

Building a Community Health Worker Program: The Key to Better Care, Better Outcomes, & Lower Costs

by

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In April 2017, the American Hospital Association (AHA) formed a strategic alliance with the National Urban League (NUL) to advance health equity and diversity in health care leadership in communities across the United States. The organizations collaborate to promote policy solutions to persistent challenges impacting the health of vulnerable communities, match NUL leaders with opportunities on governing boards at hospitals and health systems, and develop resources and share best practice on community health worker programs. As a part of the community health worker initiative, the AHA and the NUL hosted the Community Health Worker Consortium in Chicago, in November of 2017. Representatives from hospital and health system organizations, federal and state agencies, academic institutions and community-based organizations attended the consortium. The session focused on three main topics: defining community health workers, credentialing of community health workers, and funding sources and strategies for sustainability. Following the consortium, the AHA and the NUL, along with CommunityHealth Works, formed a strategic advisory group that worked together to apply findings from the consortium to the *Building A Community Health Worker Program: The Key to Better Care, Better Outcomes, & Lower Costs* toolkit. This resource is intended to help administrative and clinical leaders implement successful and

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sustainable community health worker programs.

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EXECUTIVE SUMMARY

BACKGROUND:

Imagine a program that allows hospitals and health systems to address the needs of high-risk or at-risk populations (multiple chronic conditions, premature birth), social determinants of health, readmissions, emergency department (ED) over usage and provide direct services.

This is the true potential of a Community Health Worker (CHW) Program.

A growing body of evidence-based practices demonstrates that implementing a CHW program is a solution that delivers meaningful and measurable results to hospital and health systems. Research has shown that CHW programs have resulted in an average savings of \$2,245 per patient served, and hospitals and health systems can save \$2.28 for every \$1.00 it invests in a CHW program – all while improving the health outcomes of patients and communities.

Just as you do, we recognize the need for novel approaches to expand patient access to primary care services, decrease unnecessary ED visits and patient readmissions, prevent disease, increase patient adherence, improve health and wellness and meet the needs of an aging population.

This CHW toolkit will cover what CHW programs are and what is suggested to implement a program on your own as well as the benefits to your organization, your patients and your community.

Toolkit highlights include:

- Best practice evidence
- Case studies, resources and references
- Definitions of key terms
- Funding considerations
- Talking points for strategic stakeholders
- Program implementation considerations
- Sample job tools and templates used by CHWs
- Suggested outcome measures

Using the information within the toolkit, you will be able to design and implement a CHW program to serve the patients within your community and achieve better patient experience, improve health and increase affordability.

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INTRODUCTION AND BACKGROUND

AS THE DEMAND FOR CARE INCREASES, SO WILL THE ROLE OF CHWs

The health care system in the United States is undergoing a monumental transformation. Escalating costs have limited the public's ability to access affordable, high-quality health and medical care. With the implementation of the Patient Protection and Affordable Care Act (U.S. House of Representatives, 2010), commonly called the Affordable Care Act (ACA), health care insurance coverage is expected to grow exponentially in the years to come.

Obviously, there is a need for novel approaches to providing access to primary care — approaches that will help hospitals and health systems to decrease readmissions and emergency department visits; increase patient adherence; improve health and wellness; reduce risk; prevent disease; and meet population needs identified by ACA-mandated Community Health Needs Assessments (CHNA).

One such approach is the implementation of a CHW Program. A growing body of evidence points to the positive health impacts by CHWs who address the needs of individuals facing barriers to health care access due to cultural practices, race, ethnicity, language, literacy, geography, income, ability, or other related factors. In coordination with mainstream health care providers, CHWs offer health, wellness, and disease prevention and management services in order to decrease health disparities and achieve improved health outcomes, better patient experience, and increased affordability.

This toolkit provides essential information and strategies to leaders in mainstream health care settings so that they can more easily design and implement a successful CHW program in the communities they serve.

WHAT IS A COMMUNITY HEALTH WORKER?

The concept of the CHW varies from country to country. An increasing number of nations around the world are moving toward the use of multipurpose CHWs equipped with enough knowledge to deal with a variety of primary symptoms. Some other nations still follow the more traditional approach, in which a CHW focuses on one condition or disease. In either case, these paraprofessionals help cover the basic health care needs of populations and refer when necessary.

The United States lags on both fronts — we have been comparatively slow to adopt the use of CHWs at all. Many other countries have found that when CHWs are equipped with knowledge and skills to address a variety of concerns they have been more "successful" than a CHW that focuses on one condition or disease. As the rest of the world is realizing the potential of the CHW, we can learn from their experience and adopt that model in the U.S.

A CHW uses a multipurpose approach to the provision of health care services. Historically, the training of CHWs has generally followed the traditional approach mentioned on the previous page, in which the CHW focuses on one condition such as diabetes or heart disease or HIV/AIDS. As a result, several CHWs may visit the same patient and/or household, each attending to the services and tasks related to his or her assigned condition.

While the individual CHW's workload has fewer tasks and is seemingly more manageable, the care provided can be fragmented and uncoordinated – frustrating to both CHW and client. CHWs can assist patients and/or households with multiple conditions. For example, a patient who suffers from asthma, hypertension, and diabetes has one CHW who is able to provide a wider range of services and tasks, which increases efficiency (Jaskiewicz & Tulenko, 2012). The care is better coordinated and less fragmented, and communication is streamlined. (See Chapter 3)

The ACA defines a community health worker as "an individual who promotes health or nutrition within the community in which the individual resides." Per the Act, a CHW promotes health in the following ways:

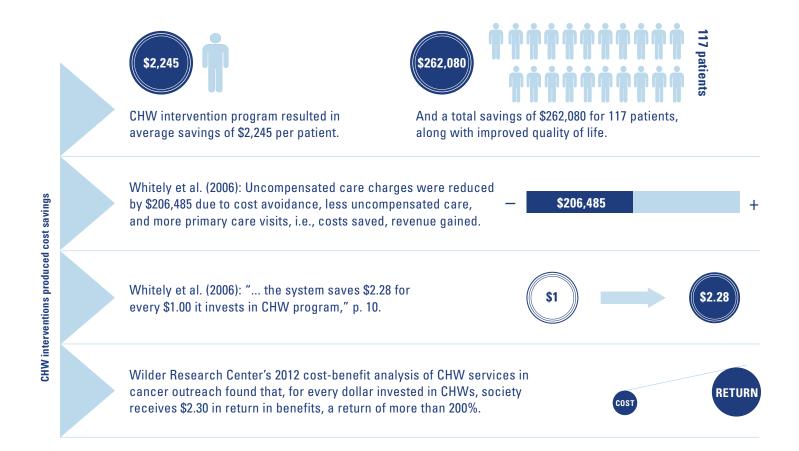
- By serving as a liaison between communities and health care agencies
- By providing guidance and social assistance to community residents
- By enhancing community residents' ability to communicate effectively with health care providers
- By providing culturally and linguistically appropriate health or nutrition education
- By advocating for individual and community health
- By providing referral and follow-up services or otherwise coordinating care
- By proactively identifying and enrolling eligible individuals in federal, state, local, private, or nonprofit health and human services programs

WHERE WILL THE FUNDING COME FROM?

A major challenge to implementing CHW programs on a large scale has been a lack of funding. In the United States, CHW programs have historically developed to fill disease-specific or population-specific niches funded by time-limited grant dollars. The current melding of health-related challenges gives the health care community the incentive to embrace the CHW model of outreach, an extension of primary care and maintenance care for the chronically ill. Furthermore, this incentive may lead to the implementation of new health care delivery models that have been adapted on a widespread basis.

Funding concerns will diminish as hospitals and health systems look for mechanisms to meet the ACA government mandates. In some instances, health care providers have realized third-party reimbursement; for example, specific CHW services are covered by Medicaid in Alaska and Minnesota. Some have received funding through the Center for

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Medicare and Medicaid Services (CMS) Innovation Awards, while for others CHWs costs have been "bundled" into health care charges. However, these circumstances are not the norm. As health care reform evolves, new methods for reimbursement will emerge. Hospitals and health systems that are unfamiliar with CHWs are in need of a blueprint to show them how to take advantage of this low-cost, high-yield, multipurpose adjunct to the health care team. (See Chapter 3)

Recent analysis of cost data from 14 studies showed that, in a majority of the studies, CHW interventions produced cost savings. Cost avoidance from reduced health care utilization — a 12 percent decrease in urgent care visits — was greater than the cost of the intervention, six months to two years post-program relative to controls with limited or no intervention (Institute for Clinical and Economic Review [ICER], 2013a; Whitely, Everhart, & Wright, 2006).

While this evidence is promising, Viswanathan et al. (2009) describes mixed evidence on CHW effectiveness with regard to any number of outcomes (cost, behavior change, health outcomes). However, the mixed evidence is a result of varying research methods, inconsistent defining of terms and variables, and insufficient data. Inconsistent cost-benefit data led to uneven support for the CHW role (Whitely et al., 2006). Nevertheless, the growing body of research and practice-based evidence on CHW cost-effectiveness supports program implementation due to the positive impacts CHWs have in reducing health disparities, expanding access to coverage and care, improving care quality, increasing health care cultural competence, and controlling costs.

CHW PROGRAMS HAVE BEEN USED SINCE THE EARLY 1960s

The CHW role is not new in the United States or around the world (Andrews, Felton, Wewers, & Heath, 2004; Heath, 1967; Swider, 2002). In the U.S., the use of lay health workers in the community to expand access to health care for

the poor and ethnic minorities began in the early 1960s (Heath, 1967). These workers were called by a variety of names, served different populations, and provided a range of health and social services.

Today, CHWs can be found in a wide spectrum of settings, such as community organizations, health departments, churches, schools, clinics, and hospitals. Globally, there is evidence of the successful use of CHWs in developed and developing countries for a variety of chronic conditions, including asthma, diabetes, HIV/AIDS, and hypertension (Cherrington et al., 2008b; Patel & Nowalk, 2010; Postma, Karr, & Kieckhefer, 2009; Rich et al., 2012). Similarly, in the U.S., reports indicate that CHWs were successful in traditional roles for a variety of chronic conditions, such as asthma, congestive heart failure, and diabetes, as well as mother-child health and sexually transmitted diseases (Andrews et al., 2004).

THE CHW WORKFORCE IS RAPIDLY EXPANDING IN THE UNITED STATES

In 2003, the Institute of Medicine (IOM) recommended that CHWs be included on health care teams to improve the health of underserved populations (IOM, 2003). More recently, the ACA has recognized CHWs as important members of the health care workforce, who can help to build capacity in primary care (Rosenthal et al., 2010). The estimated number of CHWs in the U.S. rose from 10,000 (Rosenthal et al., 1998) to 120,000 (Rosenthal et al., 2010) because CHWs improve health care access and outcomes, strengthen health care teams, and enhance quality of life for people in poor, underserved, and diverse communities. Community members desire assistance in identifying opportunities for behavior change to improve their health and well-being — a service CHWs can provide.

The continued expansion of the CHW workforce will require that health care stakeholders across the U.S. — professional care providers and insurers — be motivated to find alternative, innovative care delivery models that use CHWs to increase access to health care. Likewise, stakeholders need to recognize that new financial reimbursement models exist, are becoming more available, and can include reimbursement for CHW services.

As the CHW workforce expands, one natural outcome that will benefit everyone will be increased diversity in the health care workforce. CHWs usually represent their communities and cultures; accordingly, as more CHWs enter the workforce, they will bring with them their unique talents, insights, and experiences. Diversity will develop organically and directly represent the patient population served.

IMPLEMENTING A SUCCESSFUL CHW PROGRAM REQUIRES IDENTIFYING THE BARRIERS AND THE FACILITATORS

Health system leaders, including chief nursing officers (CNOs) and chief medical officers (CMOs) in acute care settings, are often unaware of or uninformed about the potential value of including CHWs in care delivery models. Unfamiliarity has created barriers to implementing CHW programs and has led to skepticism about CHWs, their role, and competencies. They do not know how to integrate CHWs into the care delivery system, or how to accomplish smooth and unfragmented transitions of care. Also, health system leaders are usually unfamiliar with CHW selection criteria, training, scope of practice, roles, responsibilities, workload, reimbursement, and important outcomes to measure.

Other barriers to implementing CHW programs include insufficient financial reimbursement for the services provided;

varying relationships with primary care providers, who are the main source of patient referrals; and a community that is not supportive of or interested in exploring how CHWs can benefit community members. In addition, health system leaders are unaccustomed to exploring public health strategies because acute care and public health often function in silos.

Facilitation of program success often rests with meaningful engagement of community and other key stakeholders from governance, medical staff leadership, executive leadership, and community-based organization leaders. This engagement is critical from the beginning phases of CHW program planning to ensure that CHW services are appropriate and sensitive to community needs and values.

Whenever possible, the integration of CHW services into existing community programs and health care resources

will leverage the current program's success — for example, a program sponsored by the local community's agency on aging in partnership with a hospital or a health care system.

Scheduled and periodic monitoring of CHW services with quarterly feedback from stakeholders will enable CHW program leaders to quickly address problems and revise plans on an ongoing basis. This toolkit provides a blueprint to overcoming barriers to CHW program implementation; in particular, Chapter 4 provides a detailed list of implementation considerations.

