and for a variety of populations in terms of improved health outcomes and reduced cost.

Kansas City Regional CHW Collaborative (Collaborative) Successes and Lessons Learned

The Collaborative's vision is "Optimal health outcomes for the Greater Kansas City bi-state community". The Collaborative's mission is "to integrate CHWs into the health and human services systems, through capacity building, advocacy, and sustainability".

In its efforts to further its vision and mission, the Collaborative has worked together to support the development of a sustainable CHW workforce. The Collaborative's strengths of collaboration, diversity of membership, and understanding of community need contributed to its successes to-date including: 1) the development and continued enhancement of a regional CHW training program; 2) the training of 97 CHWs and CHW trainers in four years; and 3) an increase in awareness of the value of the CHWs as evidenced by the diversity and growth of Collaborative membership including recruitment of state policy representation to the Collaborative.

Looking forward, the Collaborative is in a strong position to leverage its existing strengths to continue to increase regional awareness of the CHW role and core competencies, influence state policy processes in both Missouri and Kansas, and recruit payers and employers by demonstrating ROI from the regional CHW initiatives. The Collaborative identified several lessons learned including: 1) involving CHWs in CHW policy efforts, 2), creating and following work plans with action steps, and 3) identifying return-on-investment in order to broaden the use of CHWs by public and private employers. Next steps to further the sustainability of a regional CHW workforce should include:

- Demonstrating ROI from regional CHW initiatives to attract employers and payers. This can include finalizing
 and making public evaluations of regional CHW initiatives, considering a time-limited randomized controlled
 trial, and exploring the development of core evaluation measures across programs to help standardize
 outcome measurement;
- Involving CHWs in Missouri and Kansas CHW planning efforts;
- Maintaining and following work plans to advance the Collaborative's goals;

- Advancing an advocacy campaign that disseminates the Collaborative's and regional CHW programs' successes and promotes the CHW core competencies in educational, training and employment opportunities; and
- Developing technical assistance opportunities for new regional CHW programs leveraging the emerging best practices identified in the cross-case comparison.

Emerging CHW Program Best Practices

A cross-case comparison of regional and national CHW programs revealed emerging trends for successful CHW programs in the areas of recruitment and hiring; training and supervision; and evaluation and funding, including:

- Recruitment and Hiring: Use targeted recruitment strategies such as role-plays, pre-hire workshops, or pre-hire trainings to identify CHWs with the appropriate soft skills for the role.
- Training and Supervision: Provide appropriate hands-on training after hiring to encourage development of appropriate skills for the role such as communication strategies or health advocacy and leadership. Maintain low supervisor to CHW ratios with supervisors who exclusively or almost exclusively supervise CHWs to provide ongoing support to help CHWs succeed in their roles.
- Evaluation and Funding: Identify value-add of CHW services through rigorous evaluation methods such as a randomized controlled trial to encourage new payers and employers.

II. Methods

Sample. The study has three components. The first component consists of a literature review on CHW programs nationally to identify a CHW scope of practice, program models, education and training programs, ROI, and funding opportunities. The second component focused on developing a timeline of the history of the Collaborative, and identifying its successes and lessons learned through a review of meeting minutes, meeting agendas, and ten interviews (nine individual interviews and one group interview) of current and former Collaborative members. The third component examined four regional CHW initiatives within the greater Kansas City bi-state region and four national CHW initiatives to identify emerging best practices relative to CHW program operation. The national initiatives were selected to reflect a range of CHW model types and a diversity of geographic locations.

Data Collection. To identify the Collaborative's successes and lessons learned, Collaborative members were interviewed either in person or over the telephone between October and November 2015. During the interviews, Collaborative members were asked to recount a timeline of Collaborative activities, major milestones and other successes, strengths that contributed to its successes, and challenges encountered and lessons learned. For the third component, we conducted phone interviews during November and December 2015 with leaders of selected regional and national CHW programs to identify emerging best practices relative to CHW program operations. A standardized interview guide was used and included the following components: program description, target population, point of access, program leadership, scope of practice, hiring standards, pay range, training, supervision, program evaluation, success factors, and challenges/lessons learned. We provided the four regional initiatives an opportunity to draft responses prior to the interviews. All of the responses for the national initiatives were collected via the phone interview. Results of the interviews were drafted and shared with the four regional organizations operating CHW initiatives and the four organizations operating national CHW initiatives for an opportunity to review and validate the results of the interview.

Analysis. Regarding the second component, the results of each interview were summarized and a comparison of interview results was conducted to recount a timeline of the activities and major milestones of the Collaborative, and to identify strengths that contributed to the successes, challenges and lessons learned. To identify emerging best practices relative to CHW program operation regionally and nationally, a cross-case comparison was

conducted to identify site-specific and general best practices of the CHW programs as well as common themes and challenges the organizations have encountered in the development and operation of the programs.

III. Overview of the Community Health Worker

a. Who is a Community Health Worker?

According to the American Public Health Association (APHA) and the Collaborative, a CHW is:

"A frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy". If

Value-added Role. CHWs reflect the values, culture and experiences of the community they work within. These similarities allow CHWs to develop peer-to-peer relationships of trust rather than the provider-patient relationships that are based on clinical expertise. These trusting relationships encourage open communication on health-related issues that ultimately leads to improved health care access and outcomes. This trusting relationship and natural connection is seen as the "key to building relationships with marginalized communities and easing their wariness" of the health care industryⁱⁱⁱ.

Skills and Qualities. As CHWs are frequently members of or share a close understanding of the communities that they serve, they are unique assets to their organizations. CHWs are able to leverage an ability to build individual and community capacity, understand cultural or linguistic barriers to care, and develop trusting relationships. These abilities offer opportunities to liaise between providers and clients^{iv} to improve health care access and outcomes; strengthen care teams; and enhance quality of life for people in poor, underserved, and diverse communities.

CHW activities are often tailored to meet the unique needs of their communities. However, in order to aptly serve in a CHW role – to serve as a bridge between people and the health and human services systems – there are core competencies (qualities and skills) important for any CHW to possess:

Core Competencies ^v			
Qualities	Skills		
A relationship to the community being served	Communication		
Desire to help community	Knowledge Base		
Empathy	Capacity Building		
Persistence	Interpersonal		
Creativity / Resourcefulness	Advocacy		
Personal strength and courage	Service coordination		
Respectfulness	Organizational		
	Teaching		

CHWs are referred to in a variety of terms including community health advisors, lay health advocates, Promotoras, peer health educators, or outreach educators. vi

i. Demographics

In 2015, there were approximately 395 employed CHWs in the Kansas City region^{vii}. This is an increase of approximately 39 percent since 2001. The majority of the CHWs are female (73 percent) and between the ages of 25 and 54. CHWs in the Kansas City region are predominately white (65 percent) and African American (28 percent). CHWs have a varied educational background: 31 percent of CHWs had a bachelor's degree; 23 percent completed some college work; 18 percent had a master's degree; and about 13 percent had a high school diploma or equivalent. The 2015 median pay range was \$17.10/hour. Local government employed the largest number of CHWs followed by other individual and family services, services for the elderly and persons with disabilities, religious organizations, and outpatient mental health and substance abuse centers.^{viii}

ii. History of the CHW in the United States

CHW activities are documented in U.S. literature beginning in the 1960s as methods to meet the needs of individuals in low-income and underserved communities. Since that time, there has been continued and growing interest in CHW services leading eventually to state and federal initiatives. In 2010, the Bureau of Labor Statistics (BLS) created a standard job classification code for CHWs. In 2010, the Affordable Care Act (ACA) recognized CHWs as important members of the health care workforce. The ACA also allowed state Medicaid programs "to designate non-licensed providers (i.e., CHWs) to provide preventive services"xi. Research has continually documented ROI of discrete CHW initiatives. Please refer to the "Is There A Return on Investment" section for further discussion on the cost effectiveness of CHW interventions.

b. What Services Do CHWs Provide?

The general scope of practice for a CHW has remained consistent over the years including a broad range of health promotion, outreach, and education activities to help individuals in the communities they serve, and which are applied across a variety of health care and non-health care settings.

A 1998 study identified the following core roles of CHWs in any organizational setting, which remain true today:

- Cultural mediation between communities and health and human services system;
- Informal counseling and social support;
- Providing culturally appropriate health education;
- Advocating for individual and community needs;
- Assuring people get the services they need;
- · Building individual and community capacity; and
- Providing direct services.xii

CHWs link people to health care or supportive services, coordinate care among multiple service systems, and ensure individuals get the necessary support toward achievement of their health goals. Due to their close connection to the community, CHWs can help people address social determinants of health and overcome cultural, linguistic or economic barriers to health care, or fear of navigating the complex health care system. Barriers can include lack of transportation, lack of health insurance, and treatment and prevention strategies that are difficult to understand. CHWs can also help providers and institutions integrate social and cultural concepts into day-to-day practice. Integrating social and cultural concepts into day-to-day practice can help improve an individual's engagement in care and ultimately improve health outcomes.

