Population-based approaches to health require the integration of public health practice and medical practice. Community health workers (CHWs) hold a unique understanding of how local communities function, and how the local resources, environment, and culture influence healthy lifestyles and affect health outcomes. Qualified CHWs can connect what happens inside a physician’s office and what happens in the communities where these patients live and work. This paper discusses the value of establishing a contingent of CHWs in Connecticut and how CHWs can improve access to health care, can improve quality of health care, can increase health care affordability, and ultimately, can facilitate better health outcomes in Connecticut’s most at risk populations.

Published Fall 2014

1 The Connecticut Department of Public Health supported the development of this paper with federal grant funding from the Centers for Disease Control and Prevention.
CHWs Defined

The American Public Health Association defines community health workers (CHWs) as:

Frontline public health workers who are trusted members of and/or have an unusually close understanding of the community served. This trusting relationship enables CHWs to serve as a liaison...between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. CHWs also build 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.

CHWs complement clinically-trained health care teams comprised of physicians, physician assistants, and nurses, among others. CHWs carry out a broad range of responsibilities that facilitate access to health care services and that support patients achieve goals in their care plans. Examples include:

- Outreach and community mobilization
- Health care and social service system navigation
- Community and cultural liaison services
- Facilitation of participatory research
- Case management and care coordination
- Home-based support service delivery
- Health promotion and coaching

CHWs play vital roles in improving population-based health outcomes across a variety of issues (see sidebar). In 2009, the U.S. Department of Labor created a distinct Standard Occupational Classification for CHWs (i.e., 21-094) who “assist individuals and communities to adopt healthy behaviors.”

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CHWs support service delivery across a broad range of health areas

- Nutrition
- Women’s health
- Pregnancy, prenatal care
- Infant and child health
- HIV/AIDS
- Diabetes
- Immunizations
- Sexual behavior
- Obesity
- Family planning
- High blood pressure
- Breastfeeding
- Tobacco control
- Physical activity
- Low birth weight and premature birth prevention
- Substance abuse
- Cancer
- Cardiovascular and heart disease
- Mental health
- Men’s health
- Children w/ special health care needs
- Asthma
- Violence
- Lead poisoning
- Stroke
- Emergency preparedness
- Alzheimer’s disease and dementia

Source: 2006 Community Health Worker National Education Collaborative Survey
CHWs - A Human Face

“Susie”, a 75 year old woman, entered the United States in 1995 from Liberia and lived with her son and his family. In 2000, Susie first accessed health care in the United States through a community health center. A CHW set up a medical appointment for her with a Primary Care Physician (PCP). The PCP diagnosed Susie with obesity, lower extremity edema, Diabetes II, an ulcerated stomach, hypertension, eye problems, high cholesterol and other health problems. The CHW supported Susie in implementing her care plan(s). And, the CHW worked weekly with Susie to resolve her housing issue, enroll her into HUSKY A, Temporary Assistance for Needy Families (TANF), and Supplemental Nutrition Assistance Program (SNAP).

In 2006, Susie suffered a severe stroke and was hospitalized. The CHW served as a liaison with a culturally diverse medical team, and helped Susie enter into a rehabilitation center conveniently located near her family and covered by her insurance. Later, the CHW obtained home health services to support a successful transition. The CHW reviewed Susie’s prescriptions and realized that four different doctors who were not communicating with each other prescribed Susie 20 different medications – six of which related to pain management.

The CHW coordinated the communication between Susie’s doctors and the pharmacist, and helped Susie organize her daily medicine routine through education and a weekly pill box organizer. The CHW worked with the pharmacist and insurance company to maintain a consistent medication regimen by reducing the introduction of alternative brands (e.g., generics). Consistency of medications produced higher medication adherence with Susie.

The CHW forged a strong partnership with Susie that significantly improved her quality of life and health outcomes. The local pharmacist now monitors Susie’s medication, meets with her on a monthly basis and communicates changes in medications. Susie lost 50 pounds since the 2006 stroke and stopped taking many of her pain medications. Susie was granted SNAP in April 2013 and she lives comfortably in senior housing. Susie now more effectively advocates for herself with her medical team. For example, Susie called her gastroenterologist to relay that her stomach did not hurt anymore, so the gastroenterologist discontinued the pain medications prescribed for her stomach.