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IF DONE CORRECTLY, A CHW PROGRAM CAN BENEFIT EVERYONE

One major goal of implementing CHW programs is to reduce health disparities. Leading health authorities such as the Institute of Medicine (IOM), the CDC, the Health Resources and Services Administration (HRSA), and the APHA point to the impact of CHW strategies on decreasing health inequities. With greater emphasis on collecting and reporting outcomes for diverse groups, health providers will need to achieve optimal results for all populations.

Another goal of implementing a CHW program is to achieve improved health outcomes, better patient experience, and increased affordability.

Population health

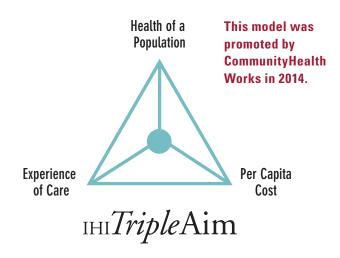
- Risk status
- Mortality

Experience of care

- Quality
- Satisfaction

Per capita costs

- Decreased utilization of ED for primary care services
- Alternative financing, payment, reimbursement models



Source: IHI Innovation Series white paper.

Cambridge, Massachusetts: Institute for Healthcare Improvement; 2012.

THE CHW WORKFORCE IS RAPIDLY EXPANDING IN THE UNITED STATES



The CHW is part of a multidisciplinary care team that includes a variety of members (as listed above). The care team partners with the patient to develop an implementation plan to address the issues and needs identified with and by the patient. In this model, the care coordination intervention is delivered by the CHW — who is, in essence, the vector or tool to implement the multidisciplinary team's care plan. CHWs do not function independently, but rather under the direction of the team, and they address the goals and wishes of the patient.

These CHWs are grounded and knowledgeable about the environment in which the patient functions. The patient's environment (home, social structure, relationships, financial capabilities) impacts which interventions will work and also dictates how the CHW can be most effective in helping the patient to achieve his or her goals. Because CHWs are part of the team that develops the interventions, they can ground the care team in what is realistic and will or will not work — providing the essential "reality check."

1: INTRODUCTION AND BACKGROUND



DEFINING THE CHW ROLE

CHWs SERVE AS CULTURAL LIAISONS BETWEEN PATIENTS AND HEALTH CARE TEAMS

The term CHW refers to many different job titles and roles — lay health worker, patient navigator, peer advisor, community health advocate, promotora de salud, and many others (ICER, 2013b). Duties of the work vary and may include outreach, health education, program enrollment, care coordination, system navigation, client advocacy, and other enabling services.

While different titles and duties are often connected to CHWs, consensus appears around these main functions:

- Health educator

- Navigator

- Outreach

- Case manager

- Program facilitator

- Advocate

- Team member

- Information counseling

- Social support

(Andrews et al., 2004; Cherrington et al., 2008a; O'Brien, Squires, Bixby & Larson, 2009; Rosenthal et al., 2010)

CHWs have an appreciation and respect for the ethnic, linguistic, cultural, or experiential connections of the population they serve. CHWs are trusted and knowledgeable members of their communities who play a critical bridge role serving as cultural mediators and liaisons. As full members of health care teams, CHWs increase the team's cultural competence by helping the team better understand cultural norms and the beliefs of members of their communities. This includes everything from providing basic cultural understanding to sharing knowledge of the use of traditional herbs and medicines — and even consulting with shamans and religious leaders.

CHWs work with vulnerable patients of all ages, typically from underserved, low-income communities in urban, suburban, and rural areas. They work across the continuum — from preventive services and helping people appropriately access care (e.g., outreach and education to increase immunization rates and screenings) to chronic disease management and palliative care (e.g., care coordination, helping patients navigate the complicated health system, coaching on chronic disease self-management).

Working with both individuals and groups, CHWs meet patients and community members "where they are" and address the whole person and family. This often involves making referrals to address unmet social and/or emotional needs, as well as social determinants of health, such as housing, early childhood development, and neighborhood conditions.

As varied as the role of CHWs has been, according to the CDC, there are several official definitions of the role. However, the APHA's definition is most widely used and accepted amongst hospitals and health systems.



HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)

CHW National Workforce Study. Community health workers are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status, and life experiences with the community members they serve (Community Health Worker National Workforce Study, 2007).



CHWs are community-based workers who help individuals and groups in their own communities to access health and social services, and who educate community members about various health issues. WHO has elaborated the definition of CHWs, stating that "they should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers" (Evidence and Information for Policy, Department of Human Resources for Health, 2007).



A community health worker (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 CHW 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 CHW 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 (American Public Health Association).

U.S. BUREAU OF LABOR STATISTICS

BLS Job Code: 21-1094 Community Health Workers. Assist individuals and communities to adopt healthy behaviors. Conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health. May provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening. May collect data to help identify community health needs. Excludes "Health Educators" (21-1091) (U.S. Bureau of Labor Statistics, 2010).

AFFORDABLE CARE ACT (ACA)

CHWs are individuals who promote health or nutrition within the community in which the individual resides:
a) by serving as a liaison between communities and health care agencies; b) by providing guidance and social assistance to community residents; c) by enhancing community residents' ability to effectively communicate with health care providers; d) by providing culturally and linguistically appropriate health and nutrition education; e) by advocating for individual and community health; f) by providing referral and follow-up services or otherwise coordinating care; and g) by proactively identifying and enrolling eligible individuals in Federal, State, and local private or nonprofit health and human services programs (U.S. House of Representatives, 2010).

TEXAS DEPARTMENT OF STATE HEALTH SERVICES

A person who, with or without compensation, is a liaison and provides cultural mediation between health care and social services, and the community. A promotor(a) or community health worker is a trusted member of the community who has a close understanding of the ethnicity, language, socio-economic status, and life experiences of the community served. A promotor(a) or community health worker assists people to gain access to needed services and builds individual, community, and system capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, patient navigation and follow-up, community health education and information, informal counseling, social support, advocacy, and participation in clinical research (Texas Department of State Health Services, 2012).







AFFORDABLE CARE ACT



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HOW DO CHWs COMPARE TO OTHER FRONTLINE ROLES?

CHWs provide care and services in a variety of settings: client homes, provider offices, hospitals, social services agencies, schools, and in the community at large. Despite the dramatic growth of CHWs, there is still an overall lack of familiarity with their role. What training do they have? Where do they practice? What exactly does a CHW do? The table below was designed to help answer these questions and more by showing how the CHW's role is similar to — or different from — other, more familiar frontline roles.

	Work Settings	Formal Training	Duties	Median Percentile Hourly Wage*
COMMUNITY HEALTH WORKER*	Community clinics, health departments, hospitals and integrated health systems, schools, social service agencies and other non-profits, housing providers	Varies from on-the-job to community college certificate programs. HS diploma or GED required by many employers. No national standardized curriculum Certification required for Medicaid reimbursement in select states	Supervision varies depending on worksite Culturally appropriate preventive services, patient education, outreach and info/referral Basic health screenings such as vital signs* Administrative duties, i.e., social services paperwork, insurance forms *CHW is not a clinician and does not typically provide "hands on" care	\$18.45 per hour
CERTIFIED NURSE ASSISTANT	Hospitals, nursing homes, and residential care facilities	Community colleges, vocational schools, technical schools, or universities. One-year program typically leading to a certificate or diploma. Certification required for Medicare/Medicaid reimbursable services	Supervised by licensed nursing staff Assistance with activities of daily living (ADLs) Maintain patient health records Monitors changes in patient conditions	\$13.23 per hour
HOME HEALTH AIDE	Homes and residential care facilities	No formal education requirements	Supervised by case manager Assists with activities of daily living (toileting, feeding, bathing, dressing, transfers) Light housekeeping Simple rehabilitative and lifestyle counseling	\$11.16 per hour
MEDICAL ASSISTANT	Ambulatory settings such as provider offices, urgent or outpatient clinics	High school diploma or GED Community colleges, vocational schools, technical schools, or universities. One-year program typically leading to a certificate or diploma.	Supervised by MD Client history, vital signs, phlebotomy, injections Administrative duties, schedule appointment, hospital admissions, prescription refills	\$15.61 per hour

^{*}U.S. Bureau of Labor Statistics Occupational Outlook Handbook, 2017

DEFINING AN APPROPRIATE SCOPE OF PRACTICE

Because CHWs provide a variety of services in a variety of settings, their scope of practice needs to reflect required competencies across these sites. Defining an appropriate scope of practice based on education, duties, accountabilities, and responsibilities is important in order to provide role clarity, facilitate health care team member communication, and mitigate risk.

Check to see if your state has developed a CHW definition and scope of practice. For more information, visit the APHA CHW Section website for a CHW organization in your state or contact your state health department. http://www.apha.org/membergroups/sections/aphasections/chw/Resources/

With the input of a broad-based group of CHWs and stakeholder organizations, the Minnesota Community Health Worker Alliance developed the following statewide CHW scope of practice.

Used with permission of Minnesota CHW Alliance.

ROLE 1: BRIDGE THE GAP BETWEEN COMMUNITIES AND THE HEALTH AND SOCIAL SERVICE SYSTEMS

- Enhance care quality by aiding communication between provider and patient to clarify cultural practices
- Educate community members about how to use the health care and social service systems
- Educate the health and social service systems about community needs and perspectives
- Establish better communication processes



ROLE 2: NAVIGATE THE HEALTH AND HUMAN SERVICES SYSTEM

- Increase access to primary care through culturally competent outreach and enrollment strategies
- Make referrals and coordinate services
- Teach people the knowledge and skills needed to obtain care
- Facilitate continuity of care by providing follow-up
- Enroll clients into programs such as health insurance and public assistance
- Link clients to and inform them of available community resources



ROLE 3: ADVOCATE FOR INDIVIDUAL AND COMMUNITY NEEDS

- Articulate and advocate needs of community and individuals to others
- Be a spokesperson for clients when they are unable to speak for themselves
- Involve participants in self and community advocacy
- Map communities to help locate and support needed services



ROLE 4: PROVIDE DIRECT SERVICES

- Promote wellness by providing culturally appropriate health information to clients and providers
- Educate clients on disease prevention
- Assist clients in self-management of chronic illnesses and medication adherence
- Provide individual social and health care support
- Organize and/or facilitate support groups
- Refer and link to preventive services through health screenings and health care information
- Conduct health-related screenings



ROLE 5: BUILD INDIVIDUAL AND COMMUNITY CAPACITY

- Build individual capacity to achieve wellness
- Build community capacity by addressing social determinants of health
- Identify individual and community needs
- Mentor other CHWs capacity building
- Seek professional development (continuing education)



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A TYPICAL CHW IS ANYTHING BUT TYPICAL — AND NEITHER IS THEIR DAY

Meet Aung Win. He was born in Burma to a Thai family and left home to escape the violence and civil war that imperiled his community. After spending several years in a Thai refugee camp, he joined his older brother in Minnesota.

Win vividly remembers his arrival date, Feb. 26, 1999, and the many adjustments he faced, such as snowy winters, high school, and learning English. Using his multilingual skills — including Shan, Karen, Burmese, Thai, and English — Win spent several years as a medical interpreter in the Twin Cities. Then, in May 2012, a new door opened.

HealthEast was recruiting CHWs to serve as care guides for its health care home model. With his remarkable background and skillset, Win was a perfect candidate.

One of 21 care guides currently employed by HealthEast, Win serves on the health care home team along with physicians, consulting nurses, and medical social workers to provide patient-centered care to a growing number of patients with chronic illnesses. He brings his language skills, cultural competence, life experience, and CHW training to serve many Karen refugees. In addition to on-the-job training, he completed the CHW certificate program at Minneapolis Community and Technical College.

When he leaves the clinic at 4:30 p.m., Win knows that he and his health care home team are making a difference by helping patients with chronic illness succeed in living healthier lives.

Win starts his day at 7 a.m., checking his voicemail for messages from his patients or their caregivers. His growing patient panel, now at 120, ranges in age from 1 to 86 years, all with chronic illnesses and nearly all Karen. Many of his patients also experience depression and other mental health problems related to post-traumatic stress disorder compounded by the situational stresses often associated with resettlement. He understands that Karen cultural beliefs about mental illness mean that many refugees, especially men, are reluctant to seek help for depression. Among his biggest challenges is finding culturally and linguistically appropriate mental health services for his Karen patients.

Every day, Win meets with several patients who are new enrollees to the health care home program following their initial visit with their physician. He helps them set meaningful and achievable individual health goals in consultation with their doctor. He will then follow up by phone to monitor progress, field or refer questions, and link patients to needed resources. Win contacts the consulting nurses and medical social workers when issues that require their expertise arise.

Helping patients understand how to manage their chronic illness and teaching them how to use the U.S. health care system are ongoing, important care guide responsibilities. For example, patients may not understand the need or the process to refill their prescriptions, or they may use the emergency room or hospital instead of primary care. Win also follows up with patients after they have visited with specialists.

Every other week, Win participates in a care guide meeting during which he and his colleagues share success stories, discuss challenges, and identify improvements. They also discuss how to work most effectively on their teams. Monthly meetings bring together all team members for recognition, shared learning, occasional case discussions, and continuous improvement.