See Appendix 1 for a more detailed description of each core role.

c. Where Do CHWs work?

While CHW initiatives are designed to improve access to health care, increase health knowledge, and improve health outcomes, CHW initiatives are also tailored to meet the unique needs of their communities and the organizations in which they work. CHWs can engage clients in necessary care at multiple points along the health continuum. Employers can include: schools, universities, clinics, hospitals, physician offices, social service organizations, managed care organizations, public health agencies, or faith-based and non-profit organizations.

As such, CHWs can serve, leveraging the core competencies, within a variety of program models^{xiii} that include:

- Promotora de Salud. In this model, CHWs are trusted members of the community they serve and share many of the same social, cultural or economic characteristics. They can provide patient advocacy, education, and translation services, or serve as an outreach worker or mentor. The Promotora may be a community volunteer or a paid member of an organization's staff. CHWs are often the "bridge between the diverse populations they serve and the health care system."xiv
- Care Delivery Team. As part of a care delivery team, CHWs may render direct health care services in collaboration with a medical professional such as measuring blood pressure or performing other basic health screenings. In a team-based approach to care delivery such as a medical home environment or in a mobile clinic setting, a CHW may work alongside a team of providers to deliver health education or basic screening services while the provider conducts a medical exam.
- Care Coordinator. In this model, the CHWs are typically employed in a health care setting to help individuals navigate and remain engaged with the health care system. A CHW will serve as a liaison between their clients and other health care and social service organizations. Activities can include: making appropriate referrals to health care and social service organizations, developing a care plan with the client to track progress over time, and providing health education and assistance navigating the health care system (e.g. scheduling appointments or transportation, or applying for government-funded programs).
- Health Educator. This model is focused on health education to target populations. CHW services are targeted toward disease prevention, screening, and promoting healthy behaviors. Activities may include: offering educational programs on issues such as chronic disease prevention or the importance of physical activity and nutrition, or providing health screenings.xvii
- Outreach and Enrollment Agent. In this model, CHWs usually focus on engaging hard-to-reach populations by
 performing home visits, offering psychosocial support, promoting healthy lifestyle practices, or conducting
 environmental health assessments. CHWs in these program models also provide many of the health educator
 services, as well as assistance to enroll in government programs.xviii
- Community Organizer and Capacity Builder. In this program model, CHWs act as community change agents, promoting community action to implement and garner support for new activities. CHWs may build relationships with social services or public health organizations as well as providers or faith-based groups to develop a coordinated approach to serving the target population.xix

The program models are not always mutually exclusive, some CHW initiatives fall into more than one category described above. It is important to remember that CHW initiatives are tailored to the needs of the population served, the purpose of the organization that employs them, and the goals of the initiative and, therefore, CHW roles can vary and often encompass a wide variety of activities.

d. Who do CHWs serve?

According to the 2007 CHW National Workforce Study, CHWs generally serve special populations such as the uninsured, the homeless, or immigrants. The study reported that CHWs serve all racial and ethnic groups, but most often served Latino, Non-Hispanic white, and African American populations. CHWs serve populations with a variety of needs including women's and maternal health, child health, or individuals with specific chronic conditions including diabetes, high blood pressure, cancer, cardiovascular diseases, or heart disease.**

Similarly, the regional CHW initiatives highlighted in this study serve mainly uninsured individuals, Medicaid recipients, and individuals with significant health concerns including those managing chronic conditions or at risk for hospital readmission and frequent emergency department use.

e. What Are Employer Requirements for CHWs?

i. Education and Training Requirements

According to the Sinai Urban Health Institute (SUHI), an organization that conducted an extensive CHW literature review and a Chicago-based workforce study, one of the reasons employers most often identified for hiring CHWs was their ability to connect to the community and impact change, and to help tailor programs to community needs. As a result, "consensus within the field is that CHWs are not hired for their credentials but for their knowledge of and connection to the community" These findings mirror the results of the HHS 2007 National CHW Workforce Study that reported, "communication skills, combined with the ability to create interpersonal relationships and maintain confidentiality, were considered by most organizations as essential attributes for a job as a CHW."

Because employers emphasize that individuals exhibit the core competencies, CHWs typically enter the profession with varying education, skills, and experience and are trained on the specific health knowledge and technical skills needed for their positions."xxiv Accordingly, employers of CHWs in the Kansas City region report they are mostly looking for individuals with specific skills and qualities such as communication or interpersonal skills that tie to the core competencies discussed earlier and may not require more than a high school-equivalent level of education. Appropriate hands-on training is generally provided to encourage development of appropriate skills for the role such as communication strategies or health advocacy and leadership, and many programs in the Kansas City region require completion of the regional CHW course that emphasizes the core competencies.

CHW specific education and training can range from some on-the-job training to formal community college-based programs that grant certification, such as the Metropolitan Community College (MCC) course offered in the Kansas City region. Beyond formal education opportunities, CHWs are typically trained on the job after hiring through mentoring and supervision to: 1) reinforce the core competencies of CHWs, and 2) develop additional competencies to succeed in the particular organization that hired the CHW (e.g. computer skills or disease-specific training).**

Health Resources Services Administration (HRSA) and Centers for Disease Control (CDC), recognizing the success of CHW programs, offer resources to organizations operating CHW programs:

- The CDC offers disease-specific resources for organizations operating CHW programs.
- HRSA developed a CHW tool kit that offers successful strategies and background research for organizations implementing CHW programs.

ii. Certification

In recent years, many states are moving toward standardization of CHWs, including core competencies and educational and training requirements, through certification. Supporters of standardization believe it will "help integrate CHWs into the health and human services systems, raise the visibility of their roles, and obtain higher pay and reimbursement from insurers. Others fear this standardization will force out CHWs who do not have the resources to obtain the required credentials." The following is a summary, as of October 23, 2015, state movement toward standardization xxxvii:

- Five states have laws or regulations that establish CHW certification program requirements;
- Seven states have a state-led training or certification program without mandating legislation;
- Three states have laws that create a CHW advisory board or workgroup tasked with establishing CHW standards; and
- One state has an approved Medicaid state plan amendment for certified CHW services.

f. How Are CHW Initiatives Funded?

Historically, stable funding has been a significant barrier to implementing and sustaining a CHW program. "The majority of CHW programs rely on grant funding. These funds provide a vital lifeline to programs, but do not offer long-term sustainability." In many states, private insurers and Medicaid have not historically reimbursed for CHW services.

However, as health care moves from a volume-based to a value-based system of care, health care organizations are increasingly developing methods to attain the Triple Aim^{xxix} to: improve the patient experience of care; improve the health of populations; and reduce the per capita cost of health care. CHW services can play an important role in helping accomplish these goals by working effectively with health professionals to promote wellness, prevent and manage chronic conditions, and help coordinate medical care and meet post-acute care needs efficiently.^{xxx} Due to incentives brought about by the ACA, providers and insurers are incorporating CHWs into health care teams. This includes programs to reduce hospital readmissions or emergency department visits as well as the creation of health care teams within patient-centered medical homes. Therefore, across the country new employers and funding opportunities are emerging for CHWs, such as Medicaid, managed care organizations, and health care providers. Below lists emerging Medicaid funding streams for CHW programs:

- Medicaid State Plan Amendment. Minnesota is the only state to have CHW services included in its Medicaid state plan as a reimbursable service. According to the National Academy for State Health Policy (NASHP)***, many states are exploring submitting a state plan amendment to the Centers for Medicare and Medicaid Services (CMS) to include CHW services in the Medicaid state plan.
- State Innovation Models (SIM). CMS provided SIM grants to selected states that offered financial and technical support for the development and testing of state-led, multi-payer health care payment and service delivery models. The model must be geared toward improving health care system performance, increasing quality of care, and decreasing costs. According to NASHP, ten states included use of CHWs in its SIM proposal, varying from using SIM funds to directly reimburse for CHW services to using the funds to research and develop sustainable funding options. XXXIII
- Medicaid 1115 waivers. Three states use Medicaid 1115 waiver **xxiiifunding to support CHW programs.**xxiiv
- Health Homes. Seven states report allowing approved Health Homes^{xxxv} to hire CHWs as part of the care team^{xxxvi} including Missouri, which recently rolled out a CHW pilot within its Health Homes initiative.

g. Is There a Return on Investment?

