



# Addressing Chronic Disease through Community Health Workers: A POLICY AND SYSTEMS-LEVEL APPROACH

A POLICY BRIEF ON COMMUNITY HEALTH WORKERS

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention





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## A POLICY BRIEF ON COMMUNITY HEALTH WORKERS

**T**his document provides guidance and resources for implementing recommendations to integrate community health workers (CHWs) into community-based efforts to prevent chronic disease. After providing general information on CHWs in the United States, it sets forth evidence demonstrating the value and impact of CHWs in preventing and managing a variety of chronic diseases, including heart disease and stroke, diabetes, and cancer. In addition, descriptions are offered of chronic disease programs that are engaging CHWs, examples of state legislative action are provided, recommendations are made for comprehensive policies to build capacity for an integrated and sustainable CHW workforce in the public health arena, and resources are described that can assist state health departments and others in making progress with CHWs.

### Background

In the United States, CHWs help us meet our national health goals by conducting community-level activities and interventions that promote health and prevent diseases and disability.

### Who Are CHWs?

CHWs are known by a variety of names, including community health worker, community health advisor, outreach worker, community health representative (CHR), promotora/promotora de salud (health promoter/promoters), patient navigator, navigator promotoras (navegadores para pacientes), peer counselor, lay health advisor, peer health advisor, and peer leader.

As expressed by the Community Health Workers section of the American Public Health Association:

CHWs are 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, link, or

intermediary 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.<sup>1</sup>

One of the most important features of programs that engage CHWs is that these women and men strengthen already existing ties with community networks.<sup>2,3</sup> This is not surprising, since CHWs are uniquely qualified as connectors (to the community) because they generally live in the communities where they work and understand the social context of community members' lives.<sup>4</sup>

In addition, CHWs educate health care providers and administrators about the community's health needs and the cultural relevancy of interventions by helping these providers and the managers of health care systems to build their cultural competence and strengthen communication

skills.<sup>3,5</sup> Using their unique position, skills, and an expanded knowledge base, CHWs can help reduce system costs for health care by linking patients to community resources and helping patients avoid unnecessary hospitalizations and other forms of more expensive care as they help improve outcomes for community members.<sup>3,4</sup>

An evidentiary report for the Centers for Medicare and Medicaid Services from Brandeis University on cancer prevention and treatment among minority populations states that “community health workers...can offer linguistic and cultural translation while helping beneficiaries get coverage, develop continuous relationships with a usual source of care, understand current risk behaviors, motivate them to engage in risk management, and receive support and encouragement for maintaining these efforts.”<sup>6</sup>

### **What Evidence Supports the Unique Role of CHWs as Health Brokers?**

The unique role of CHWs as culturally competent mediators (health brokers) between providers of health services and the members of diverse communities and the effectiveness of CHWs in promoting the use of primary and follow-up care for preventing and managing disease have been extensively documented and recognized for a variety of health care concerns, including asthma, hypertension, diabetes, cancer, immunizations, maternal and child health, nutrition, tuberculosis, and HIV and AIDS.<sup>5-24</sup>

Evidence supporting the involvement of CHWs in the prevention and control of chronic disease continues to grow:

- Integrating CHWs into multidisciplinary health teams has emerged as an effective strategy for improving the control of hypertension among high-risk populations.<sup>10,11</sup>
- Several studies have documented the impact that CHWs have in increasing the control of hypertension among urban African American men.<sup>10,11</sup>
- A recent review examined the effectiveness of CHWs in providing care for hypertension and noted improvements in keeping appointments, compliance with prescribed regimens, risk reduction, blood pressure control, and related mortality.<sup>11</sup>
- After 2 years, African American patients with diabetes who had been randomized to an integrated care group consisting of a CHW and nurse case manager had greater declines in A1C (glycosylated hemoglobin) values, cholesterol

triglycerides, and diastolic blood pressure than did a routine-care group or those led solely by CHWs or nurse case managers.<sup>4,23</sup>

- In reviewing 18 studies of CHWs involved in the care of patients with diabetes, Norris and colleagues found improved knowledge and lifestyle and self-management behaviors among participants as well as decreases in the use of the emergency department.<sup>19</sup>
- Interventions incorporating CHWs have been found to be effective for improving knowledge about cancer screening as well as screening outcomes for both cervical and breast cancer (mammography).<sup>24</sup> Interventions incorporating CHWs have shown improvements in asthma severity and in reduced hospitalizations.<sup>16-17</sup>

This evidence has been further strengthened by two Institute of Medicine reports. One of the reports, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, recommends including CHWs in multidisciplinary teams to better serve the diverse U.S. population and improve the health of underserved communities as part of “a strategy for improving health care delivery, implementing secondary prevention strategies, and enhancing risk reduction.”<sup>23</sup> The more recent report, *A Population-based Approach to Prevent and Control Hypertension* (published in 2010), recommends that the Centers for Disease Control and Prevention (CDC) Division for Heart Disease and Stroke Prevention work with state partners to bring about policy and systems changes that will result in trained CHWs “who would be deployed in high-risk communities to help support healthy living strategies that include a focus on hypertension.”<sup>25</sup>