Win's impact is meaningful and measurable. Working with his diabetic patient on the importance of a healthy diet, regular exercise, and medication compliance translates to measurable improvements leading to better health, lower costs, and improved quality of life. Connecting a depressed parent with culturally appropriate, affordable mental health services can impact the well-being of the entire family. This description of the day in the life of a CHW is also used with permission of the Minnesota CHW Alliance.

3

IMPLEMENTING A CHW PROGRAM

WE'VE TAKEN THE BEST PRACTICES AND THE VERY BEST THINKING TO HELP YOU CREATE THE BEST-POSSIBLE CHW PROGRAM

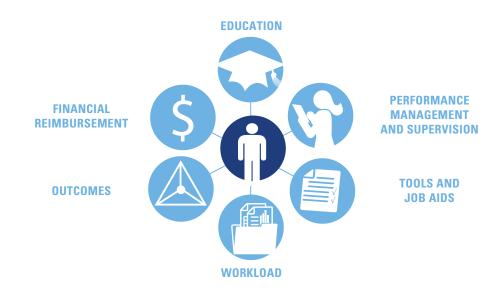
It can be more than a little overwhelming. Where do you begin? How do you recruit? What type of training is required? How do you measure success?

We understand, and we're here to help.

We've brought together evidence-based best practices and program resources, all designed to help you accelerate CHW implementation as easily as possible. Everything you need is literally at your fingertips. (See page 16 for checklist)

CHW BEST PRACTICES

While preparing this toolkit, we completed an extensive review of the literature to identify best practices. What emerged was an awareness of the benefits of implementing a CHW role that is multipurpose, as opposed to a role that focuses on only one condition. (See Chapter 1) To enhance readability, we have synthesized the evidence into six domains as depicted in the diagram below. What follows is a brief summary of evidence-based best practices.



ELEMENTS OF SUCCESSFUL CHW PROGRAMS.

/	
1/	
V	

1. Recruitment	How and from where a community health worker is identified, selected, and assigned to a community.	
2. CHW Role	The alignment, design, and clarity of the role from community, CHW, and health system perspectives.	
3. Initial Training	Training is provided to the CHW to prepare for his or her organizational role and ensure that he or she has the necessary skills to provide safe and quality services.	
4. Continuing Training	Ongoing training is provided to update CHWs on new skills, to reinforce initial training, and to ensure they are practicing skills learned.	
5. Equipment and Supplies	The requisite equipment and supplies are available when needed to deliver expected services.	
6. Supervision	Supportive supervision is carried out regularly to provide feedback, coaching, problem solving, skill development, and data review.	
7. Individual Performance Evaluation	Evaluation to fairly assess work during a set period of time.	
8. Incentives	A balanced incentive package includes financial incentives such as salary and bonuses and non-financial incentives such as training, recognition, certification, uniforms, and medicines, etc., appropriate to job expectations.	
9. Community Involvement	The role that the community plays in supporting a CHW.	
10. Referral System	A process for determining when a referral is needed; a logistics plan in place for transport and funds when required; and a process to track and document referrals.	
11. Opportunity for Advancement	Opportunity for Advancement: The possibility for growth and advancement for a CHW.	
12. Documentation and Information Management	How CHWs document visits; how data flows to the health system and back to the community; and how data is used for service improvement.	
13. Linkages to Health Systems	How the CHWs and communities are linked to the larger health system through involvement in recruitment, training, incentives, supervision, evaluation, equipment and supplies, use of data, and referrals.	
14. Program Performance Evaluation	General program evaluation of performance against targets, overall program objectives, and indicators carried out on a regular basis.	
15. Country Ownership	Country Ownership (not applicable to U.Sbased programs): The extent to which the ministry of health has policies in place that integrate and include CHWs in health system planning and budgeting and provides logistical support to sustain district, regional and/or national CHW programs.	

(Crigler et al., 2011, p. 15)

3: IMPLEMENTING A CHW PROGRAM

RELEVANT STATE CHW RELATED STATUTORY AND REGULATORY SECTIONS AS OF JUNE 30, 2016

EDUCATION DOMAIN

Currently, there is no national standardized, agreed-upon curriculum or educational path for CHWs. CHW training and onboarding takes numerous forms, and most experts agree that there are core knowledge and skill needs that should be addressed. Core skills were first identified by the National Community Health Advisor Study and include:

- Communication skills
- Interpersonal skills
- Service coordination skills
- Capacity-building skills
- (Rosenthal et al., 1998)

- Advocacy skills
- Teaching skills
- Organizational skills
- Knowledge base on specific health issues

University and community agency based programs use these core skills to develop the educational plan for their CHW workforce. Experts recommend that CHW training include information about health and illness as well as environmental, psychological, economic, cultural, and other social determinates of health (Campbell & Scott, 2011).

CHWs SHOULD HAVE A HIGH SCHOOL DIPLOMA OR GED

There is consensus that the minimum formal educational requirement for a CHW should be a high school diploma or GED certificate. The 2007 Community Health Worker National Workforce Study reported that 32 percent of organizations required CHWs to hold a bachelor's degree (HRSA, 2007).

After CHWs are brought on board, they are trained to strengthen the skills they had at the time of hiring and educated regarding skills and competencies they need for the specific program (HRSA, 2007). Mechanisms to deliver CHW education take many forms, including formal classroom instruction, computer-based education, and one-on-one experiential mentoring, alone or in combination.

Achieving certification improves and in some states is required for reimbursement.

The length of training varies widely, ranging from five hours to six months of training. The healthand disease-specific education usually covers a wide variety of topics, including cardiovascular diseases; diabetes; cancer screening; and awareness of breast, prostate and colorectal health.

As yet, there is no national standardized curriculum for training CHWs. Indeed, most CHWs are trained on the job through mentoring (HRSA Office of Rural Health Policy, 2011). Lack of standardized training

can lead to variations in the implementation of the role (Alvillar, Quinlan, Rush, & Dudley, 2011). Recommendations for the adoption and refinement of CHW roles and competencies date back to the 1998 Summary of the National Community Health Advisor Study. A standard curriculum would aid the recognition and integration of this role in the wider health care arena. (http://s472440476.onlinehome.us/wp-content/uploads/2013/05/EducationCurriculum.pdf)

Despite this lack of consensus, building blocks are under development. There is agreement that CHWs need continuing education, and this has been built into the requirements of at least one state, Ohio. The State of New York, in its recent report regarding its CHW initiative, notes that, "this lack of standardization in New York creates fragmentation in the CHW field and inhibits sustainable financing" (Zahn et al., 2010, p. 8). Information regarding CHW education, from initial training to ongoing development, is most commonly found in toolkits and reports — the research literature is largely silent.

In 2016, the CDC published a summary of state CHW laws that describes how states are using law to develop sustainable CHW programs.

3: IMPLEMENTING A CHW PROGRAM

CHW INTERVENTIONS ADDRESSED IN STATE LAW, EFFECTIVE JUNE 30, 2016

	Infrastructure		Profes	sional Id	entity		Workforce Development			Financing					
State	Establish a CHW commission or advisory body	Provide chronic disease care services	Managed or team-based care models	Supervision by other health care professionals	Defined scope of practice	Educational campaign	CHW core certification process	CHW certification to practice	Creation of standardized core curriculum	Include CHWs incertification or curriculum development	Specialty area or disease- specific certification	Standardized specialty area or disease-specific curriculum	Medicaid reimbursement	Incentives or grants for CHW workforce	Private insurer reimbursement
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CA	*	—	\bigcirc	—	—	—	—	_	—	—	—	_	*	_	—
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IA	_	\circ	_			_	_	_	_		_		_		
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LA	_	—	*	—	\bigcirc	—	—	_	—	—	—	\bigcirc	—	*	—
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	Totals														
	6	0	0	1	6	0	4	0	4	3	1	1	0	0	0
	0	0	1	4	3	1	0	4	0	3 1	0	2	2	1	0
	0	6	7	3	6	2	2	5	1	0	1	1	5	5	1
*	2	6	5	0	2	2	6	1	5	1	1	4	5	5	2
	17	13	12	17	8	20	13	15	15	20	22	17	13	14	22
Legal Authority : ○ Authorized ▶ Required in Part ● Required ❖ Other Law — No Law Identified															

Promising Quality or Impact

Emerging

Evidence Assessment Result: Best

No Evidence Assessment

^{*} Table does not include multiple levels of CHW Certification Data (CDC, 2016a)

RELEVANT STATE CHW RELATED STATUTORY AND REGULATORY SECTIONS AS OF JUNE 30, 2016

Jurisdiction	Statutory Citation Sections	Regulatory Citation Sections
Alaska	ALASKA STAT. §§ 18.28.010 TO .050 & 18.28.100 (2013)	ALASKA ADMIN. CODE tit. 7 §§ 125.160, 155.020, 145.140 (2013); See also ALASKA ADMIN. CODE tit. 7 §§12.450 to 12.490, §100.124; 7 §§ 27.600 to 27.629 (2016)
California	CAL. HEALTH & SAFETY CODE §\$ 106000 & 106005 (WEST 2014); CAL.WELF. & INST.CODE §\$ 16002.5 & 14127 (WEST 2014)	None identified
DC	D.C. CODE §§ 7–1631 TO 1633 (2013)	None identified
Georgia	GA. CODE ANN. §§ 33-23-201 (2016)	None identified
Illinois	20 ILL. COMP. STAT. ANN. 2335/1, 2335/5, 2335/10, 2335/15 & 2335/99 (WEST 2015)	None identified
Indiana	None identified	405 IND. ADMIN. CODE §§5-21.8-1 TO 5-21.8-11 (2015)
lowa	IOWA CODE ANN. § 135.106 (WEST 2014)	IOWA ADMIN. CODE R. 641 §§10.1(135) - 10.9(135) (2015)
Kansas	KAN. STAT. ANN. §65-1,158 (2015)	None identified
Louisiana	LA. REV. STAT. ANN. §§ 46:161 – 165, 40:1081.8 & 40:2018.3 (2015)	None identified
Maine	ME. REV. STAT. ANN. TIT. 32 §§13821 - 13825 (2013)	MD. CODE REGS. §§ 10.61.01.03, 05, 06 (2015)
Massachusetts	10-144-101 ME. CODE R. CH. II § 91 (WEIL 2015): SEE ALSO 10-144-101 ME. CODE R. CH. III § 91	None identified
Maryland	MD. CODE ANN., HEALTH-GEN. §§ 20-1401 TO 1407 & MD. CODE ANN., TAX - GEN. § 10-731 (WEST 2013)	MD. CODE REGS. §§ 10.61.01.03, 05, 06 (2015)
Massachusetts	MASS. GEN. LAWS ANN. 17 § 3 (WEST 2013); MASS. GEN. LAWS ANN. 112 §§ 259 TO 262 (WEST 2013); MASS. GEN. LAWS ANN. 13 §106 TO 108 (WEST 2013); SEE ALSO MASS. GEN. LAWS ANN. 13 § 9; MASS. GEN. LAWS ANN. 6D § 15 (WEST 2013); MASS. GEN. LAWS ANN. 111 § 2H (WEST 2013)	None identified
Minnesota	MINN. STAT. ANN. §§ 256B.0625, 256B.79 & 256B.0755 (WEST 2014); MINN. STAT. ANN. § 145A.17 (WEST 2014); MINN. STAT. ANN. § 62J.692 (WEST 2015)	None identified
Nebraska	NEB. REV. STAT. § 81–3140 (2016)	None identified
Nevada	NEV. REV. STAT. §§ 449.001; 449.0027, 449.0028, 449.0045, 449.030, 449.0302, 449.089, 449.119, ETC (2015)	None identified
New Mexico	N.M. STAT. ANN §§ 24-30-1 TO 24-30-7, 27-2-12.13 & 27-2-12.15 (WEST 2014)	N.M. CODE R. §§ 7.29.5.1 TO 7.29.5.14 (2015)
New York	N.Y. PUBLIC HEALTH LAW § 2959-A (MCKINNEY 2013)	None identified
North Carolina	10A N.C. ADMIN. CODE 48B.0803 (WEST 2013)	None identified
Ohio	OHIO REV. CODE ANN. §\$ 4723.01, 4723.06, 4723.07 & 4723.81 TO 4723.88 (WEST 2016); OHIO REV. CODE ANN. § 4723.33 TO 35 (WEST 2014)	OHIO ADMIN. CODE § 5122-29-33 (2014); OHIO ADMIN. CODE §§ 4723-2-01 TO 2-04, 4723-26-01 TO 4723-26-14 (2015)
Oregon	OR. REV. STAT. ANN. §§ 413.260 & 413.600 (WEST 2015); OR. REV. STAT. ANN. § 410.604 (WEST 2015); OR. REV. STAT. ANN. §§ 414.018, 414.025 & 414.625, 414.635 & 414.665 (WEST 2016)	OR. ADMIN. R. 410-120-0000 (2013); OR. ADMIN. R. 410-138- 0060 (2013); OR. ADMIN. R. \$\$ 410-141-0300, 410-141-3015, 410-141-3180, 410-141-3260 & 410-141-3320 (2016); OR. ADMIN. R. 410-146-0120 (2013); OR. ADMIN. R.410-180-0300 TO 410-180- 0380 (2013); OR. ADMIN. R. 418-010-0010 & 418-020-0010 (2015)
Pennsylvania	4 PA. CODE § 6.402 (2015)	None identified
Rhode Island	R.I. GEN. LAWS 1956, § 40-19.1-1 (2016); R.I. GEN. LAWS 1956, §§ 23-64.1-1 TO 23-64.1-8 (2013)	None identified
Texas	TEX. HEALTH & SAFETY CODE ANN. §§ 48.001, 48.051, 48.052, 48.053 & 48.101; SEE ALSO TEX. HEALTH & SAFETY CODE ANN. § 1001.035; TEX. HUMAN RES. CODE ANN. § 32.071 (WEST 2013); TEX. INS. CODE ANN. § 845.155 (WEST 2013)	TEX. ADMIN CODE 25 §§ 146.1 THROUGH 146.8 (146.9 TO 146.12 REPEALED AS OF 6/24/15) (2015); TEX. ADMIN CODE 1 § 351.20 (2014)
Vermont	3 VT. CODE R. § 12-3-217:5370 (2015)	None identified
Washington	WASH. REV. CODE ANN. § 43.70.725 (WEST 2015)	WASH. ADMIN. CODE §§ 182-501-0065, 182-533-0315, 0320, 0325, 0327, 0328, 0330, 0340, 0345, 0360, 0365, 0370, 0375, 0378, 0380, 0385, 0386 (WEST 2016); WASH. ADMIN. CODE §§ 246-170-011 & 246-170-035 (WEST 2016)

3: IMPLEMENTING A CHW PROGRAM

PERFORMANCE MANAGEMENT AND SUPERVISION DOMAIN



The performance management and supervision of CHWs includes standard elements of human resource management (HRM) designed to recruit, oversee, and develop people within an organization.