According to the Sinai Urban Health Institute (SUHI), another primary reason employers identified for hiring CHWs was their ability to "impact health outcomes, cost, and system navigation". In addition to improving quality of care through cultural mediation and improved communication with medical providers, CHW programs demonstrated effectiveness in improving health outcomes, increasing access to care, and reducing costs. XXXVIIII

There are many studies identifying the positive overall impact of individual CHW interventions to health, quality of care and costs. Problems identified include a lack of rigor in terms of collection of health and clinical outcomes or evaluations that are only descriptive in nature, and no common measures across CHW interventions making it difficult to compare across a wide variety of CHW programs.**

Even with the variety in quality of CHW evaluations, there are numerous studies that identified a return on investment (ROI) in health outcomes and reduced costs. So much so, that in 2009, the APHA released a policy statement** identifying CHW program effectiveness and advocating for the addition of CHWs to health care delivery teams in order to improve quality of care. It cited findings from a variety of studies identifying improved access to appropriate care, improved quality, improved health outcomes and reduced cost:

Improved access, quality and health outcomes.

- Increase in insurance rate. A CHW intervention to increase insurance among Latino children in Boston found
 that children subject to CHW intervention services were significantly more likely to be continuously insured.
- Improved health outcomes. CHWs also have proven positive effects on chronic disease management through
 methods such as improved treatment adherence, or increased physical activity. The APHA noted improved
 clinical outcomes for diabetes, such as decreased hemoglobin A1C levels.xivi,xivii,xivii,xivii,xivii,xiix

Reduced health care costs. The APHA cited the following CHW programs saved money by diverting care from emergency departments to primary and preventive care.

- For a CHW program targeting underserved men in Denver, it was found that care shifted from inpatient and urgent care to less costly primary care services, resulting in a return on investment of \$2.28 for every one \$1 spent on the CHW intervention, for a total savings of \$95,941 per year.
- For a CHW program targeting patients with diabetes, results indicated a reduction in emergency room visits and hospitalizations, which resulted in an estimated gross savings to the hospital per CHW of \$80,000–90,000 per year.
- Another program, in addition to those cited by the APHA is the Arkansas Community Connector program, which used CHWs to identify people living in the community who are at-risk of institutionalization and have unmet long-term care needs, and to connect them to Medicaid home and community-based services. The efforts resulted in a 23.8 percent average reduction in annual Medicaid spending per participant over 2005–08, for a net three-year savings to the Arkansas Medicaid program of about \$2.6 million.

Appendix 2 outlines the results of a select number of studies identifying the ROI of CHW interventions.

IV. History of the Kansas City Regional CHW Collaborative

The Collaborative represents a multi-disciplinary collaboration of health care providers, and social service, government, community-based, and faith-based organizations advocating for the advancement of the CHW workforce at both the regional level and at the state-levels in Kansas and Missouri.

Vision: Optimal health outcomes for the Greater Kansas City bi-state community.

Mission: To integrate CHWs into the health and human services systems, through capacity building, advocacy, and sustainability.

To advance the CHW workforce, the Collaborative focuses efforts on:

- Developing and improving CHW educational opportunities;
- Creating a sustainable workforce through a variety of employers and payer sources; and
- Educating the regional and statewide community on the benefits and successes of CHW models.

a. First Meeting of the Collaborative

The Collaborative first met on June 30, 2011 at the KC CARE Clinic with a group of organizations that had implemented or were working to implement CHW initiatives in the region. The initial meeting included KC CARE Clinic, Truman Medical Center (TMC), Truman Corporate Academy, Metropolitan Community College (MCC) and the Mid-America Regional Council (MARC). Shortly after the initial meeting, El Centro joined the Collaborative. Below is the history of each initial member's CHW program that precipitated the first meeting:

- KC CARE Clinic and MARC. KC CARE Clinic and MARC had been awarded a grant from the Health Care Foundation of Greater Kansas City (HCF) to fund the Care Coordination Initiative, which would employ CHWs at the KC CARE Clinic to provide care coordination for uninsured and underinsured clients and help link them to primary care. Representatives from KC CARE Clinic and MARC had recently visited Project Access in Dallas to investigate an inter-organizational approach to using CHWs to increase access to safety net services, encourage hospital participation in the initiative, and reduce unnecessary ED use and hospital admissions.
- TMC. Truman Medical Center was interested in developing a CHW program to target its highest utilizers of it emergency department and inpatient services.
- MCC. During the development of the Care Coordination Initiative, the KC CARE Clinic identified it would need
 an educational partner to educate and strengthen its CHW workforce. It recruited MCC to support the
 educational efforts of the Collaborative.
- *El Centro*. El Centro had operated a Promotoras program in the region since 2008 in response to an identified need in the community for better access to health care and social services.

The following section highlights major milestones since the Collaborative's first meeting. For a detailed timeline of the Collaborative, please see *Appendix 3*.

b. Important Milestones

i. 2012

2012 was a formative year for the Collaborative. It focused efforts on the research and development of a CHW education and training program. Collaborative members worked collaboratively to research and advise MCC on the development of a CHW course. Collaborative members also researched certification or credentialing pathways and began discussions regarding strategies to develop a sustainable CHW workforce in the region. Below are important 2012 milestones:

- Approval for MCC CHW Course Development. MCC requested and received approval from the State of Missouri
 to use a portion of existing grant funds for the creation of an MCC CHW course.
- Collaborative Development of a CHW Course. With the approval to use the grant funds to develop a CHW curriculum, the Collaborative served in advisory capacity on the development of the MCC curriculum, including performing research on national CHW education programs such as those in Ohio, Texas, and Minnesota. Ultimately, MCC developed a pilot course, with the Collaborative serving in an advisory capacity, based upon the Minnesota CHW curriculum.
- First CHW Class at MCC. MCC hosted its first pilot class and trained twenty-two CHWs. Collaborative members from the KC CARE Clinic and TMC served as instructors in the MCC pilot.
- CMS Innovation Award. One of the initial members, TMC, received a three-year CMS Innovation award to
 implement a program providing targeted care management intervention services using CHWs to the most
 frequent utilizers of its emergency department and inpatient services.

ii. 2013

With the significant accomplishment of the development and implementation of a CHW education and training program, the Collaborative turned its efforts toward CHW advocacy and sustainability. As awareness and use of CHWs increased throughout the region, the Collaborative increased the diversity of its membership and recruited another educational partner, Donnelly College. Below are important 2013 milestones:

- Creation of Regional CHW Subcommittees. The Collaborative agreed to form three subcommittees with specific goal-oriented agendas to focus on education, advocacy and sustainability including workforce development and funding opportunities. The three subcommittees were: Membership/Education, Payment/Legislation, and Advocacy subcommittees.
- First CHW Forum. The Collaborative held its first community forum at the MARC offices to educate the regional community on the value of CHWs and to attract potential employers. Feedback from forum attendees was positive overall.
- Second MCC CHW Class. MCC hosted its second pilot class training twenty-three CHWs and potential trainers
 of CHWs.

iii. 2014

In 2014, the Collaborative formalized its vision and mission statements, continued its outreach and advocacy efforts to develop a sustainable CHW workforce, and increased educational opportunities with the translation of

the MCC CHW curriculum into Spanish. In 2014, the Missouri Department of Health and Senior Services (DHSS) joined the Collaborative and held a statewide forum to explore the development of a statewide CHW advisory committee to advise the state on CHW core competencies, standards, and scope of practice.

Collaborative membership continued to grow in 2014 to include additional health care and non-health care organizations as well as state representation from DHSS and the Kansas Department of Health and Environment (KDHE). Below are important milestones:

- Translation of Curriculum. Donnelly College, with the assistance of MARC and grant funding from the REACH Healthcare Foundation, translated the MCC curriculum into Spanish.
- Second Community Forum. The second CHW community forum, held at the Chamber of Commerce of Greater Kansas City's offices, focused on informing potential employers of the benefits of CHWs.
- Vision and Mission Statements. The Collaborative finalized its vision and mission statements.
- Health Resources and Services Administration (HRSA) Grant. MCC receives a three-year HRSA grant to identify, recruit and enroll up to 400 individuals per year in MCC CHW non-credit and for-credit programs.
- *Missouri Statewide Forum.* DHSS held a statewide forum to bring partners together and gather input regarding the development of a statewide CHW advisory committee.

iv. 2015

Efforts of Collaborative members in 2015 focused on enhancements to the MCC curriculum in response to community need and CHW feedback, training 50 CHWs and CHW trainers, and engagement with DHSS on the Statewide Advisory Committee in order to promote sustainability of the CHW workforce in the region and throughout the state of Missouri. In 2015, a CHW forum began convening monthly in order to provide opportunities for CHWs throughout the region to collaborate, share resources and advocate for CHW needs. Below is a summary of important milestones:

- MCC Trainings. MCC trained 50 CHWs and CHW trainers.
- CHW Forum. The Collaborative began hosting a monthly forum through which CHWs could share resources, offer support to one another, and identify workforce development opportunities.
- Statewide CHW Advisory Committee. The first Statewide CHW Advisory Committee meeting is held. The
 Committee is tasked with recommending to DHSS a minimum set of CHW core competencies, minimum
 standards, and a scope of practice.
- MCC Hypertension Module. MCC delivered its hypertension add-on module to 36 individuals.
- Sustainability, Advocacy, and Education Subcommittees. The Collaborative refocused the subcommittees, creating three subgroups of Sustainability, Education, and Advocacy, to work towards: obtaining statewide recognition of a standard CHW definition, core competencies, scope of practice and curriculum; increasing regional awareness of CHWs; creating additional CHW workforce opportunities; and developing a strategy for obtaining Medicaid reimbursement of CHW services.