CHWs and Medical Homes

The Centers for Medicare and Medicaid Services define six core services from designated health homes or medical homes:

1) Comprehensive care management
2) Care coordination and health promotion
3) Comprehensive transitional care from inpatient to other settings, including appropriate follow up
4) Individual and family support, which includes authorized representatives
5) Referral to community and social support services as warranted
6) Use of health information technology to link services

CHWs can play a supportive medical or non-medical role depending on the issue, their training, and the positioning of CHWs in the delivery system. The role of the CHW depends on the service delivery model.
Institute of Medicine values the role of CHWs

Over a decade ago, the Institute of Medicine published a report titled, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. The IOM recommended including CHWs as members of multidisciplinary teams to serve diverse populations and to reach underserved communities in the context of improving health care delivery, implementing prevention strategies, and enhancing risk reduction.

More recently, the IOM recommended that the Centers for Disease Control and Prevention Division for Heart Disease and Stroke Prevention facilitate state-level policy and system change to train CHWs who could reach large numbers of residents in diverse communities and promote behavioral and lifestyle changes.


Program Models

The U.S. Department of Health and Human Services offers several examples of CHW program models. Each of these models improves access to care, increases knowledge, prevents disease, and improves select health outcomes for target populations.

- **Promotora de Salud / Lay Health Worker Model.** CHWs activate their peers in the desired target population. These CHWs share social, cultural, and economic characteristics with individuals who they will help as a patient advocate, educator, mentor, outreach worker or translator.

- **Member of Multidisciplinary Team Model.** CHWs collaborate with medical professionals to deliver health services such as blood pressure screening, first aid care, medication counseling, and health screenings. The CHWs provide a range of other important services such as health education and patient activation.

- **Care Coordinator / Care Manager Model.** Individuals with complex health conditions including chronic diseases rely on CHWs to navigate systems of care. CHWs may provide information, schedule appointments, organize transportation, develop care plans, and monitor progress.

- **Health Educator Model.** CHWs teach individuals and groups about chronic disease prevention, healthy lifestyles, and healthy choices. **Outreach and Enrollment Agent Model.** CHWs identify, recruit, and enroll individuals into appropriate programs. The process may include assisting in eligibility screening or other assessment processes.

- **Community Organizer and Capacity Builder Model.** CHWs play a more directive and participatory role in addressing social determinants of health inequities. Activities may include needs assessment, public awareness, training, organizing, and policy change.

Each of these CHW program models exist in Connecticut. However, scaling up these models will require changes in health care reimbursement and delivery systems.
Evidence for Success

Substantial evidence exists to confirm that intervention models involving CHWs produce improved health outcomes. Examples span a wide range of health topics and populations:

- An analysis of 26 peer-reviewed publications, the majority involving randomized, controlled trials, concluded that peer counselors effectively improved rates of breastfeeding initiation, duration, and exclusivity as well as a significant decrease in the incidence of infant diarrhea and a significant increase in the duration of lactational amenorrhea.iii

- CHWs who met one-on-one with HIV patients were demonstrated better control of viral loads (<50 copies/ml) than their counterparts receiving usual care.iv

- CHWs, with a history of incarceration, provided newly released prisoners individual case management services for 12-months and facilitated access to primary care and community health resources. Patients in the CHW intervention group recorded lower rates of emergency service utilization compared to their formerly incarcerated counterparts with no CHW supports.v

- The Institute for Clinical and Economic Review offers an extensive review of program evaluation, evidence on effectiveness of value, and status of workforce development in New England.vi Of 50 studies involving CHWs, 32 reported positive findings in health outcomes and/or resource utilization across a wide range of health topics such as immunizations, cancer screening, cardiovascular disease, hypertension, asthma, and diabetes.

Evidence-based CHW program models lend themselves to core services offered by health homes or medical homes (see page 3 sidebar) and hold great promise to address health disparities.
Return on Investment

Research confirms that intervention models involving CHWs create cost savings and revenue enhancements across a wide range of health issues. For example:

- CHWs provided home visit services, appointment support, health literacy and education, advocacy, and facilitated access to equipment and supplies to 691 high-risk patients enrolled in the New Mexico Medicaid managed care plan. An evaluation of claims data for a sample of patients and a non-CHW comparison group showed significant reductions in Emergency Department use, hospitalization, and prescription medication producing an annual cost offset of $3,003 per patient relative to the non-CHW comparison group. Total program costs were estimated at $559 per patient per year (or $46.58 per month).vii

- CHWs in Seattle-King County provided a home environmental assessment, individual consultations related to patient-specific action plans, educational and social support, and facilitation to home environmental mitigation resources to 214 low-income, high-intensity children suffering from persistent asthma. Children in the CHW group produced a cost offset of $342 to $480 annual from reduced use of emergent or urgent care.viii

- CHWs working with behavioral health care patients in Denver increased patient utilization for primary care and specialty care and decreased utilization of urgent, inpatient, and outpatient care. The model produced a cost savings of $2.28 for every dollar.ix

- CHWs in Baltimore helped Medicaid diabetic patients reduce their emergency room visits by 38% and hospitalizations by 30% translating to a cost savings of $80,000 annually per CHW.x

- In Connecticut CHW’s working as part of cross-cultural teams with pharmacists provided Medication Therapy Management to 100 Limited English speaking persons who had experienced extreme trauma. The average person had 6.1 medication problems and the teams were able to solve 93% of the problems at a cost savings of $3,032 per person per year.