1. Selection Criteria and Job Description

Research has shown that the most successful programs include CHWs who represent the community members they serve.

The attributes of a successful CHW program are far ranging. Research has shown that the most successful programs include CHWs who represent the community members they serve. CHWs recruited from local communities have enhanced impact on utilization, the creation of health awareness, and health outcomes (Abbatt, 2005; Bang et al., 1994; Lewin et al., 2005). They are able to communicate the desired message, to liaise between clients and providers, and to garner support from various community resources. If CHWs are

recruited from outside the community, the community should participate in the recruitment process and be consulted on the final selection (Crigler et al., 2011). While not always practical to carry out, community selection of CHWs can foster program success (Campbell & Scott, 2011).

Personal qualities of the successful CHW include:

- Willingness to learn
- Compassion, caring about others
- Communication skills
- Cultural competence
- Professional experiences
- Commitment to serving the community

- Respect by peers in the community
- Shared values and experiences of the people being served
- Good personal health practices, attitudes, and selfesteem
- Ability to grow, change, and learn
- Recognition as a trusted community member

(O'Brien et al., 2009; Rural Assistance Center, 2013; Wringe, Cataldo, Stevenson, & Fakoya, 2010)

The clear definition and description of the CHW's roles and responsibilities is essential to performance management and supervision. A written job description protects both the organization and the worker and should define job accountabilities, specify qualifications, and delineate how the role fits with others in the organization. Expectations of the CHW should be plainly expressed, and include:

- Being constructive in interpersonal relationships
- Being friendly, outgoing, sociable, culturally competent, patient, open-minded, and nonjudgmental
- Knowing about health issues and the health care system
- Understanding the importance of sharing that knowledge with family and friends

- Possessing good communication skills (speaking, listening, writing, teaching, bilingual ability)
- Being able to identify and use resources (e.g., having initiative, being self-directed, having the capacity to work independently)
- Facilitating empowerment and leadership skills
- Being adept at resolving conflicts
- Being respectful and honest

(Centers for Medicare and Medicaid Services, 2011) (See page 39)

2. Support and Supervision

It is important to provide regular and reliable support and supervision for CHWs within the structure and function of the health team. Ineffective supervision often results in low CHW morale and poor productivity (Jaskiewicz & Tulenko, 2012). Effective and supportive supervision — established with regular feedback during CHW staff meetings — will result in sufficient time to complete assigned work, adequate resource allocation, enhanced problem solving, and just-in-time training (Patel & Nowalk, 2010; Wringe et al., 2010).

Peer-to-peer support has also been shown to increase retention and motivation.

To ensure that the supervisor can coach and mentor effectively, the span of control and supervisory skills must be carefully considered (Campbell & Scott, 2011; Jaskiewicz & Tulenko, 2012). CHWs who receive ongoing mentoring and support, as well as acknowledgment of their efforts, are more likely to be motivated to excel in their respective roles. Peer-to-peer support has also been shown to increase retention and motivation (Jaskiewicz & Tulenko, 2012). The recommended CHW to supervisor ratio is 6:1.

3. Rewards and Recognition

Many CHWs identified the gratifying nature of serving others and the responsibility given to them as their personal motivations for pursuing the role. In addition to improving the health of their communities, CHWs valued their newfound knowledge as a means to improve the health of their own families. This position may function as a gateway to other health care careers. Because CHW programs can have high levels of attrition, both financial and non-financial incentives and benefits are essential to CHW retention.

A source of further motivation was increased community recognition and acceptance. Many CHWs expressed that receiving ongoing mentoring, support, and certification made their jobs richer and more rewarding.

TOOLS AND JOB AIDS DOMAIN

Standardized protocols and job aids, along with clearly defined roles, should ensure that CHWs practice within their scope and training (Jaskiewicz &Tulenko, 2012). Job aids (or tools) such as checklists, flowcharts, and educational materials, along with interview, assessment, and data collection forms, facilitate and organize the CHW's work. Jaskiewicz and Tulenko (2012) discuss the organization of tasks as critical to maximizing productivity. Standardized tools must be used to assist in the completion of a series of tasks or services, visit and program planning, and evaluation. There are a multitude of tools currently being used in CHW programs in the United States and around the world.

Chapter 7 of this toolkit includes a few sample tools. While each organization will require tools to meet its specific program needs, the aim of this section is to convey the importance of having such tools, job aids, and standardized protocols as integral to a CHW program.



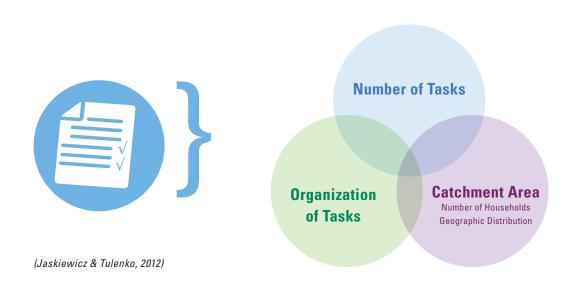
WORKLOAD DOMAIN

As more mainstream health care organizations incorporate the CHW role into their care delivery

3: IMPLEMENTING A CHW PROGRAM

model, they must determine the proper workload so that productivity and quality are not compromised. Jaskiewicz and Tulenko (2012) define CHW workload as multifaceted, best defined by the "interplay of the number and organization of tasks and the catchment area" (p. 3 of 9). Viswanathan et al. (2009) describes three levels of visit "intensity." Low-intensity visits encompass prevention and screening tasks, whereas high-intensity visits are face-to-face, last longer than one hour, occur one-on-one in the client's home, and may require additional visits for three months or longer. High-intensity examples are maternal-child or chronic disease management visits (Viswanathan et al., 2009). Workload can vary based on the number of tasks, how tasks are organized, and catchment area. See Figure 1 below.

FIGURE 1: COMPONENTS OF CHW WORKLOAD



Number of Tasks. Determining the number and organization of tasks depends upon many factors, such as the program's focus, characteristics of the patient population or community, and whether the CHW's role is focused on one purpose or multiple (defined in Chapter 1). Outside the U.S., CHWs have often been trained to focus on one condition, e.g., diabetes or heart disease or HIV/AIDS (Cherrington et al., 2008a; Patel & Nowalk, 2010; Postma et al., 2009; Rich et al., 2012). As a result, numerous CHWs might visit the same client and/or household, each attending to the services and tasks in his or her assigned medical condition. While the individual CHW's workload has fewer tasks and therefore is more manageable, the care provided can be fragmented and uncoordinated — frustrating to both the CHW and client.

Organization of Tasks. In order to maximize CHW productivity, tasks must be thoroughly organized. Checklists, questionnaires, teaching guides, protocols, and an efficient means of documentation enable the CHW to complete assigned services and tasks on time (Jaskiewicz & Tulenko, 2012). In the same way, the supplies and equipment needed to complete a task must be available. Pre-planning client visits with the care team ensures that appropriate assessments and health screenings are completed, needed services (e.g., education) are not forgotten, and all tasks (e.g., height, weight) are finished. Tasks should be combined to create the most efficient visit, and like tasks should be integrated into one visit. One study suggested no more than 100 possible types of tasks and organized tasks into 12 categories of care (Jaskiewicz & Tulenko, 2012). Visits typically last at least one hour, and most programs require at least one face-to-face visit per month.

Catchment Area. The catchment area assigned to a CHW directly impacts workload (Jaskiewicz & Tulenko, 2012). The number of clients managed by the CHW is important. Some organizations assign CHWs by households, whereas others assign CHWs by individual clients. Clearly assigning CHWs by client in a large household can present challenges, since other members of the household require services. Likewise, the geographic distribution of clients impacts workload. Clients in rural areas are geographically dispersed, often by difficult terrain, which increases travel time. While urban settings are denser, reliable public transportation, traffic congestion, and parking affect workload.

Households. To establish a CHW's catchment area, there is no set formula or workload measure that takes into consideration the number of households and a specified standard of care. However, Palazuelos et al. (2013) revealed that the majority of programs maintain a "low CHW to beneficiary ratio" (p. 4). There are countries in which a CHW covers as few as ten households (e.g., Sri Lanka). In other countries (e.g., India), that number might be 1,000 households (population 5,000) (Patel & Nowalk, 2010). In Iran, 1,500 clients are assigned to one CHW (Javanparast et al., 2011), whereas in other areas CHWs are assigned from one to ten clients. For maternal-child visits, one sees as few as ten households per CHW; in urban areas, there are ten neighboring households per CHW (Whitely et al., 2006). The majority of programs maintain a low CHW-to-client ratio of between two and ten clients per CHW (Palazuelos et al., 2013).

Geographic Distribution. Determining geographic distribution is not an exact science, and one must consider the difficulty of the terrain. Few studies report geographic distribution. One study indicates client households spread out from three to six miles; in another, client households are spread out from six to 12 miles (Jaskiewicz & Tulenko, 2012). Workload, productivity, and quality are inextricably linked. An increase in tasks (intensity) and the number of households or geographic distribution will impact workload and quality; therefore, changing one will impact the other.

FINANCIAL REIMBURSEMENT DOMAIN

A growing body of practice-based evidence on CHW cost-effectiveness supports program implementation. This evidence points to the positive impacts CHWs have in reducing health disparities, expanding access to coverage and care, improving care quality, increasing health care cultural competence, and controlling costs. However, Viswanathan et al. (2009) describes mixed evidence in empirical research on CHW effectiveness with regard to any number of outcomes (cost, behavior change, health outcomes). Empirical research, though, often suffers from methodology issues, inconsistent defining of terms and variables, and insufficient data. Because of flaws in research, inconsistent cost-benefit data has led to uneven support for the CHW role (Whitely et al., 2006).

Consistently applied approaches to the financial evaluation of CHW programs as a whole or to specific interventions are needed (Cherrington et al., 2008a; Whitely et al., 2006). Both Viswanathan et al. (2009) and Whitely et al. (2006) recommend using the standard measure of costs/quality-adjusted life-year saved.

Payer Sources

The existing literature describes four major financing models associated with CHW programs: charitable foundations and government agencies; Medicaid; federal, state, or local governments; and private organizations. Carl H. Rush, MRP, Principal of Community Resources LLC, recommends the diagram on the next page depicting CHW financing models.

3: IMPLEMENTING A CHW PROGRAM

"Changes in Federal Medicaid Rules Effective January 2014 Allow Payment for Preventive Services by Non-licensed Individuals including CHWs." (Federal Register, July 15, 2013 [78 FR 135 p. 42306])

Preventive services "recommended by a physician or other licensed practitioner ...:

- 1. Prevent disease, disability, and other health conditions;
- 2. Prolong life; and,
- 3. Promote physical and mental health efficiency."