 Core Competencies. The Education and Sustainability Subgroups agreed on and recommended a minimum set of core competencies to DHSS including: Outreach Methods and Strategies; Individual and Community Assessment; Effective Communication; Cultural Responsiveness and Mediation; Education to Promote Healthy Behavior Change; Care Coordination and System Navigation; Use of Public Health Concepts and Approaches; Advocacy and Community Capacity Building; Documentation; Professional Skills and Conduct; and Introduction to Chronic Disease.

c. Milestones and Strengths of Collaborative

Current and former Collaborative members were interviewed and asked to identify the major milestones the Collaborative achieved since its inception and the strengths of the Collaborative that contributed to its successes over the years. The following milestones were identified in the interviews:

- Recruiting an educational partner for the development of a CHW course;
- Development of the MCC curriculum;
- Delivering the curriculum to CHW students multiple times;
- Securing a dedicated space, time and administrative support for the Collaborative;
- Hosting public forums and creating regional awareness of the value of CHWs especially among other health care providers such as hospitals;
- · Recruiting Collaborative representation from the Kansas and Missouri state governments; and
- Refocusing as a working committee with subgroups to continue the Collaborative's progress.

The interviewees identified the following Collaborative strengths contributed to its milestones.

i. Collaboration

Collaborative members worked collectively toward one common goal — a sustainable CHW workforce — which contributed to its successes. The members worked collaboratively, sharing an understanding of the role and value of a CHW, to advocate for a common agenda. For example, the members collaboratively researched and advised on the development of a CHW course for the region, sharing their time and resources to advance the CHW workforce.

One former Collaborative member noted that members had "a respect for all parties involved", and that "decisions were made together". Another noted that the collaborative nature kept the original Collaborative members from the June 30, 2011 meeting involved over the years and that perseverance is a key to success in sustaining a CHW workforce. Another member identified that including HCF, the funding organization, in the planning process, was integral to the continued success of both the Collaborative's work and specific CHW initiatives. Furthermore, the partnership between Missouri and Kansas and the Collaborative created an opportunity for the Collaborative to be involved in each state's CHW planning efforts.

ii. Membership Diversity

Several current and former Collaborative members noted that the diversity of the Collaborative, which is supported by the open membership structure, brought a variety of perspectives to the process, which helped to strengthen the Collaborative's understanding of:

- The CHW role and value of a CHW all along the health continuum;
- New funding options; and
- Regulatory, legislative and other methods to advocate for a statewide CHW model.

One Collaborative member noted that "community commitment to a sustainable CHW workforce as a collaboration of diverse actors is much more powerful than one organization advocating alone". Another noted that physicians and social workers worked side-by-side with educators in the research and development of the regional CHW training program. The collaboration among diverse actors brought a depth of knowledge and greatly contributed to the success of developing regional CHW educational opportunities.

iii. Recognition of Community Needs

Collaborative members identified that the Collaborative is community-led; therefore there is a common understanding of the needs of the community and how a CHW can help address those needs. Collaborative members understand that health care is changing to a prevention and value-based system and that health care providers need to "meet members in the community" in order to effect health outcomes and cost. Collaborative members recognize the value of using laypersons to identify the social determinants of health and to better meet the needs of their clients.

Collaborative members further understand the role of the CHW is flexible depending on the program model and needs of a particular community. Therefore, the members that advised on the development of the MCC CHW training program encouraged a training that is flexible, while meeting the core competencies a CHW would need all along the continuum of care from hospital and clinic-based models to community-based models.

d. Lessons Learned

i. Buy-in at all levels

The majority of Collaborative members identified buy-in as fundamental to the success of a community-led initiative. Members identified that buy-in and agreement of a common vision is necessary at the Collaborative-level. In addition, members identified that a movement to integrate CHWs into the workforce requires organizational buy-in to the vision and goal as well as a common understanding of the role of a CHW. This buy-in must also include "champions at the top including managed care organizations (MCOs) and hospitals". Furthermore, CHW buy-in and input is key to developing a successful CHW workforce. CHWs must have input in the development of CHW training and in the identification of standard core competencies and scope of practice at the regional and state levels.

ii. Identify Return-on-Investment

In order to attract potential employers and new payers such as Medicaid or MCOs, demonstrating return on investment (ROI) from CHW programs is essential. Collaborative members identified the need to demonstrate ROI in order to attract new payers. Collaborative members that implemented CHW programs are currently involved in research and evaluation efforts to identify ROI.

iii. Identify Action Steps

The third most common lesson learned was to identify and execute next steps. Collaborative members identified that at various times the Collaborative repeated conversations or remained stagnant. One former Collaborative member identified that "to be effective, the Collaborative always needs to focus and execute next steps off of a to-do list". Another current Collaborative member identified the Collaborative "needs a work plan to move forward and that the newly formed subgroups will help this".

V. Metropolitan Community College Curriculum

a. Background

In 2012, the initial Collaborative members collaboratively researched and evaluated CHW curriculums and agreed to adopt the Minnesota curriculum for the MCC CHW course. Since 2012, MCC trained 97 CHWs and CHW trainers and developed a hypertension add-on module in response to community need.

Overview: The MCC CHW curriculum focuses on understanding of legal and ethical responsibilities involved with advocacy and how cultural beliefs and social determinants play a role in community health. Coursework is designed to develop communication skills, interaction strategies, and awareness of local health resources. It focuses on understanding public health systems, identifying community resources, motivational interviewing, case management, conflict resolution, documentation skills, effective communication and working with the community to promote health.

Required Hours: The CHW non-credit certificate course is a total of 100-classroom contact hours (84 core competency hours plus 16 hours of behavioral health focus) plus 60 hours of community service learning. The for-credit certificate course awards 16 hours of college credit.

Program Eligibility: Individuals must be 18 or older, have a high school diploma or GED equivalent, and proof of lawful residency in the United States, among other requirements.

b. MCC Core Competencies

The MCC CHW course is designed to ensure that CHW students practice the core competencies in order to adequately perform the various roles in care and non-health care settings. Several states across the country have determined core competencies that set the standard for CHW curriculums. The MCC core competencies mirror not only those in other states but also the 1998 Community Health Advisor study detailed in *Appendix 1* and represent emerging best practices for CHW education including:

- Communication skills. Oral, written and non-verbal communication strategies to communicate with different audiences in respectful and meaningful ways.
- Advocacy and Capacity Building. Advocating on behalf of people and helping people to make their own decisions about their health.
- Teaching. Providing health education to promote individual and community health.
- Organization and Documentation. Organizing oneself and preparing for client interactions as well as documenting work activities.
- Service Coordination and System Navigation. Identifying and locating community resources, and making appropriate referrals to help people navigate the health and social service systems. Helping address issues and social determinants of health that can interfere with treatment regimens.

- Client and Community Assessment. Assessing client and community strengths, limitations, and available resources. Collecting, organizing and interpreting client information to develop and monitor progress toward treatment goals.
- Cultural Responsiveness and Mediation. Acting as a cultural interpreter and with cultural humility in diverse settings. Acting as a cultural interpreter with professionals.
- Knowledge Base. Developing broad knowledge about the community, specific health issues prevalent in their communities and how to find information and available resources.
- Interpersonal Skills. Building relationships in a friendly and sociable manner. Working in a team and as mediator for people with diverse actors in the health and social services system.

VI. National and Regional CHW Programs

a. A Study of Four National CHW Programs

Key Program Characteristics

The key program characteristics of the four national CHW programs interviewed for this white paper are summarized in Exhibit 1. One of the programs uses a Promotora de Salud model and one used a Health Educator model. The remaining two utilize a Care Coordinator model based out of the health care system, but extending into the patients' homes and community. The programs range from a disease-specific model in which patients are referred directly by the clinics to more advanced models in which the health care system employs risk stratification techniques and hot-spotting to identify high-risk patients. All of the organizations used grant funding for at least some of their start-up costs, but are working toward more sustainable funding sources such as from a payer partner, the State or the participating health care system.

Scope of Practice

The scope of practice across the programs includes: home visits, health education, health care system navigation, training on disease specific triggers, and referral to social or mental health services.