Economic impact studies will increase in the future with the advancement of electronic health records.
Expanding the CHW Workforce

Credentialing and certification requirements for CHWs vary by state (see sidebar). Qualified CHWs hold competencies such as: communication skills; interpersonal skills; service coordination skills; capacity building skills; advocacy skills; teaching skills; organization skills; and knowledge base on specific health issues.

National and statewide initiatives exist to expand the CHW workforce. For example, the Community Health Worker National Education Collaborative offers a national community of practice website to support the development of college responsive programs and to facilitate development of CHW educational resources, services, curricula, and promising practice delivery strategies. Visit www.chw-nec.org.

Connecticut can take advantage of CHW workforce efforts championed by other states including Massachusetts, New York, and Texas. These states have developed legislation, competency-based frameworks, curricula, certifications and credentials, career pathways from CHWs to health care occupations, training delivery systems, and professional organizations for CHWs.

In 2009, the US Department of Labor Bureau of Labor Statistics created a Standard Occupational Category (#21-1094) specifically for CHWs. The category creates a methodology to assess changes in the CHW workforce and adjust the capacity of the CHW education and training systems.

Connecticut’s Area Health Education Centers champion CHW efforts in Connecticut, and coordinate with other similar efforts underway in the Northeast Region. The Southwestern Connecticut AHEC recently published results from a survey of CHWs in Connecticut.
Recommendations

The CHW movement in Connecticut presents a distinct opportunity to reduce racial and ethnic health disparities. CHWs sharpen the health care delivery system’s focus on population health. CHWs help at-risk patients mitigate social and environmental determinants of health through grass-roots, community-based, and culturally competent services.

1. Educate stakeholders such as policy makers, health insurance industry leaders, physicians, and state and local agencies on the value of CHWs (see sidebar).

2. Inventory the existing CHW workforce. Document job titles, responsibilities, geographic reach, target population, language, areas of health expertise, and funding sources, among other considerations.

3. Support the CHW Association of Connecticut as an intermediary and professional learning community that promotes professional identity, accelerates policy change, and advances credentialing and professional development processes.

4. Establish a CHW education and training infrastructure that aligns with and creates maximum leverages with the workforce development and higher education systems.

5. Identify, leverage, and enact opportunities created through the Affordable Care Act and health policy change to develop sustainable financing for CHW positions and/or condition-specific intervention models supported by CHWs.²

6. Establish collaborative efforts among partners to conduct research studies on cost-effectiveness of CHWs.

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² On July 13th CMS ruled that Medicaid can cover preventive services that are recommended by physicians or other licensed practitioners, and gives the states latitude to determine who is appropriate to provide these services. Medicaid, either directly or through its managed care contractors, can pay for community-based interventions carried out by asthma educators, healthy homes specialists, or community health workers.
Connecticut CHW Survey Findings

The Yale School of Public Health and the Southwestern AHEC, Inc. published a recent study titled, “Funding Community Health Workers: Best Practices and the Way Forward.” The authors reviewed CHW literature, surveyed 43 CHWs and 97 CHW employers, and interviewed 10 health care industry leaders. Main themes from the survey included:

- CHWs commonly assist with access to medical and non-medical services, provide community advocacy and deliver case management and social support services.

- Nonprofit agencies and local health departments most commonly employ CHWs. CHWs work across diverse for profit and non-profit settings.

- CHWs face numerous challenges and obstacles such as lack of awareness about the role of CHWs, job instability, and lack of training resources.

- CHW employers believe CHWs should hold skills in areas such as advocacy, bilingual communication, organization, self-management, and interpersonal communication. CHWs should demonstrate knowledge about local communities, community resources, care coordination, and health care privacy protocols.

- CHW employers rely on temporary sources of funding.

Leaders in the health care industry recognized three important policy areas for leaders to address:

- Development of the professional identity of CHWs

- Integration of CHWs health care organizations or intervention models

- Identification of stable, sustainable funding mechanism for CHWs

The report confirms that a strong foundation exists in Connecticut to build a CHW movement.

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3 The CT-RI Public Health Training Center provided support for this project.
References