Project on CHW Policy and Practice University of Texas Institute for Health Policy Sustainable Financing of CHW Activities: Three Broad Pathways

Basic pathways Α Population/community-based Patient-centered care systems Conventional health care public health (emerging hybrid structures) Emergency room diversion "Hot-spotters" (high cost users) Prenatal/perinatal coaching Specific condition-focused initiatives Patient Centered Medical Homes **Promising** Primary care based chronic Community development approach Accountable Care Organizations disease management program (social determinants) Health Homes Care transitions models Home/community-based long-term care Care coordination Self-management support for chronic conditions 2 Referral and assistance with non-Combination of health care and Basic outreach and education Specific CHW medical needs and barriers population-based Community advocacy/organizing roles in these Medication management support (as at left) Patient/family advocacy models Support and extension of health education Patient navigation Fee for service Medicaid waivers Managed care organizations: **Payment** Bundled/global/prospective payment Block grants admin/service dollars; duals mechanisms Prevention trust fund (Mass. model) Supplemental capitation payment for Medicaid 1115 waivers Pooled funds from third-party specific services for these Internal financing healthcare payers models Prospective payment (FQHCs) CHWs directly employed by payer **Options for** Health care provider contracts/add-ons to hire CHWs third-party CBO contracts to employ CHWs

Charitable foundations and government agencies are the most common arrangement within the U.S., usually
involving a community-based organization (CBO). Typically, strict requirements must be met for the program to
receive ongoing funding. Sources for these grants include the National Institutes of Health (NIH), HRSA, and
Temporary Assistance for Needy Families (TANF). State and locally administered programs are often disease
specific.

CHWs as independent contractors

payers

- 2. Medicaid presents multiple avenues for funding, including direct reimbursement and managed care contracts. Under direct Medicaid reimbursement, CHWs are recognized as "billable providers." However, federal codes and regulations do not allow for direct billing by CHWs; services billed for must be part of a recognized program. The Medicaid SS1115 waiver permits states to use federal funds in ways that do not conform to federal standards, so in this case Medicaid funds can be used to support CHW programs. In either case, mainstream health care providers must explore billing and reimbursement rules in their respective state (Dower, Knox, Lindler, & O'Neill, 2006). The second Medicaid option is under the auspices of a Managed Care Contract. Here, a capitated amount from the state is allotted per the number of Medicaid enrollees within the CHW program.
- 3. Federal, state, or local government general funds, supported by taxes, are often seen in budgets as dedicated line items within an existing program that provides CHW services. This model is frequently found in county hospitals and/or health departments.
- 4. The fourth funding model is from private organizations such as mainstream health care providers (e.g., hospitals, health systems), managed care organizations, insurance companies, and employers. Typically, mainstream health care providers, health plans, and other businesses either employ or contract for CHW services. Mainstream health care providers' goal is to save money by reducing inappropriate ED visits and/or readmissions a cost-avoidance approach. On the other hand, employers retain CHW services to maintain a healthy workforce. The diagram above depicts funding sources, as well as the care "pathways" where CHWs are used.

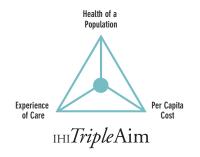


OUTCOME DOMAIN

Care and services provided by successfully financed, sustainable CHW programs produce positive outcomes in alignment with the Triple Aim.

This model was promoted by CommunityHealth Works in 2014.

The IHI Triple Aim team put together a prudent set of suggested measures that also help operationally define the IHI Triple Aim. Much like the Triple Aim outcomes suggested by IHI (2009), HRSA (2011) and ICER (2013b) have suggested important CHW program outcomes to measure. These outcomes have been combined to provide a sample outcome measurement plan for CHW programs. Additional outcome measures should be included based on the specific focus of the CHW program.



Source: IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2012.

3: IMPLEMENTING A CHW PROGRAM

Experie	ence of Care			
Process of Care and Utilization	Behavior Change	Satisfaction	Health of a Population	Per Capita Cost
# from ED # from PCP # from PCP # from community # from PCP # from community # of clients enrolled # of patients served # of appointments made # of CHW visits # deducation programs taught by CHWs: # of education sessions offered # enrolled in education sessions # of clients completing program # and type of materials disseminated Number of clients enrolled in wellness and/or education	Changes in knowledge Client reminders Risk reduction Physical activity Diet changes Self-management of: Medication compliance Lifestyle changes	Client satisfaction with CHW Likelihood to recommend Why patient uses CHW services	Health Risk Appraisal (HRA) Health/functional status Reduced morbidity Reduced mortality Healthy Life Expectancy (HLE) Reduction in health disparities Specific measures consistent with population: Glucose HTN Cholesterol Lipids HgbA1c Weight Smoking	Decreased ED visits Decreased admissions Decreased readmissions Total cost per member of the population served
<pre>programs: diet, exercise, smoking</pre>			(HR	SA, 2011; ICER, 2013b; IHI, 2009)

IMPLEMENTATION ALERT

Cost-benefit Analysis https://azprc.arizona.edu/sites/default/files/CHWtoolkit/PDFs/FRAMEWOR/COSTBENE.PDF

The University of Arizona's Office of Rural Health provides a comprehensive resource for calculating the cost-benefit analysis of CHW programs — Cost-benefit Analysis: A Primer for Community Health Workers (1999).



STRATEGIC STAKEHOLDERS

THE SUPPORT OF STAKEHOLDERS IS KEY TO YOUR SUCCESS

As you begin program planning, realize that strategic stakeholders are both inside and outside your organization.

The success of any CHW program depends strongly upon the support of key stakeholders, both within and outside of the organization. Who, exactly, are these stakeholders? What role do they play in the design and implementation of a CHW program? Most important, how do you secure their support?

We've researched best practices and strategies to help you identify stakeholders critical to your CHW program and leverage their efforts for ongoing growth and success.

IDENTIFYING KEY STAKEHOLDERS

The planning stage of a CHW program begins with outreach to the communities that the CHW program is intended to serve — which can greatly benefit CHW recruitment. An excellent place to start is with local groups. Community health and non-profit organizations promoting health care for everyone have a vested interest in improving outcomes. For example, if a CHW program is intended to address health needs of the African-American community, outreach to local church leaders and organizations such as the Urban League would be advisable.

To assure that plans to design, implement, and evaluate a CHW program are valued, consider soliciting input from:

External Stakeholders

- Community officials (e.g., city or county government)
- Local health department
- Nonprofit organizations or foundation
- Policymaking groups (local, regional, state)
- Other organizations (e.g., faith-based, recreation, neighborhood homeowner associations)
- Other CHW employers in the community
- CHWs

(CDC, 2013b; Jaskiewicz & Tulenko, 2012)

Internal Stakeholders

- Governing board
- Executive leadership (CEO, CMO, CNO, CFO)
- Medical staff
- Steering committee members
- Staff registered nurses
- Social work
- Care/case management
- Volunteers

4: STRATEGIC STAKEHOLDERS

EDUCATING KEY STAKEHOLDERS

After key stakeholders are identified, there are several elements to consider as part of the overall program design, implementation, and evaluation. To secure their support, you should provide education about the CHW role, demonstrate the cost-benefit of implementing a program, and show clinical outcomes achieved. Below is a list of some, but not all, program elements important to share with key stakeholders.

Program Design

- Consider areas where CHWs' services could make a difference
- Identify the long-term mission and vision of a program
- Create a shared understanding of the CHW program
- Define the CHW role
- Establish educational requirements
- Develop sustainability planning strategies associated with healthy communities (CDC, 2013b)
- Convene a planning team

Program Implementation

- Identify infrastructure, operational practices, policies, and financial resources
- Assess partner relationships to create a connection map
- Discuss CHW workload, productivity, and supervision
- Identify client access and referrals
- Develop staff education goals

Program Evaluation

- Cost-benefit
- Service quality
- Outcome measurement

COMMUNICATING WITH KEY STAKEHOLDERS

On the next page is a sample of talking points CHW program leaders may find helpful during program approval and design.



HEALTH SYSTEM GOVERNANCE

- "Health systems are required by the ACA to look 'beyond the walls' of their hospitals and to meet the needs of the broader community."
- "Improving the experience of care, population health and increasing affordability is driving health care and requires new modes of delivery."
- "Based on our community health needs assessment, we understand that CHWs can provide some of the needed services."
- "CHWs augment the continuum of care, providing services where patients live."
- "One health system saved \$2.28 for every \$1.00 it invested in its CHW program."
- "CHWs provide patient referrals, so patients remain within our system's services and can generate revenue for certain referrals."
- "Using CHWs can decrease cost and inappropriate ED visits."



SENIOR LEADERSHIP

- "CHW program resulted in average savings of \$2,245 per patient, and a total savings of \$262,080 for 117 patients, along with improved quality of life."
- "Uncompensated care charges were reduced by \$206,485 due to cost avoidance, less uncompensated care, and more primary care visits, i.e., costs saved and revenue gained."
- "Adding CHWs to our care teams can enhance our reputation in the community."
- "CHWs are integral to meeting the goals of the ACA."
- "Implementing a CHW program begins to establish clinical competence beyond acute care."
- "CHWs can help us effectively address health disparities."



MEDICAL, NURSING, AND OTHER STAFF

- "Physicians, nurses, and allied health professionals must form partnerships to redesign health care delivery, and CHWs are included in new models of patient engagement in health care."
- "Transforming to a team-based care model in which the integration of CHW services will improve the team's reach, cultural competence, outcomes, and sustainability especially for high-risk populations."
- "CHWs can maximize team performance."
- "The CHW role will be clearly defined based on their scope of practice."
- "CHWs receive formal educational, often in community colleges, and certification is available to validate competency."
- "CHWs do not provide patient care, but rather provide referrals and services under the supervision of a licensed provider."



CARE MANAGEMENT, DISCHARGE PLANNING, AND SOCIAL SERVICES

- "Patient transitions across the continuum of care are critical points of intervention."
- "CHWs are out in the community providing care managers with information about referrals and services needed."
- "CHWs can help identify and address social determinants of health that are impacting community outcomes."

4: STRATEGIC STAKEHOLDERS

SUSTAINING THE SUPPORT OF KEY STAKEHOLDERS

To ensure the support of key stakeholders, we recommend following the strategies listed in the CDC's *A Sustainability Planning Guide for Healthy Communities* (CDC, 2013b).

(http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability_guide.pdf)

These strategies should also be considered when gaining buy-in beyond and within a health system for the integration of CHWs on the health care team.

Create a shared understanding of the CHW program

- Clear definition of the CHW
- Long-term mission and vision of a program

Create a plan for the design and implementation process

- Who might be on the planning team (e.g., CNO, CFO, nurse case managers, local public health nurse, community representatives, etc.)

Identify engaged and committed individuals to involve in planning from beyond and within the health system

- Design plans to increase the odds of sustainability of the CHW program
- Identify current and future goals and factors such as infrastructure, operational practices, and financial resources needed to support the goals (Refer to other chapters of this toolkit for examples.)
- Assess partner relationships to create a connection map of existing and potential community connections as well as champions within the health system

List the current and pending planning efforts

- Work with external and internal key stakeholders to identify efforts that could complement planning activities
- Discuss how these factors influence the organizational structure and the potential for achieving future program strategies, goals, objectives, or activities

Develop criteria to help determine which efforts to continue

- Consider the program's mission and vision
- Structure and support
- Long-term goal of each of your planning efforts
- Criteria include available financial, organizational, human resources, level of community support, and evidence of program need and effectiveness

Decide on strategic priorities, appropriate resource development, and funding sources (e.g., potential for Medicaid reimbursement)

Develop action plans for strategic priorities

- List steps needed, due dates, and responsible individuals
- Steps may include engaging policymakers, grant writing, or reorganizing the structure of the planned program based on feedback
- Flexibility is essential to realistic planning and maintaining stakeholder involvement

Implement specific action plans and evaluate outcomes

- Evaluation is included from the outset and is an ongoing activity
- Plan a summary evaluation to clarify program goals and reasonable outcomes

4: STRATEGIC STAKEHOLDERS 35



IMPLEMENTATION CONSIDERATIONS AND FAQS

ADVICE, INSIGHTS, AND IDEAS FROM LEADERS OF SUCCESSFUL CHW PROGRAMS

We've conducted interviews and reviewed the latest literature to assemble the very best thinking on successful CHW programs. This information is designed to serve as a guide in the development of an overall program as well as in the creation of specific program policies and procedures. Frequently asked questions and detailed answers about each of the subjects can be found below.

WHAT ARE THE COMMON NEEDS THAT DRIVE THE DEVELOPMENT OF CHW PROGRAMS?

Common drivers include:

- Chronic disease
- Maternal and child health
- Social isolation
- Social determinants of health
- Addressing the needs of high-risk/at-risk populations, e.g., premature birth, low birth weight
- Ensuring positive health outcomes for underserved communities and the uninsured
- Addressing readmissions
- Decreasing inappropriate Emergency Department usage

Once determined, community health needs should drive the goals of the CHW program.

WHAT DETERMINES THE SIZE AND SCOPE OF CHW PROGRAMS?

As a program begins, team leaders must determine the number of patients that can be served. Services can grow and expand as the program becomes established and more CHWs are hired. Estimates of potential demand should be based upon the organization's knowledge of its community and the organization's overall capacity. For example,

determining the number of patients experiencing unplanned readmissions within six months of an initial admission may be used as a way to identify the number of potential program enrollees.

Select determinants of program size:

- CHW scope of work
- Number of clients/families/households uninsured or underinsured
- Number of health disparities, types of disease states, e.g., diabetes, asthma
- Sophistication of electronic documentation
- Data exchange capabilities
- Efficiency and/or existence of mechanisms for screening, enrolling, and tracking clients
- Geographic service area
 - » Urban
 - » Rural
- Travel time between clients
- Available transportation
 - » Public
 - » Employee owned or reimbursed
 - » Program owned

Programs employing CHWs may require workers to go into the homes of patients, meet them at their primary care provider's office, and, at times, meet them at locations outside the home (e.g., grocery stores, schools, medical equipment providers). These work requirements necessitate travel; therefore, transportation needs must be considered.