Hiring and Training

The key characteristics of the population of CHWs working in these four national CHW programs are also summarized in Exhibit 1. All four programs use a paid, employed model that provided benefits to the CHWs, reflecting trends toward professionalization of the CHW role. The Minnesota and Texas programs require that the CHWs complete the state CHW certification program before or after hiring and all programs required significant on-the-job training including activities such as: classroom training, role-playing and shadowing. High school equivalency is a requirement of some, but not all of the programs. Most of the programs focus hiring efforts on finding committed individuals from the communities they serve with soft skills such as empathy, strong communications and ability to advocate. The programs then train them on more specific hard skills such as computer use, disease processes or health care system navigation.

Exhibit 1: Summary of National CHW Programs

Key elements	Rio Grande Valley Salud y Vida	Sinai Asthma Care Partners	Hennepin County Medical Center	UPenn IMPaCT
Program characteristics				
Location	Rio Grande Valley, TX	Chicago, IL	Minneapolis, MN	Philadelphia, PA
Program Description	Collaborative community evidence-based chronic care management program	Comprehensive asthma management program. Yearlong active phase with up to six home visits. 6-month follow-up phase.	Integrated model in which CHWs are part of the interdisciplinary care team based in certified patient-centered "Health Care Home". Additional program includes Outreach CHWs based in community.	Evidenced-based model developed with input from patients to serve high-risk patients in the Penn Medicine system. 3 main programs; 2 hospital-based focused on care transitions; 1 primary care based
CHW model type	Promotora de Salud	Health Educator	Care Coordinator	Care Coordinator
Target population	Adults 18-65 with chronic diabetes; at least 60% low-income	Adults 18 and older and children with uncontrolled asthma	High and extreme risk patients identified through risk stratification	High risk patients in 8 target "hot-spot" zip codes in Philadelphia
Point of access	Referrals by participating community clinics	Partner MCO identifies and refers patients	Homegrown risk stratification model identifies high and extreme risk patients regardless	Screening for hot- spot zip codes; uninsured/Medicaid status AND Inpatient: about to be discharged or 3 more hospital admissions in 6 months Outpatient: 2 or more chronic conditions, 1 or more uncontrolled and on Medicaid or uninsured or referred by the care team.
Funding	Delivery System Reform Incentive Payment (DSRIP) through State Medicaid 1115 waiver	Grants and partner MCO	Initial: state incentives; participating ACO Ongoing: Hennepin Health System; some state Medicaid reimbursement for CHW services	Penn Medicine due to statistically significant outcomes shown
Evaluation	Done through DSRIP; evolving from process to outcome based	Done through Sinai Urban Health Institute; variety of measures	Done through HCMC; focused on measures that show decreased ED and Hospital utilization and increased primary care visits; patient satisfaction surveys	Done by UPenn. Model was tested in a Randomized Controlled trial and showed improved outcomes.
Community Health Worker charac				
Scope of Practice	Home visits; health education, navigation,	Home visits including environmental	CHWs work in care team to provide	Developed standardized

Key elements	Rio Grande Valley Salud y Vida	Sinai Asthma Care Partners	Hennepin County Medical Center	UPenn IMPaCT
	guidance, referrals to mental health	assessment; education on asthma, proper medication use, and asthma triggers.	navigation of the health care system and address social needs of patients. CHWs develop individualized care plans with patients in the primary care setting.	workflows for CHWs to do care planning and patient centered goal setting. Provide navigation to overcome barriers. Integrated in health care team but work in home and community as well.
Hiring Standards				,
High school equivalency	No	Yes	Yes	Yes
Additional language skills	Yes; Spanish	No	Yes; Spanish, Somali, Hmong, Arabic	None
Computer skills	No; trained	No; trained	No; trained	No; trained
Training				
On-the-job training	Yes	Yes; 40 hours	Yes	Yes; 140 hours
Formal CHW education required	Yes; must complete 12- week TX state certification program	No	Yes; must complete a state-certified (MN) CHW program	No, but the 140 hours of training can be applied to 6 college credits with the Community College of Philadelphia
CHW Population				,
Employed (n, %)	36-42, 100%	3, 100%	25, 100%	23, 100%
Paid	Yes	Yes	Yes	Yes
Benefits package	Yes	Yes	Yes if over 0.5 FTE	Yes

b. A Study of Four Regional CHW Programs

Key Program Characteristics

The key program characteristics of the four regional CHW programs interviewed are summarized below in Exhibit 2. One of the programs uses a Promotora de Salud model. One program model reflects a combination Promotora de Salud and Health Educator model. Two programs use a Care Coordinator model. CHWs in the Promotora de Salud programs primarily work in the community. One of the Care Coordinator programs operates as a partnership between safety net health care providers, hospitals, and social service and community-based organizations. The CHWs are based in a safety net clinic, but have partnerships and help to coordinate care with the partner organizations. The second Care Coordinator model operates out of a health care system and the CHWs work as part of a team that includes a social worker and nursing staff. In this program, the CHW spends the majority of his or her time in the community or in the patients' homes.

Scope of Practice

The programs range from providing disease-specific health education and referral services for specific conditions (i.e. diabetes, smoking cessation and cancer), to general health education on the benefits of receiving preventive care through a medical home, to targeted care management interventions for identified high-risk patients. All of the organizations use grant funding to sustain the programs, but are working toward more sustainable funding sources similar to the national CHW initiatives. The scopes of practice across the programs are similar to the

national CHW programs including: home visits, health education, health care system navigation, or addressing social determinants of health.

Hiring and Training

The key characteristics of the population of CHWs working in these four regional CHW programs are also summarized in Exhibit 2. Three of the programs use a paid, employed model that provides benefits to the CHWs. Two of the programs require completion of the MCC course. The Promotora/Health Educator program reports it would require the MCC course if it were offered in Spanish. All programs require on-the-job training including activities such as: classroom training, role-playing, mentoring or shadowing. High school equivalency is a requirement of the Care Coordinator programs. Similar to the national CHW programs interviewed, the regional CHW programs focus hiring and recruitment on finding committed individuals from the communities they serve with skills that represent the CHW core competencies. The programs then provide more specific training necessary for the particular role such as computer use or chronic disease management training.

Exhibit 2: Summary of Regional CHW Programs

Key elements	KC CARE Clinic	Truman Medical Center	Juntos at University of Kansas Medical Center	El Centro		
Program characteristics	Program characteristics					
Location	Kansas City, MO	Kansas City, MO	Kansas City, KS	Kansas City, KS		
Program Description	Culturally competent care coordination along a continuum of access points in the safety net health care system including safety net health care providers, hospital EDs and inpatient units, and community-based organizations	Targeted care management intervention services using CHWs as part of a care coordination team	Health education and outreach to eliminate health disparities through research, training, community partnerships and service	Community-based health outreach and education, and referral to health clinics for primary and preventive care		
CHW model type	Care Coordinator	Care Coordinator	Promotora de Salud/Health Educator	Promotora de Salud		
Target population	Uninsured or underinsured individuals who have significant barriers to accessing and participating in care, and are at high-risk of falling out of care	Adults who are the highest utilizers of TMC's ED and inpatient services	Latino population throughout Kansas. In Wyandotte county, targets diabetes, breast cancer, and smoking cessation education.	New immigrant Latino community		
Point of access	Referrals by safety net and community-based partners, and hospital ED and inpatient units	TMC data analysis identified its highest utilizers for ED and inpatient services and then risk-stratified individuals by chronic condition	Community-based outreach through community partners and organized health events	Community-based outreach within local organizations including local businesses, groceries, churches, and events		
Funding	Grants	CMS grant	Grants	Grants		
Evaluation	Done through data analysis by KC CARE Clinic and partners; focused on health outputs such as the	TMC tracks outcomes including reductions in ED and inpatient admissions and high utilization of	Juntos measures program outputs (e.g. # of educational sessions; # of mammograms	Done through surveys administered by El Centro; focused on health-related		

Key elements	KC CARE Clinic	Truman Medical Center	Juntos at University of Kansas Medical Center	El Centro
	percent of patients that achieve one service plan goal during each 60-day cycle or gain access to medication, and lower costs through reduced ED or inpatient utilization	outpatient services, and clients' abilities to self-manage their health care such scheduling appointments or transportation and access to resources they need.	completed; # of smokers receiving intervention). Juntos also measures outcomes related to the Promotora themselves such health literacy or stress level.	outputs (e.g. # of people monitoring daily food portions); Also measures outcomes related to the Promotoras including career/education progression
Community Health Worker charac		1	1	
Scope of Practice	Supporting and coaching at-risk patients to manage their own health care, navigation of health care system, address social determinants of health, and individualized health education and goal setting	Home visits to address social / community needs of the patients including securing transportation, assistance for utilities or federal benefits; health care navigation; health education; and care planning to address social determinants of health	Culturally competent health education and outreach; health advocacy; data collection; engage participants and/or their families in health intervention protocols / addressing barriers to change	Community liaisons that conduct health outreach and education to discuss healthy behaviors, applying for assistance or connecting with a medical home
Hiring Standards				
High school equivalency	Yes	Yes	No	No
Additional language skills	Spanish preferred, but not required	No	Yes; Spanish	Yes; Spanish
Computer skills	Yes; basic knowledge required but training provided	No; trained	Preferred but not required; training provided	No; trained
Training				
On-the-job training	Yes includes specific health education and shadowing experienced CHWs	Yes; close supervision by team leader and specific health education	Yes; extensive initial training and monthly ongoing health education	Yes; continued training is offered on health education issues
Formal CHW course required	Yes; must complete MCC course	Yes; must complete MCC course	Yes; must complete an initial 8-hour health advocacy training before hiring	Yes; must complete a variety of trainings including leadership
CHW Population				
Employed (n, %)	10, 100%	6, 100%	3, 100%	0, 0%
Volunteer (n, %)				5, 100%
Paid	Yes	Yes	Yes	Unpaid, occasionally receive gift cards
Benefits package	Yes	Yes	Yes	No

c. Emerging Best Practices

A cross-case comparison of these eight CHW programs provides insight into how CHW programs are developing nationally and emerging best practices that may be applicable to programs in other states. Emerging best practices

were identified around three areas including: 1) Recruitment and Hiring 2) Training and Supervision and 3) Evaluation and Funding.

Recruitment and Hiring

While training is well discussed in the current CHW literature, effective strategies for recruitment and hiring are not well outlined. In practice, each of these eight organizations interviewed spends considerable time developing effective strategies for the recruitment of CHWs that would be a good fit for their individual programs. Most have minimal educational or work experience requirements and focus instead on finding individuals who have the interpersonal skills, life experience and cultural awareness to succeed in the role. They then expect to train the new CHWs on necessary skills such as professional communication, electronic documentation and health care knowledge. The Promotoras programs seek individuals from the community with the language skills and experience with the disease or health care system navigation to match the patients they serve. The care coordinator model programs seek individuals from the communities they serve or individuals with similar life experiences. A few of the care coordinator programs also look for some related experience to the setting they'll be working in such as an ambulatory clinic for CHWs who are part of an integrated care team. Several of the organizations recommended using targeted outreach through community events, "pre-hire workshops", or community health advocacy trainings where they would have the opportunity to observe potential CHWs in role-playing situations and the CHWs could learn more about the role.

Emerging Recruitment and Hiring Best Practices: Use targeted recruitment strategies such as role-plays, pre-hire workshops, or pre-hire trainings to identify CHWs with the appropriate soft skills for the role.

Training and Supervision

Since hiring is primarily done on the basis of "fit", standardized training and supervision processes are increasingly important. All of the programs require a standardized training program with topics such as motivational interviewing or leadership training. Two of the programs incorporate feedback and evaluation on role-play cases, some with trained patient-actors. All of the programs utilize either shadowing of existing CHWs in the community and / or shadowing of a new CHW by a supervisor as a training method. Maintaining an appropriate caseload with a low ratio of supervisors to CHWs, which may include supervisors that exclusively or almost exclusively supervise CHWs, also emerged as an important best practice in order to provide hands-on supervision and feedback. Many of the organizations reported this was a challenge with some reporting ratios as high as 1:100 in a Promotoras model while another recommended ratios as low as 1:6 for a care coordinator model. The importance of ongoing communication with supervisors through 1:1 meetings, weekly huddles with the CHW team and monthly team staff meetings to discuss cases is another method used to ensure CHWs have sufficient support. Many programs also use ongoing field observation by the supervisors. Ongoing training is also critical and some of the organizations bring in experts on different topics to do training on issues such as communication with medical professionals, navigating legal aspects of social services or understanding the health care home. Finally, in the states where a State certification program existed, the CHWs are required to complete this training, which may lead to a more standardized skill set among CHWs and a greater pool of applicants.

Emerging Training and Supervision Best Practices: Provide appropriate hands-on training after hiring to encourage development of appropriate skills for the role such as communication strategies or health advocacy and leadership. Maintain low supervisor to CHW ratios to provide sufficient ongoing support and supervision to help CHWs succeed in their roles.

Most of these organizations identified evaluation of their CHW programs as important to their future success and inextricably linked to ongoing sustainable funding beyond short-term grants. Many of the interviewees reported that it is increasingly important for CHW programs to demonstrate improved outcomes that will appeal to payers both public and private and health care systems. All programs were evaluating and reporting on various process-based measures and some outcomes-based measures. Only UPenn's IMPaCT reported it had completed a randomized controlled trial of a specific two-week CHW "intervention" and demonstrated measurable improvement in certain outcomes. These favorable results led the health care system to continue to invest in the model, allowing them to continue to hire additional CHWs and supervisors to grow the program and keep supervisor to CHW ratios low. While not all CHW programs will have the academic resources or funding to conduct such rigorous analyses, it does point to the need for organizations to develop and measure outcomes in order to demonstrate the value of the CHW role and how they can provide ROI to health care systems, states and private payers. At the same time, it can be difficult to measure outcomes for high-risk patients with multiple health and psychosocial needs so this will likely require a broader effort beyond individual programs.

Emerging Evaluation and Funding Best Practices: Identify value-add of CHW services through rigorous evaluation methods such as a randomized controlled trial to encourage new payers and employers.

VII. Looking Forward

Both Missouri and Kansas received funding from the CDC to develop state strategies to prevent chronic disease, which prompted statewide CHW efforts. In both states, clinical and community linkages to support chronic disease management through CHW efforts are central to the grant. In Missouri, a Statewide CHW Advisory Committee was created to identify CHW core competencies, minimum standards, and scope of practice. Other activities include providing tuition reimbursement for individuals enrolled in a CHW curriculum and conducting a needs assessment. Missouri is also pursuing CHW pilot programs related to high-utilizers of the emergency departments and hospitalizations. In Kansas, activities are in the early stages of development and include plans to map and organize current CHW networks across the state, perform a statewide CHW workforce assessment survey, and hold a statewide symposium in the spring of 2016.

Looking forward, the Collaborative is in a strong position to leverage its existing strengths to expand regional awareness of the value of the CHW, influence state policy processes, and recruit payers by demonstrating ROI from the regional CHW initiatives. The Collaborative identified several lessons learned including involving CHWs in planning efforts, creating and following work plans with action steps, and identifying ROI. With the development of three subcommittees, the Collaborative will continue its progress through action planning building from its lessons learned and leveraging the Collaborative's strengths.

Next steps to further the sustainability of a regional CHW workforce should include:

- Demonstrating ROI from regional CHW initiatives to attract employers and payers. This can include finalizing
 and making public evaluations of regional CHW initiatives, considering a time-limited randomized controlled
 trial, and exploring the development of core evaluation measures across programs to help standardize
 outcome measurement;
- Involving CHWs in the Missouri and Kansas CHW planning efforts;
- Maintaining and following work plans to advance the Collaborative's goals;
- Advancing an advocacy campaign that disseminates the Collaborative's and regional CHW programs' successes and promotes the CHW core competencies in educational, training and employment opportunities; and
- Developing technical assistance opportunities for new regional CHW programs leveraging the emerging best practices identified in the cross-case comparison.

VIII. Appendix 1: Core Roles^{liv}

The 1998 National Community Health Advisor Study provided the following detail on CHW core roles.

1. Cultural mediation between communities and health care and human services system

- a. Educating community members about how to use the health and social service systems. CHWs can help people get the services they need by teaching people how (where and when) to access services.
- b. Gathering information for medical providers. CHWs establish trust with clients that other health care professionals are often not able to accomplish. This trust leads to the discovery of information that when passed on to medical providers can increase client adherence to treatment regimens as well as more accurate diagnoses.
- c. Educating medical and social service providers about community needs. CHWs can educate providers and social service staff about cultural practices that can lead to practice modifications that will help to better serve the needs of the community.
- d. Translating literal and medical languages. In this role, bi-lingual CHWs serve as translators. CHWs also assist by translating medical terminology into lay language.

2. Informal counseling and social support

- a. Providing individual support and informal counseling. CHWs who come from the same community are able to understand pressures individuals living in poverty or with a specific chronic condition face. This understanding provides CHWs with the ability to provide informal support to individuals.
- b. Leading support groups. Leading support groups varies from providing group health education to leading support groups.

3. Providing culturally appropriate health education

- a. Teaching concepts of health promotion and disease prevention. CHWs teach health education and promote healthy lifestyles such as regular screenings and check-ups.
- b. Helping to manage chronic illness. CHWs trained in chronic conditions can provide health education to manage chronic conditions, such as teaching about healthy cooking to manage diabetes.

4. Advocating for individual and community needs

- a. Advocating for individuals.
- b. Advocating for community needs.