CAN A CHW PROGRAM BE LAUNCHED USING EXISTING STAFF?

Most of the CHW programs reviewed began small and were built over time. A key ingredient is engaged hospital/ health system leadership, an executive champion, and a physician champion. If an organization is beginning the program from existing staff, it must determine who is best qualified to coordinate the program and supervise CHWs. One approach is to have an existing team member incorporate CHW program oversight or supervision into current duties. The hospital or health system would employ the entire CHW team and integrate the role into their care model.

As the program grows and the number of clients served increases, a separate CHW program and/or department is created using newly hired dedicated staff or current staff transferred into the new program. The organization must decide which staff are involved and when, how much time is required, and how often the disciplines need to meet to establish and review patient care plans.

Program staff may include, but are not limited to: — Pharmacy

- Nursing - Nutrition

- Medicine - Physical or occupational therapy

- Social work

WHAT OTHER FACTORS SHOULD BE CONSIDERED IN PROGRAM MANAGEMENT?

Because screening, enrolling, and coordinating services for clients can take a significant amount of time, the team may need to establish a CHW supervisor. Other factors to consider in program management:

- Clear, objective criteria as to which clients to include and exclude from services provided
- Mechanisms/decision tree to determine length of client service based upon client-identified needs and goals
- CHWs' duties and scope of practice
- Oversight and supervision of the duties delegated to CHWs by a licensed professional
- Allowing CHWs the freedom to solve problems, overcome barriers, and intervene appropriately in a wide variety of situations
- Allocating time for patient education, especially for clients with limited health literacy, lack of English proficiency,
 and cultural barriers

WHAT IS THE BEST SOURCE OF POTENTIAL CLIENTS?

Potential clients can be identified from many sources. Referrals from physicians, health care providers, and community leaders are all appropriate. The graphic below illustrates several common referral areas, but clients may be sourced through other means depending on the community served.



WHAT INFRASTRUCTURE IS NEEDED TO OPERATE A CHW PROGRAM?

CHWs need to be integrated into a multidisciplinary team of professional staff and have tools to guide their work.

Dependent upon the setting, the team must collaborate to determine patient needs, plan care, and implement care and services. CHWs must have a defined scope of practice, work guidelines, and oversight by licensed professionals.

In order for the CHW program to be successful, the following should be developed:

- A detailed admission needs assessment, including the social issues that impact health and drive the care delivery for the patient
- Individualized care plans or maps to guide the team and CHW as they work with clients
- Tracking tools to facilitate documentation of interventions and to assist the team in monitoring and oversight
- Scheduled multidisciplinary conferences to establish patient plans, evaluate interventions, and adjust care plans as needed
- Outcome data collection tools to measure the success of the intervention
- Electronic health record authorization for the CHW to access records and documents

WHAT EDUCATION ABOUT THE ROLE OF A CHW SHOULD BE PROVIDED TO EXISTING STAFF?

A clearly defined role for the CHW is important in gaining support from nurses, social workers, physicians, pharmacists, and others. Because the CHW role is new, most professionals have not worked with CHWs and should be educated regarding how:

- The CHW role fits within the care continuum
- The collaborative, team approach to care is used
- CHWs work independently, but require supervision
- The patient goals drive the multidisciplinary care planning
- The care plan is the roadmap for interventions and services

HOW CAN YOU BEST MONITOR THE EFFECTIVENESS OF YOUR CHW PROGRAM?

The best way to monitor effectiveness is by focusing on the requirements of the ACA — decreasing readmissions and inappropriate ED visits. Evaluating the success of your program is integral to making improvements and demonstrating value. Of course, how and when the program is evaluated depends on the focus of the program.

A balanced scorecard sample is included in Chapter 3 for reference.

Typical measurements of effectiveness include:

- Readmission rates prior to and after the intervention and/or service
- Number of ED visits pre and post intervention and/or service

- Increase in patients with medical homes/primary care provider
- Medication adherence (e.g., percentage of doses taken correctly, patient understanding of medications)
- Chronic disease self-management
- Diabetes: Glucose control, HgbA1c
- Hypertension: Blood pressure control
- Asthma: Reduced symptom days, reduction in ED and hospital use
- Patient satisfaction with the program and with their health
- Patient rating of their health status
- Cost savings due to decreased avoidable readmissions and ED visits
- Reduction in health disparities (e.g., increase in rates of cancer screenings, oral health visits, immunizations, and well child checks)
- Fewer missed appointments
- Connecting people with community resources and government programs such as food pantries and WIC

WHAT IS THE BEST WAY TO MAKE A BUSINESS CASE FOR A CHW PROGRAM?

By demonstrating improvements in the process of care via the measures above, you can illustrate the need for resources to be devoted to a CHW program. Hospitals have an incentive to take all actions possible to reduce readmissions. Therefore, they have a reason to integrate CHW programs into their organizations to avoid readmission penalties. Don't forget — the goal of CHW programs is to improve the patient's experience of care, improve health outcomes, and increase affordability.

WHAT LIABILITY AND SAFETY ISSUES SHOULD BE CONSIDERED?

CHWs who are integrated into a hospital or health care system may fall under the umbrella of the organization's liability insurance; however, each facility should contact its insurance carrier for clarification. Every organization's situation is unique, and the implications of a CHW program should be thoroughly reviewed with legal counsel. Topics for review include safety, security, compliance, risk management, liability, and insurance coverage. The nature of the CHW's work may take them into client homes, where they could encounter situations that are unsafe (Rural Assistance Center, 2013). The workers should be educated on how to recognize potentially unsafe situations and to leave a visit if they feel endangered.

WHAT ARE METHODS FOR GAINING THE SUPPORT OF KEY STAKEHOLDERS?

Identifying key stakeholders and securing their support is an essential part of overall CHW program design and implementation. Please see Chapter 4 for an in-depth look at stakeholder strategies.



CASE STUDIES

A REAL-WORLD LOOK AT THE IMPACT OF CHW PROGRAMS IN RURAL, SUBURBAN, AND URBAN SETTINGS

We've selected three case studies to show how CHW programs can address unmet health care needs in various settings. As CHW programs grow in number across the United States, a variety of models have been used, including those that are institution-specific and others organized as shared services by coalitions or partnerships. Regardless of the model, what these programs have in common is the ability to address unmet needs through culturally responsive approaches and recruiting CHWs from the communities that they serve. CHW programs work — and they can work for you.

CASE STUDY: USING A CHW TO IMPROVE THE QUALITY OF CARE FOR MEDICARE AND MEDICAID PATIENTS IN RURAL MONTANA

The Challenge. health care providers in Montana needed to address ED utilization and readmission rates and to lower health care costs and improve quality of care for Medicare and Medicaid patients living in rural areas. These areas typically have a population of less than six people per square mile. Patients are referred from primary care providers, community agencies, churches, and hospital staff.

The Solution. The Montana Department of Public Health and Human Services, in partnership with the Montana Health Research and Education Foundation, the Montana Hospital Association, and 11 frontier critical access hospitals, implemented a care coordination program for Medicare and Medicaid patients or others in the community who need assistance. To participate in this program, each area had to have less than six people per square mile in its county. The population among these 11 facilities ranged from 1,500 to 9,000. This program is a community-based, patient-centered clinical service coordination and health promotion model. CHWs work for participating health care facilities to provide care coordination services. CHWs conduct home visits, schedule provider appointments, help clients understand their chronic disease, provide emotional support, assist with medication management, and help individuals to identify social support services.

The Montana Office of Rural Health and Montana Health Research and Education Foundation developed the curriculum and training for the CHWs. The curriculum covers such topics as the role of the CHW, legal and ethical issues, home visits, and chronic illness.

The Results. The program personnel report decreased ED visits and readmissions by assisting the elderly to understand their discharge instructions as well as their chronic disease. Anecdotal process outcome data is all that is available at this time. They also report a range of outcomes, from helping the newly diagnosed diabetic to preventing elder abuse. Program leaders have placed value on CHWs' being from the same community that they serve — "The best CHWs are the people from that community who make the casseroles when someone is ill."

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CASE STUDY: THE IMPACT OF CHWS ON IMPROVING PATIENT-CENTERED ENGAGEMENT, RESILIENCY, AND SELF-CARE AT MAYO CLINIC.

The Challenge. Since 2009, Mayo Clinic Employee and Community Health (ECH) practice has partnered with the Intercultural Mutual Assistance Association's (IMAA) CHW Program to integrate CHWs into patients' care teams. The process involves ongoing development of CHW and team capacities that improve patient-centered engagement, resiliency, and self-care. The goal of the program is to decrease health disparities and advance health equity in patients with high-risk social determinants of health.

The Solution. Preliminary work was conducted in 2009, with a small-scale research program involving Somali adults interacting with a CHW. Lessons learned from this program formed the design of the CHW training, the request for collaborative funding, and the strategic alignment of both care team and patient needs. In 2012, ECH provided an opportunity for CHWs to complete a 90-hour internship within designated areas. That same year, approval was obtained to develop an 18-month pilot program embedding CHWs into the care teams of patients with complex care needs that were receiving care coordination. Critical program outcomes include the creation and evaluation of a practice model to improve holistic care, while reducing costs and improving traditional quality of care metrics.

This is a community-based model of CHW co-supervision with the IMAA and the staff of Mayo Clinic. Team-based care is provided by the CHWs, ECH care coordinators, and care teams — partnering with patients — to support complex care needs, target diversion to primary care, and align early intervention services and community-based resources at collaborative partner sites. The CHWs receive patient referrals through ECH and provide patient services in the home, at ECH, and in the community.

CHWs and the ECH co-supervisor meet on-site with lead care coordinators and care team champions to provide case consultation and reporting on program outputs. Patients partner with the CHWs to provide a score on their social determinants of health to determine their most pressing needs. A collaborative evaluation process between the CHWs, patients, health care teams, and community partners is being applied on an ongoing basis to determine care contexts, workflow, referral opportunities, and programming improvements to assure best practices.

The Results. The pilot program will be utilizing trend data examining cost of care per-member per-month (PMPM) six to 12 months pre- and post-timeline, resource utilization, one to two years' previous total cost comparison, and the quality metrics inclusive of asthma, depression, diabetes, and cardiovascular disease.



Preliminary survey results from enrolled patients indicate a high level of satisfaction with services and a better understanding of their health conditions. Care coordinators express satisfaction with CHWs' helping to manage their patient panels and connecting patients to community resources. The social determinants of health scores indicate that many patients are identifying and experiencing multiple health determinants needs within their daily lives. Patient-identified goals describing categorical themes of daily living, care of chronic conditions, healthy living, independence, and public programs have evolved at this time.

For more information, contact:

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CASE STUDY: HOW THE CAMDEN COALITION RELIED ON CHWs TO IMPROVE CARE AND REDUCE COSTS FOR "SUPER-UTILIZERS."

The Challenge. In 2002, providers in Camden, New Jersey, began meeting to discuss common issues in delivering care to members of their community. Over time, they recognized that they could better serve the community by working together, which ultimately led to the formation of the Camden Coalition of Health Care Providers (Coalition). The Coalition is the community organizer of the area health care arena and is composed of the three hospitals in the city (Lourdes, Virtua, and Cooper), two federally qualified health centers (FQHCs), private community-based medical practices, social service agencies, and other providers serving Camden residents.

Almost immediately, the Coalition identified a subset of patients — "super-utilizers" — who disproportionately used health care resources. Super-utilizers comprised just 13 percent of the population yet accounted for 80 percent of all costs. Super-utilizers are usually individuals with multiple chronic conditions and social barriers that make it difficult to access the care they need (Miller, 2013). The health care provided to these super-utilizers was "fragmented, episodic, uncoordinated, and extremely inefficient."

Based on these facts, the Coalition established dual goals: improve care for the super-utilizers and dramatically bend the cost curve in Camden, N.J.

The Solution. Providers in Camden recognized that they needed a better understanding of the population in order to improve the community's ability to provide care. In collaboration with the three health systems, the Coalition created a local population all-payer hospital claims data set. This citywide health database gives the Coalition detailed information on the population's health status, utilization patterns, and cost (Camden Coalition of Health Care Providers, 2014).

The Coalition then developed the Camden Health Information Exchange (HIE) to enable providers to access clinical data about their patients in real time, and they designed a care coordination tracking tool to monitor and evaluate caregiver interactions with patients (Miller, Cunningham, & Ali, 2013).

The care management intervention begins with a daily list, provided by the HIE, of patients who are currently admitted to the three Camden hospitals and who had already been admitted twice in the past six months. Using a qualitative checklist, patients are identified for intervention. Patients are ruled out if their admissions are related to pregnancy, an oncological diagnosis, surgical procedure, complications of a progressive chronic disease with limited treatment, or a mental health only diagnosis with no co-morbid condition.