5. Assuring people get the services they need

- a. Case finding. Because the CHW has a close relationship to the community served, they can help to locate and contact hard-to-reach cases. In addition, CHWs may be able to recognize undiagnosed symptoms and refer individuals to see a medical professional for diagnosis.
- b. Making referrals. CHWs make referrals to health care and social services.
- c. Providing follow-up. CHWs can help make sure that individuals follow up on medical treatment including making and keeping appointments or following up on lab results.

6. Building individual and community capacity

a. Building individual capacity. CHWs help individuals learn to maintain a healthy lifestyle and manage conditions. They share health education about how to prevent or manage certain conditions. CHWs also can teach concrete skills such as how to prepare healthy meals.

b. Building community capacity. In this role, CHWs can help communities come together to assess their needs and advocate for policy changes.

7. Providing direct services.

- a. Providing clinical services. Providing direct clinical services appears to be the most minimal role of a CHW, but in rural areas CHWs have historically provided some services such as first aid.
- b. Meeting basic needs. In order for an individual to be responsible for his or her health, basic needs must be met including housing, employment, or adequate food intake. CHWs can refer individuals to the appropriate agencies in order to ensure these basic needs are met.

IX. Appendix 2: CHW Program Effectiveness

Author / Study	Outcome
Spencer MS, Rosland A-M, Kieffer EC, et al. Effectiveness of a community health worker intervention among African American and Latino adults with Type 2 diabetes: A randomized controlled trial. Am J of Public Health. 2011:e1-e8.	Participants who received CHW services had improved HbA1c at 6 months follow up. Intervention participants also had significantly greater improvements in self-reported diabetes understanding compared with the control group.
Otero-Sabogal R, Arretz D, Siebold S, et al. Physician-community health worker partnering to support diabetes self-management in primary care. Quality in Primary Care. 2010;18(4):363-372.	High-risk patients with type 2 diabetes had improved HbA1c and maintained glycaemic control). In addition, LDL, total cholesterol and self-management outcomes significantly improved. Ninety-seven percent of patients were satisfied with the CHWs' support. Overall, providers' comfort level in referring patients to CHWs was very high.
Babamoto KS, Sey KA, Camilleri AJ, Karlan VJ, Catalasan J, Morisky DE. <i>Improving diabetes care and health measures among Hispanics using community health workers: results from a randomized controlled trial.</i> Health Educ Behav. Feb 2009;36(1):113-126.	Participants who received the CHW intervention services achieved greater improvements than did the control group in: health status, emergency department utilization, dietary habits, physical activity, and medication adherence. The intervention group also had 2.9 times greater odds of decreasing body mass index.
Johnson, D., Saavedra, P., Sun E., Stageman A., et. al. <i>Community Health Workers and Medicaid Managed Care in New Mexico.</i> J Community Health. 2012 Jun;37(3):563-71.	Individuals working with a CHW significantly reduced their ED utilization from an average of 5.9 claims 6 months before the intervention to an average of 1.8 claims 6 months after the intervention. Patients engaged with CHWs also decreased their inpatient admissions at a statistically significant level.
Whitley EM, Everhart RM, Wright RA. Measuring return on investment of outreach by community health workers. J Health Care Poor Underserved. 2006;17(suppl 1):6–15.	For a CHW program targeting underserved men in Denver, it was found that care shifted from inpatient and urgent care to less costly primary care services, resulting in a return on investment of \$2.28 for every one \$1 spent on the CHW intervention, for a total savings of \$95,941 per year.
Fedder DO, Chang RJ, Curry S, Nichols G. The effectiveness of a community health worker outreach program on healthcare utilization of west Baltimore City Medicaid patients with diabetes, with or without hypertension. Ethn Dis. 2003:13:22–27.	For a CHW program targeting patients with diabetes, results indicated a reduction in emergency room visits and hospitalizations, which resulted in an estimated gross savings to the hospital per CHW of \$80,000–90,000 per year.
Felix, Holly C, Mays, Glen P., Stewart, M. Kathryn, Cottoms, Naomi, Olson, Mary. THE CARE SPAN: Medicaid Savings Resulted When Community Health Workers Matched Those With Needs To Home And Community Care. Health Aff (Millwood). 2011 Jul; 30(7): 1366– 1374.	Used specially trained CHWs: 1) to identify people living in the community who have unmet long-term care needs and who may be at risk for entering nursing homes, and 2) to connect them to Medicaid home and community-based services. The efforts targeted three disadvantaged counties The result was a 23.8 percent average reduction in annual Medicaid spending per participant over 2005–08. Net 3-year savings to the Arkansas Medicaid program equaled \$2.619 million.

X. Appendix 3: Detailed History of the KC Regional CHW Collaborative

2008

Promotoras de Salud. El Centro started a Promotoras de Salud program. At El Centro, Promotoras are trained
volunteers from within their communities that provide outreach, education and information on healthy
lifestyles for individuals who speak Spanish as their primary language. El Centro continually recruits and trains
Promotoras from within their communities.

2009

After-Hours Initiative. A bi-state coalition of Kansas City safety net clinics that met through the MARC's
Regional Health Care Initiative^{lv} (RHCI) developed and implemented the After-Hours Initiative with funding
from the HCF. The goal of the initiative is to improve the health status of vulnerable populations by increasing
access to primary and preventative health care and decreasing barriers to health care.

The main components included new evening and weekend hours in safety net clinics, a system to exchange critical patient medical information between providers, an educational awareness program that assists the community in navigating the safety net system of care, and a common advertising campaign to assist patients in finding low or reduced cost health care.

2010

- Care Coordination Initiative Research and Development. Throughout 2010, in order to strengthen the After-Hours initiative by providing care coordination support, KC CARE Clinic and MARC, along with input from West Central Missouri Area Health Education Center, researched various CHWs models and training programs. KC CARE Clinic and MARC began discussions with various safety net providers throughout the Kansas City region regarding use of CHWs during the evening and weekend hours.
- Fall 2010. Care Coordination Initiative Application Submitted. KC CARE Clinic and MARC submitted the Care
 Coordination Initiative application to the HCF, which included the following original partners KC CARE Clinic,
 Swope Health Services, Johnson County Health Partnership, Samuel U. Rodgers, Quindaro Family Health Care
 and MARC. Born out of the After-hours Initiative, through the Care Coordination Initiative, KC CARE Clinic
 employs CHWs who provide care coordination for uninsured and underinsured clients and help link them to
 primary care with Care Coordination Initiative partners.
- *March 3, 2010. Missouri Workforce Development Grant.* MCC received a three-year workforce development grant (Training for Tomorrow grant) from the State of Missouri Department of Economic Development.
- October 1, 2010. Care Coordination Initiative Approved. In 2010, HCF funds the Care Coordination Initiative.

2011

• June 2011. Care Coordination Initiative Implemented. Under the initial structure of the Care Coordination Initiative, the partnership included only safety net partners that would screen, triage, and risk stratify clients at the point of service including during weekend and evening hours and work collaboratively to help clients engage in ongoing primary care. A team of CHWs, employed by KC CARE Clinic, worked with patients with complex medical and social conditions to address barriers to care and help clients engage in ongoing primary care. For clients with greater needs, the CHW provided ongoing care coordination.

The implementation of the Care Coordination Initiative served as an impetus to bring together diverse partners to explore and expand the use of CHWs throughout the region, and to engage an education partner to develop a CHW education and training program.

- June 2011. Site Visit to Project Access Dallas. A group of inter-organizational partners, including
 representatives from KC CARE Clinic and MARC, working on the Care Coordination Initiative visited Project
 Access in Dallas to investigate an inter-organizational approach to using CHWs to increase access to safety net
 services, encourage hospital participation in the Care Coordination Initiative, and reduce unnecessary
 emergency department use and hospital admissions.
- June 30, 2011. First formal inter-organizational CHW meeting. On June 30, 2011, the KC CARE Clinic convened
 a small group of regional partners including MCC, TMC, Truman Corporate Academy, and MARC to discuss an
 agenda to advocate for recognition of CHWs throughout the Kansas City region, and for the development of
 a CHW curriculum. The Collaborative continued to meet monthly focusing efforts on CHW education,
 awareness, and sustainability.

2012

2012 Collaborative Attendees¹: KC CARE Clinic, TMC, Truman Corporate Academy, MCC, MARC, El Centro, University of Kansas Medical Center (KUMC), University of Missouri – Kansas City (UMKC), Health Care Collaborative of Rural Missouri (HCC), Kansas City University of Medicine and Biosciences (KCUMB), Communities Creating Opportunity (CCO), and West Central Missouri AHEC.