The remaining patients are identified for intervention if they have two or more chronic conditions along with three or more of the following characteristics:

- Taking five or more medications
- Difficulty accessing health care services due to language barrier
- Low health literacy or other factors
- Lack of social support
- Mental health disorder
- Active drug use, homelessness, or lack of medical insurance

(Camden Coalition of Health Care Providers, 2013)

Qualified patients are then enrolled in either the Care Management Program or the Care Transitions Program. The Care Management Program is designed for individuals who have no source of primary care and have significant social and mental health issues. Individuals assigned to the Care Transitions Program usually have primary care and fewer or less severe social issues.

The care team, critical to the success of this model, uses a multidisciplinary approach. An RN, LPN, and CHW make up each team. The team conducts a case conference every morning, and team members have distinct roles and responsibilities. RNs provide the oversight and case management for patients. LPNs provide some of the in-home care and coordinate with the CHWs who are the most directly involved with the patients. While LPNs execute the clinical tasks of the care plan (e.g., medication reconciliation, creating methods to track symptoms, and vital signs), CHWs implement the social tasks of the care plan (e.g., obtaining legal identification, housing, insurance, etc.). CHWs are the "boots on the ground" going into patient homes and implementing the care plans, assuring that patients get to their provider's appointments — frequently going with them — and assuring that information is shared between providers.

For patients who are admitted to the hospital, an RN from the team engages patients at the bedside before discharge to determine if they would like assistance in avoiding future hospitalization. If the patient agrees to participate, the nurse interviews the patient regarding other factors that may contribute to readmission using a risk stratification form.

After discharge, the team conducts a home visit. During the visit, additional detailed information is gathered to help build the care plan that will guide the patient's care. The team engages with the patient to set health goals, which are based on the patient's desires and needs. Once the plan is established, the CHW works with the patient to follow up with health goals and coordination of the community resources. The CHW meets with the patient in the patient's home, accompanies the patient to provider appointments, and plays an active role in coordinating the patient's care. They do whatever is needed for each individual patient, whether it is shopping for healthy foods, cooking, or joining them in exercise. The CHWs are from the Camden community, and this helps build trust more quickly.

The Results. The dual goals of the Coalition are to improve care for the super-utilizers and dramatically bend the cost curve — and they are achieving these goals (Camden Coalition of health care Providers, 2013). Their efforts have led to clinical redesign of the care provided in their community, integrating the patient's care from the hospital to home to medical home. Their integration of roles led to more efficient and effective primary care. The Coalition has been actively involved in developing other programs to meet community needs, such as the Camden Citywide Diabetes Collaborative; Parenting and Pregnancy Partners (P3); and the Camden Guidance, Prevention, and Support (GPS) Program. The case management approach emphasizes personal relationships between patients and CHWs, cultural competency, and improved patient satisfaction. Community partners are critical to the success of these programs.

For more information, contact:

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6: CASE STUDIES 4:

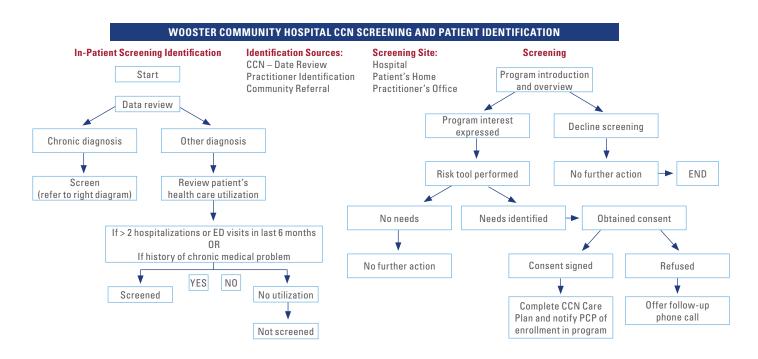


TOOLS AND TEMPLATES

HELPFUL RESOURCES DESIGNED TO HELP YOU IMPLEMENT AND MAINTAIN A CHW PROGRAM THAT MEETS THE NEEDS OF YOUR ORGANIZATION AND YOUR COMMUNITY

Patient screening tools, inclusion/exclusion criteria, documentation forms, and other data collection and tracking forms are necessary to manage a CHW program. The list below details many of the forms currently in use by the Community Care Network in Wooster, Ohio. The Community Care Network is a collaboration between Wooster Community Hospital and the College of Wooster. The program uses volunteer college undergraduates in the CHW role. The students complete a semester- long didactic and experiential program prior to interacting with clients and are overseen by a multidisciplinary group of professionals including a medical director, RN, dietician, social worker, pharmacists, mental health counselor, and an LPN. Funding for the program is provided by the hospital and the volunteer efforts of the students. **Several thumbnail illustrations of select tools are included below**.

Screening and Patient Identification Pathway. A flowchart identifying referral sources for patients and inclusion and exclusion criteria.

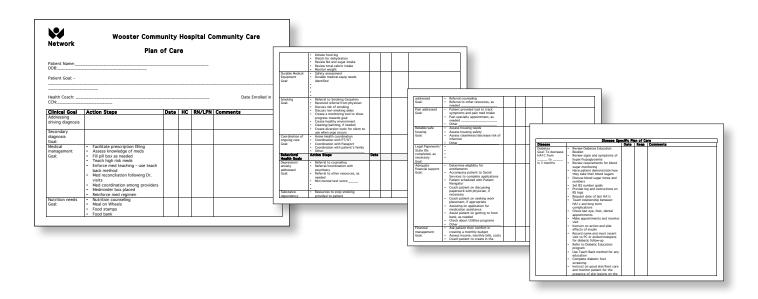


Screening Identification Tool. A document for screening clients for potential needs, issues, and appropriateness for the program. The tool details the inclusion and exclusion criteria and identifies needs (socioeconomic, housing, and social support) and areas for possible intervention (health conditions, medication compliance, mental health, and falls).

Supplemental Health Profile. A tool that includes more detail regarding a client's functional status and ADLs. After the patient is enrolled, this additional data helps the team, in conjunction with the client, determine the plan of care.

Medication Reconciliation Process and Medication List. A flowchart that details the medication reconciliation process for clients and a detailed medication listing.

Plan of Care. A detailed plan of care driven by clinical goals. The plan is established by the multidisciplinary team and driven by the goals of the client. The goals are broad based and include socioeconomic, medication management, behavioral health, nutritional, and disease specific drivers.



Equipment/Tools/Aids. A tracking form to identify needed durable medical equipment, referrals, and client aids needed and deployed in the home.

Activity Log. A form for clients to log their physical activity. The CHW reviews the log with the client.

Electronic House Call Alert Values. A tool to communicate at what value(s) (blood pressure, heart rate, pulse oximetry, weight, glucose, fever) the nurse should alert the client's primary care provider.

Personal Emergency Plan. A list of common symptoms and when the client should call the Care Network or call 911.

Supervisory Visit. A tool used to evaluate the CHW's performance during a visit to the client by the RN or LPN.

The tools can be accessed via Wooster Community Hospital's webpage or by contacting Alex Davis at adavis@ wchosp.org.

7: TOOLS AND TEMPLATES

The Coalition also graciously shared their CHW Job Description:



JOB DESCRIPTION (CAMDEN COALITION OF HEALTH CARE PROVIDERS) TITLE: CARE MANAGEMENT COMMUNITY HEALTH WORKER (CHW)

Job Description. The Community Health Worker will be an integral member of the Care Management multidisciplinary outreach team. Together with nurses, social workers, and AmeriCorps volunteers, the CHW will assist with care plan implementation, help develop care management strategies, and work with team members to provide linkages for the various health and social needs of patients. The team works in the field in a variety of Camden settings, including patient homes, medical day centers, homeless shelters, and the ED/inpatient floors of each city hospital.

Duties and Responsibilities. The primary responsibilities of this position include:

- Work under the direction of the RN Care Manager; determine plan for care management; coordinate care plan;
 and complete tasks as necessary to complete medical care plan goals
 - » Tasks may include, but are not limited to:
 - Language/medical translation
 - Scheduling medical appointments and transportation
 - Reminder/confirmation phone calls
 - Collecting vitals
 - Disease management, including symptom tracking and reporting, health education/prevention, and maintenance of patient's supplies and durable medical goods
 - Maintain outreach team/medical supplies inventory
 - Accompany patients to appointments as needed
 - Referrals to any additional services (e.g., DSME, nutritional support)
 - Act as peer support for enrolled patients, which includes advocacy as patients navigate the medical system and relationship building with individuals and their families
 - Enter and maintain electronic records, compile reports, and complete other program documentation in a timely manner (e.g., progress notes, incident reports, client track, letters, etc.); other administrative responsibilities as needed
 - Participate in interdisciplinary case conferences/team meetings
 - Coordinate with RN to report on patient progress and confer if intervention needs to be modified or discontinued
 - Play a consistent and active role in identifying project inefficiencies and finding collaborative solutions to the problems
 - Other duties and responsibilities as directed

Qualifications and Requirements.

- Current High School Diploma or GED required; Bilingual English/Spanish preferred
- Certified Medical Assistant (CMA) preferred; 1-2 years experience providing clinical services; experience in community/outpatient setting preferred
- Ability to effectively provide clinical care to socially and medically complex patients in a variety of nontraditional settings; experience in serving in poor, urban environments; familiarity with Camden is preferred
- Exceptional organizational and interpersonal skills, with attention to detail required; strong oral/written communication skills are a must
- Ability to work collaboratively in a team and manage multiple priorities, utilize effective time-management skills,
 and exercise sound administrative and clinical judgment
- Demonstrated ability to work well with people of various ages, backgrounds, ethnicities, and life experiences
- Requires the ability to travel to multiple office locations; valid driver's license and automobile that is insured
- No on-call responsibilities; no weekend hours required.

7: TOOLS AND TEMPLATES 4

RESOURCES

EDUCATION

An Action Guide on Community Health Workers (CHWs): Guidance for the CHW Workforce icer-review.org/wp-content/uploads/2014/01/CHW-Action-Guide.pdf

Community Health Workers in Minnesota: Bridging Barriers, Expanding Access, Improving Health https://www.issuelab.org/resource/community-health-workers-in-minnesota-bridging-barriers-expanding-access-improving-health.html

Examples of States with Established Community Health Worker Programs:

Colorado Coalition for the Medically Underserved: Community Health Workers Network Resources http://www.ccmu.org/our-work/community-initiatives/colorado-network-of-health-alliances/network-resources/community-health-workers/

The Minnesota Community Health Worker Alliance http://mnchwalliance.org/

New Mexico Community Health Workers Association
www.nmchwa.com

New York State Community Health Worker Initiative http://www.chwnetwork.org/

Center for Healthy Communities: Ohio Community Health Workers Association https://medicine.wright.edu/pediatrics/center-for-healthy-communities/ohio-community-health-workers-association

Washington State Health Department: Community Health Worker Training System http://www.doh.wa.gov/PublicHealthandHealth careProviders/PublicHealthSystemResourcesandServices/LocalHealthResourcesandTools/CommunityHealthWorkerTrainingSystem.aspx

WORKLOAD

Performance Management and Supervision Definitions:

Community Health Representative (CHR): Community-based health care providers who provide health promotion and disease prevention services in their communities and have completed an Indian Health Service (IHS) funded, tribally contracted/granted and directed program of training.

Community Health Worker (CHW): Is a health worker who is a trusted member of and/or has an unusually close understanding of the community served which enables the provision of information about health issues that affect the community and link individuals with the health and social services they need to achieve wellness.

Making the Connection: The Role of Community Health Workers in Health Homes https://www.healthmanagement.com/knowledge-share/briefs-reports/making-the-connection-the-role-of-community-health-workers-in-health-homes/

OUTCOMES

CHW Program Assessment Tools:

Rapid Assessment of Community Health Worker Programs in USAID Priority MCH Countries: Draft Tool for Field Testing

http://www.coregroup.org/storage/documents/meeting_reports/chw_assessment_tool_draftsept09.pdf

Centers for Disease Control and Prevention, Prevention: Community Health Worker Tool Kit https://www.cdc.gov/dhdsp/pubs/toolkits/chw-toolkit.htm

FINANCIAL REIMBURSEMENT

Minnesota Department of Human Services, Community Health Worker http://www.dhs.state.mn.us/main/idcplg?ldcService=GET_DYNAMIC_
CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16 140357

Cost-Benefit Analysis: A Primer for Community Health Workers https://apps.publichealth.arizona.edu/CHWToolkit/PDFs/FRAMEWOR/COSTBENE.PDF

TOOLS

1) Selected Toolkits

a) U.S. Focused Toolkits:

Community Health Workers Evidence-Based Models Toolbox, HRSA Office of Rural Health Policy http://www.dhs.state.mn.us/main/idcplg?ldcService=GET_DYNAMIC_
CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16_140357

Rural Assistance Center, Community Health Workers Toolkit https://www.ruralhealthinfo.org/toolkits/community-health-workers

Community Health Worker Model for Care Coordination

http://www.frontierus.org/wp-content/uploads/2012/01/FREP-Community Health Worker Care Coordination-2012.pdf

b) Global Focused Toolkits:

Community Health Worker Assessment and Improvement Matrix (CHW AIM): A Toolkit for Improving CHW Programs and Services

http://www.who.int/workforcealliance/knowledge/toolkit/54/en/

Partners In Health: Unit 7: Improving Outcomes with Community Health Workers https://www.pih.org/practitioner-resource/pih-program-management-guide/unit-7-improving-outcomes-with-community-health-workers

Partners In Health: Accompagnateur Training Guide http://www.pih.org/library/accompagnateur-training-guide

Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals http://www.who.int/workforcealliance/knowledge/resources/chwreport/en/index.html

c) CHW Program Assessment Tools:

Rapid Assessment of Community Health Worker Programs in USAID Priority MCH Countries https://coregroup.org/wp-content/uploads/2018/01/Rapid-Assessment-of-Community-Health-Worker-Programs-in-USAID-Priority-MCH-Countries-Draft-Tool-for-Field-Testing.pdf

Centers for Disease Control and Prevention (CDC): Community Health Worker Tool Kit https://www.cdc.gov/dhdsp/pubs/toolkits/chw-toolkit.htm

Monitoring and Accountability Platform — for National Governments and Global Partners in Developing, Implementing, and Managing CHW Programs

http://www.who.int/workforcealliance/knowledge/resources/monitoring_account_platform/en/

2) Selected CHW General Resources:

CDC, Division for Heart Disease and Stroke Prevention, Promoting Policy and Systems Change to Expand Employment of Community Health Workers

https://www.cdc.gov/dhdsp/pubs/chw_elearning.htm

The Minnesota Community Health Worker Alliance: Tools and Resources http://mnchwalliance.org/explore-the-field/tools-resources/

CHW Central: A Global Resource for and about Community Health Workers http://www.chwcentral.org/resources

3) Mobile Health (mHealth)

Mobile Health (mHealth) Approaches and Lessons for Increased Performance and Retention of Community Health Workers in Low- and Middle-Income Countries: A Review http://www.jmir.org/2013/1/e17/

Enhancing Community Health Worker Performance with Mobile Technology https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0065772

REFERENCES

Alvillar, M., Quinlan, J., Rush, C.H., & Dudley, D.J. (2011). Recommendations for developing and sustaining community health workers. *Journal of Health care for the Poor and Underserved*, 22, 745-750.

Abbatt, F. (2005). Scaling up health and education workers: Community Health Workers. London: DFID Health Systems Resource Centre.

Andrews, J.O., Felton, G., Wewers, M.E., & Heath, J. (2004). Use of community health workers in research with ethnic minority woman. *Journal of Nursing Scholarship*, 36, 358-3645.

American Public Health Association. (n.d.). *Definition of Community Health Worker*. Retrieved from http://www.apha.org/membergroups/sections/aphasections/chw/

Bang, A.T., Bang, R.A., Sontakke, P.G., & the SEARCH team. (1994). Management of Childhood pneumonia by traditional birth attendants. *Bulletin of the World Health Organisation*, 72(6), 897-905.

Braun, R., Catalani C., Wimbush, J., & Israelski, D. (2013). Community health workers and mobile technology: A systematic review of the literature. *PloS One*, 8(6), :e65772.

Camden Coalition of Health care Providers. (2014). Retrieved December 15, 2013, from http://www.camdenhealth.org/

Campbell, C. & Scott, K. (2011). Retreat from Alma Ata? The WHO's report on task shifting to community health workers for AIDS care in poor countries. *Global Public Health*, 6(2), 125-138.

Centers for Disease Control and Prevention. (2016a). *A summary of state community health worker laws.* Retrieved from http://www.cdc.gov/dhdsp/pubs/docs/CHW_State_Laws.pdf

Centers for Disease Control and Prevention. (2013b). *A Sustainability Planning Guide for Healthy Communities*. Retrieved from http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability_guide.pdf

Centers for Medicare and Medicaid Services. (2011, October). *Promotores de Salud.* Retreived from http://www.cdph.ca.gov/programs/cobbh/Documents/Promotores%20de%20Salud%20HHS%20(CMS%20).pdf

Cherrington, A., Ayala, G.X., Amick, H., Allison, J., Corbie-Smith, G., & Scarinci, I. (2008a). Implementing the community health worker model within diabetes management: challenges and lessons learned from programs across the United States. *The Diabetes Educator*, 34(5), 824-33. doi: 10.1177/0145721708323643.

Cherrington, A., Ayala, G.X., Amick, H., Scarinci, I., Allison, J., & Corbie-Smith, G. (2008b). Applying the community health worker model to diabetes management: Using mixed methods to assess implementation effectiveness. *Journal of Health Care for the Poor and Underserved*, 19, 1044-1059.

Cleary J, Eastling J, & Paul, V. (2010). Community health workers in Minnesota: bridging barriers, expanding access, improving health. Blue Cross and Blue Shield of Minnesota Foundation, MN.

Crigler L., Hill, K., Furth, R., & Bjerregaard, D. (2011). *Community health worker assessment and improvement matrix* (CHW AIM): a toolkit for improving community health worker programs and services. Bethesda, MD: University Research Co., LLC (URC).

Dower, C., Knox, M., Lindler, V., & O'Neill, E. (2006). *Advancing community health worker practice and utilization: the focus on financing.* San Francisco, CA: National Fund for Medical Education.

Heath, A.M. (1967). Health aides in health departments. *Public Health Reports*, 82, 608-614.

Institute for Clinical and Economic Review [ICER]. (2013a, May). Community health workers: A review of program evolution, evidence on effectiveness and value, and status of workforce development in New England. Boston, MA: The New England Comparative Effectiveness Public Advisory Council.

Institute for Clinical and Economic Review [ICER]. (2013b, September). *An action guide on community health workers* (CHWs): Guidance for organizations working with CHWs. Boston, MA: The New England Comparative Effectiveness Public Advisory Council.

Institute for Health care Improvement [IHI]. (2009). *Triple Aim Concept Design*. Retrieved from http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.aspx

Institute of Medicine [IOM]. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care.* Washington, DC: National Academies Press.

Jaskiewicz, W., & Tulenko, K. (2012). *Increasing community health worker productivity and effectiveness: A review of the influence of the work environment.* Human Resources for Health, 10(38).

Javanparast, S., Baum, F., Labonte, R., Sanders, D., Heidart, G., & Rezaie, S. (2011). A policy review of the community health worker program in Iran. *Journal of Public Health Policy*, 32, 263-276.

Lewin, S., Dick, J., Pond, P., Zwarenstein, M., Aja, G., Wyk, B. v., et al. (2005). Lay health workers in primary and community health care. The Cochrane Database of Systematic Reviews: John Wiley & Sons, Ltd.

Palazuelos, D., Ellis, K., Im, D.D., Peckarsky, M., Schwartz, D., Farmer, D.B., & Mitnick, C.D. (2013). 5-SPICE: The application of an original framework for community health worker program design, quality improvement and research agenda setting. *Global Health Action*, 6, 1-12.

Patel, A.R. & Nowalk, M.P. (2010). Expanding immunization coverage in rural India: A review of evidence for the role of community health workers. *Vaccine*, 28, 604-613.

Postma, J., Karr, C., & Kieckhefer, G. (2009). Community health workers and environmental interventions for children with asthma: a systematic review. *Journal of Asthma*, 46, 564-576.

Rich, M.L., Miller, A.C., Niyigena, P., Franke, M.F., Niyonzima, J.B., Socci, A., ... Binagwaho, A. (2012). Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment program in rural Rwanda. *Journal of Acquired Immune Deficiency Syndromes* (1999), 59(3), e35–42. doi:10.1097/ QAI.0b013e31824476c4

Rosenthal, E.L., Brownstein, J.N., Rush, C.H., Hirsch, G.R., Willaert, A.M., Scott, J.R., & Fox, D.J. (2010). Community health workers: part of the solution. *Health Affairs (Project Hope)*, 29(7), 1338–1342. doi:10.1377/hlthaff.2010.0081

Rosenthal, E.L., Wiggins, N., Brownstein, J.N., et al. (1998). Weaving the future: The final report of the National Community Health Advisor Study. Tucson, AZ: Mel and Enid Zuckerman College of Public Health, University of Arizona.

Rural Assistance Center (2013). *Community health workers toolkit.* Retrieved from http://www.raconline.org/communityhealth/chw/

Swider, S. (2002). Outcome effectiveness of community health workers: An integrative literature review. *Public Health Nursing*, 19(1), 11-20.

Texas Department of State Health Services. (n.d.). Who is a Promotor(a) or Community Health Worker? Retrieved from http://www.dshs.state.tx.us/mch/chw.shtm

- U.S. Bureau of Labor Statistics (2010). Standard occupational classification. Retrieved from http://www.bls.gov/soc/
- U.S. Bureau of Labor Statistics. (2014, May 5). Occupational outlook handbook. Retrieved from http://www.bls.gov/ooh/
- U.S. Department of Health and Human Services and Services Health Resources and Services Administration Bureau of Health Professions [HRSA]. (2007). *Community health worker national workforce study.* Retrieved from http://bhpr.hrsa.gov/healthworkforce/reports/chwstudy2007.pdf
- U.S. Department of Health and Human Services and Services Health Resources and Services Office of Rural Health Policy [HRSA] (2011). *Community health workers evidence-based models toolbox.* Washington, D.C.: U.S. Department of Health and Human Services Health Resources and Services Administration.
- U.S. House of Representatives. (2010). *Patient protection and affordable care act.*, P.L. 111-148, 23 March 2010. Retrieved from http://www.socialsecurity.gov/OP_Home/comp2/F111-148.html

University of Arizona. (n.d.). Cost-Benefit Analysis: *A Primer for Community Health Workers*. Retrieved from http://apps.publichealth.arizona.edu/chwtoolkit/PDFs/Framewor/costbene.pdf

Viswanathan, M., Kraschnewski, J., Nishikawa, B., Morgan, L.C., Thieda, P., Honeycutt, A., & Jonas, D. (2009). *Outcomes of community health worker interventions. Evidence Report/Technology Assessment No. 181* (Prepared by the RTI International—University of North Carolina Evidence-based Practice Center under Contract No. 290 2007 10056 I.) AHRQ Publication No. 09-E014. Rockville, MD: Agency for Health care Research and Quality.

Whitley, E.M., Everhart, R.M., & Wright, R.A. (2006). Measuring return on investment of outreach by community health workers. *Journal of Health Care for the Poor and Underserved,* 17 (1 Suppl), 6-15.

Wringe, A., Cataldo, F., Stevenson, N., & Fakoya, A. (2010). Delivering comprehensive home-based care programmes for HIV: a review of lessons learned and challenges ahead in the era of antiretroviral therapy. Health Policy Plan, 25(5), 352-62. doi: 10.1093/heapol/czq005.

Zahn, D., Matos, S., Martinez, J., Findley, S., Legendre, Y., Edwards, T., & Cardona, A. (2010). *The New York State Community Health Worker Initiative*. New York, New York: Columbia University Mailman School of Public Health.

BIBLIOGRAPHY

Brownstein, J.N., Andrews, T., Wall, H., Mukhtar, Q., & CDC Division for Heart Disease and Stroke (n.d.). Addressing chronic disease through community health workers: A policy and systems-level approach: A policy brief on community health workers. Retrieved from http://www.ncfh.org/?plugin=ecomm&content=item&sku=9153 32, 265-246.

Karamaga, A., Niyonzima, S., Yarbrough, C., Fleming, J., Amoroso, J., Mukherjee, J., ... Binagwaho, A. (2012). Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment program in rural Rwanda. Journal of Acquired Immune Deficiency Syndrome, 59, e35–e42.

Kenya, S., Chida, N., Symes, S., & Shor-Posner, G. (2011). Can community health workers improve adherence to highly active antiretroviral therapy in the USA? A review of the literature. HIV Medicine, 12 (9), 525–534. DOI: 10.1111/j.1468-1293.2011.00921.x.

Lawn, J.E., Kinney, M., Lee, A.C., Chopra, M., Donnay, F., Paul, V.K., ... Darmstadt, G.L. (2009). Reducing intrapartum-related deaths and disability: can the health system deliver? Int J Gynaecol Obstet., 107 (Suppl 1), S123-40, S140-2. doi: 10.1016/j.ijgo.2009.07.021.

Lemay, C.A., Ferguson, W.J., & Hargraves, J.L. (2012). Community health worker encounter forms: a tool to guide and document patient visits and worker performance. American Journal of Public Health, 102(7), e70–75. doi:10.2105/AJPH.2011.300416

Miller, A., Cunningham, M., & Ali, N. (2013). Bending the cost curve and improving quality of care in America's poorest city. Population Health Management, 16, S-17-s-19. doi:10.1089/pop.2013.0038

Minnesota Community Health Workers Alliance. (2013). Guide to CHW field. Retrieved from http://mnchwalliance.org/explore-the-field/evidence-2/

National Association of Community Health Centers. (2008). Building a primary care workforce for the 21st century. Access Transformed: http://www.nachc.org/client/documents/ACCESS%20Transformed%20full%20report.PDF

Wells, K.J., Luque, J.S., Miladinovic, B., et al. (2011). Do community health worker interventions improve rates of screening mammography in the United States? A systematic review. Cancer Epidemiology, Biomarkers & Prevention, 20(8), 1580-98.

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