- 2012. Evolution of Care Coordination Initiative. In 2012, St. Luke's Hospital joined the Care Coordination Initiative which, allowed partners to engage clients along a continuum of access points, including the emergency department (ED) and inpatient unit. KC CARE Clinic placed CHWs at St. Luke's Hospital as well as on-site at safety net clinics.
- January 12 13, 2012. MCC requested and received approval from the State of Missouri to use a portion of
 the Training for Tomorrow grant funds for the creation of an MCC CHW course. With the approval to use
 Training for Tomorrow funds to develop a CHW course, the Collaborative served in advisory capacity on the
 development of the MCC curriculum, including performing research on national CHW education programs
 such as those in Ohio, Texas, and Minnesota.
- April 2012. MCC, with the Collaborative serving in an advisory capacity, begins to develop a CHW pilot course based on the Minnesota CHW curriculum.
- June 2012. Healthy Homes. The course helps CHWs understand the connection between health and housing and how to take a holistic approach to identify and resolve problems that threaten the health and well-being of clients. Between June 2012 and February 2015, approximately 63 CHWs from a variety of organizations using CHWs including KC CARE, El Centro, Truman Medical Centers, and New Bethel Church, have attended a course offered through Healthy Homes.
- July 1, 2012. CMS Innovation Award. TMC received a three-year CMS Innovation award through which it implements a program providing targeted care management intervention services to the most frequent utilizers of its emergency department and inpatient services. Through the award, TMC utilizes CHWs as part

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¹ Collaborative attendees determined through a review of 2012 meeting minutes.

of a care coordination team to help clients connect with members of their health care team and act as advocates for the patient in any number of clinic or social service settings as needed. Additionally, CHWs assist clients with any number of social issues including finding housing, furniture, food sources or helping with applications for emergency assistance or disability in order to better manage their illness thereby reducing unnecessary emergency department use and lessen the frequency of inpatient stays.

- September 4 12, 2012. First CHW Class. MCC hosted its first pilot class to educate and train CHWs. Twenty-two students completed the pilot.
- December 2012. Kansas City Regional CHW Collaborative. MARC's RHCI began formally convening and providing administrative support to the Collaborative.

2013

2013 Collaborative Attendees²: KC CARE Clinic, MARC, TMC, MCC, UMKC, Western MO AHEC, KUMC, Eitas, El Centro, HCC, Children's Mercy, Donnelly College, and Riverview Health Services.

- March 7, 2013. Regional CHW Subcommittees. Throughout 2012, the Collaborative continued to focus on education, advocacy and sustainability including workforce development and funding opportunities for CHWs. During the March 7th meeting, the Collaborative agreed that to further its goals, the Collaborative must form three subcommittees with specific agendas. The subcommittees were the Membership/Education, Payment/Legislation, and Advocacy subcommittees.
- April 2013. First Community Forum. The Collaborative holds its first community forum at the MARC offices to
 educate the regional community on the value of CHWs and to attract potential employers. Feedback from
 forum attendees is positive overall.
- September 9 October 30, 2013. Second CHW Class. MCC hosted its second pilot class and trained 23 CHWs and potential trainers of CHWs.

2014

2014 Collaborative Attendees³: KC CARE Clinic, TMC, Eitas, El Centro, MCC, Children's Mercy, MARC, Donnelly College, St. Luke's Hospital, the Kansas City Quality Improvement Consortium (KCQIC), Mid-America Addition Technology Center, Missouri Department of Health and Senior Services (DHSS), KCPT, Asthma Ready Communities, University of Missouri Health Commission, St. Joseph Medical Center, Springfield Health Department, Primaris, Cerner, Kansas Department of Health and Environment (KDHE), BE Education Group and Juntos.

- January 2014. MCC Workforce Development Grant Ends. The MCC Workforce Development grant ends and
 the Collaborative continued to serve in an advisory capacity on education issues, but mainly shifted its focus
 to CHW sustainability and awareness.
- February 2014. Translation of Curriculum. Donnelly College, with the assistance of MARC and grant funding from the REACH Healthcare Foundation, translated the MCC curriculum into Spanish.

² Collaborative attendees determined through a review of 2013 meeting minutes.

³ Collaborative attendees determined through a review of 2014 meeting minutes.

- March 2014. Second Community Forum. The second CHW community forum is held at the Chamber of
 Commerce, focusing on informing potential employers of the benefits of CHWs. The keynote speaker from
 the Minnesota CHW Alliance spoke about the value of the CHW in the changing health care landscape and
 met with the Collaborative members to address questions about Minnesota's process to obtain statewide
 adoption of CHWs and Medicaid reimbursement for CHW services.
- June 6, 2014. Vision and Mission Statements. Collaborative finalized its vision and mission statements.
- August 2014. Care Coordination Initiative Grant Renewal Request. In August 2014, the partners submitted a
 grant renewal request. By this time, the partnership had grown to include not only health care providers, but
 also social service and community-based organizations. CHWs have relationships and receive client referrals
 from all the partners.

The request identified the following partners: St. Luke's Hospital, Kansas City Care Clinic, Swope Health Services, Johnson County Health Partnership, Sojourner Free Health Clinic, University of Kansas Hospital, Silver City Health Center, Mary Kelly Center, RoseBrooks, SAFEHOME, REDISCOVER, Operation Breakthrough, Neighbor-to-Neighbor, UMKC Department of Clinical Psychology, Artists Helping the Homeless, UMKC School of Nursing, and Legal Aid of Western Missouri.

- September 2014. HRSA Grant. MCC receives a three-year HRSA grant to identify, recruit and enroll up to 400 individuals per year in MCC CHW non-credit and for-credit programs.
- December 8, 2014. Statewide Forum. Missouri DHSS held a statewide forum to bring partners together and gather input regarding the development of a statewide CHW advisory committee.
- December 2014. Transition of RHCI. In December 2014, MARC transitions the RHCI into a broader community development program. However, the Collaborative continues to meet at the MARC offices with administrative support from MARC.

2015

2015 Collaborative Attendees⁴: TMC, KUMC, El Centro, MCC, KC CARE Clinic, Children's Mercy, MARC, Donnelly College, St. Luke's Hospital, KCQIC, DHSS, KDHE, Johnson County Community College, Swope Health Services, NBC Community Development Corporation, Comprehensive Mental Health Services, BE Education Group and MetroCare.

- February 2 September 9, 2015. Cabot Clinic CHWs. Ten students from the Cabot Clinic completed the MCC CHW course.
- March 9 September 3, 2015. KC CARE CHWs. Fourteen KC CARE employees completed the MCC CHW course.
- *March 26, 2015. CHW Forum.* The Collaborative began hosting a monthly CHW forum through which CHWs can share resources, experiences and identify workforce development opportunities.
- *March 28, 2014. Train-the-Trainer.* MCC hosted a train-the-trainer course in partnership with NBC Community Development Corporation. There were 20 attendees.

⁴ 2015 Collaborative attendees determined through a review of a MARC membership tracking spreadsheet.

- April 6 May 18. 2015. MCC Community Class. MCC hosted a six-week class for individuals recruited from within the community. Six students completed the course and MCC piloted its mental health module.
- May 4, 2015. Statewide CHW Advisory Committee. The first Statewide CHW Advisory Committee meeting is held on May 4, 2015. The Statewide CHW Advisory Committee is tasked with recommending to the DHSS a minimum set of CHW core competencies, minimum standards, and a scope of practice.
- June, 2015. Hypertension Module. MCC delivered its newly developed hypertension add-on module to 36 individuals.
- June 30, 2015. CMS Innovation Award Ends. The TMC Innovation grant ends. TMC merges the super-utilizer
 program implemented under the Innovation grant with other initiatives targeted toward improving health
 outcomes of individuals with chronic disease. TMC continues to employ CHWs as part of its combined
 initiatives.
 - July 2015. Sustainability, Advocacy, and Education. With the transition of the RHCI, the Collaborative refocuses the subcommittees, creating three subgroups of Sustainability, Education, and Advocacy to focus on obtaining statewide recognition of a standard CHW definition, core competencies, scope of practice and curriculum; increasing regional awareness of CHWs; creating additional CHW workforce opportunities; and developing a strategy for obtaining Medicaid reimbursement of CHW services.
- August 6, 2015. Train-the-Trainer. MCC offered a train-the-trainers class to eight members of the New Bethel teaching cadre.
- August 11 November 7, 2015. Current MCC Classes. MCC is training two new community classes for 22 individuals from MCC Health Science Institute and New Bethel.
- October 2015. Revised MCC Curriculum. MCC shares its new curriculum that incorporates student feedback to better align classroom instruction with the textbook, and makes use of facilitator aids.
- October 22, 2015. Core Competencies. The Education and Sustainability subcommittees agree on and recommend a minimum set of core competencies to DHSS to help inform the statewide process.

XI. Endotes

- ¹ Prior to December 2015, the name was the Regional CHW Advisory Committee.
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- viii Occupation Overview. EMSI Q3 2015 Data Set, Mid-America Regional Council. December 2015.
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- xviii Ibid.
- xix Ibid.
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