### **What Is the Burden of Chronic Disease?**

#### **Hypertension**

Hypertension is a major risk factor for heart disease, stroke, and renal disease.<sup>26</sup> Data from the National Health and Nutrition Examination Survey (NHANES) for 2005 to 2008 found that 31% of U.S. adults aged 18 years or older were hypertensive (systolic blood pressure  $\geq 140$  mmHg or diastolic  $\geq 90$  mmHg). Among hypertensive adults, 70% were using antihypertensive medications, and 46% of those treated had their hypertension controlled.<sup>27</sup> NHANES data for 1999 to 2006 estimates that 30% of adults have prehypertension (blood



pressure  $\geq 120$ – $139/80$ – $89$  mmHg).<sup>28</sup> Not surprisingly, hypertension affects certain subpopulations more than others.<sup>27,28</sup> On average, African Americans have a higher prevalence of hypertension than do other racial/ethnic groups; they develop hypertension at an earlier age, die earlier from hypertension-related problems, and have a higher rate of hypertension-related complications than do whites.<sup>25</sup>

## Diabetes

Nearly 26 million people, or about 13.7% of the adult U.S. population, have diabetes, whether diagnosed or not, and another 79 million people have prediabetes, a condition that places people at increased risk of developing type 2 diabetes, heart disease, and stroke. In fact, among U.S. adults with diabetes, 67% have hypertension.<sup>29</sup> In the United States, the burden of diabetes is disproportionately borne by American Indians and Alaska Natives, African Americans, Hispanic or Latino Americans, and Asians/Pacific Islanders. The development of diabetes is known to reflect complex, reciprocal interactions between physiological and social determinants of health.<sup>30</sup>

## Cancer

According to *United States Cancer Statistics: 2006 Incidence and Mortality*, which tracks incidence for about 96% of the U.S. population and mortality for the entire country, in 2006 more than 559,000 Americans died of cancer and more than 1.37 million were diagnosed with that disease. Cancer does not affect all races and ethnicities equally, however; African Americans are more likely to die of cancer than members of any other racial or ethnic group. In 2006, the age-adjusted death rate for both sexes per 100,000 people for all cancers combined was 219 for African Americans, 180 for whites, 120 for American Indians/Alaska Natives, 119 for Hispanics, and 108 for Asians/Pacific Islanders.<sup>31</sup> In 2006, more than 660,000 U.S. women reported that they were told they had cancer, and nearly 270,000 American women died from cancer.

## What Are the Barriers to Controlling Chronic Disease?

There are numerous barriers to controlling chronic disease, including inadequate intensity of treatment and failure of providers to follow evidence-based guidelines,<sup>3,10,11,32–34</sup> lack of family support,<sup>33,34</sup> failure to adhere to treatment, which can be lifelong,<sup>33–37</sup> lack of support for self-management,<sup>10,37</sup> lack of access to care and being uninsured,<sup>10,37</sup> differences in

perceptions of health that are culturally based,<sup>35</sup> the complexity of treatment,<sup>12,38</sup> costs of transportation and other expenses,<sup>39</sup> and an insufficient focus in the United States on prevention and on support from social and health care systems.<sup>12,32</sup>

## How Can CHWs Support the Prevention and Control of Chronic Disease and Assist in Self-Management by Patients?



Clearly, CHWs can help overcome barriers to controlling chronic disease. Twelve years ago, the National Community Health Advisor Study, conducted by the University of Arizona and funded by the Annie E. Casey Foundation,<sup>40</sup> identified the core roles, competencies, and qualities of CHWs after contacting almost 400 of these workers. Seven core roles were identified:

- Bridging cultural mediation between communities and the health care system;
- Providing culturally appropriate and accessible health education and information, often by using popular education methods;
- Ensuring that people get the services they need;
- Providing informal counseling and social support;
- Advocating for individuals and communities;
- Providing direct services (such as basic first aid) and administering health screening tests; and
- Building individual and community capacity.<sup>41</sup>

In addition to these general roles, CHWs can provide support to multidisciplinary health care teams in the prevention and control of chronic disease through the following functions:

- Providing outreach to individuals in the community setting;
- Measuring and monitoring blood pressure;
- Educating patients and their families on the importance of lifestyle changes and on adherence to their medication regimens and recommended treatments, and finding ways to increase compliance with medications;
- Helping patients navigate health care systems (e.g., by providing assistance with enrollment, appointments, referrals,

and transportation to and from appointments; promoting continuity of health services; arranging for child care or rides and arranging for bilingual providers or translators);

- Providing social support by listening to the concerns of patients and their family members and helping them solve problems;
- Assessing how well a self-management plan is helping patients to meet their goals;
- Assisting patients in obtaining home health devices to support self-management; and
- Supporting individualized goal-setting.<sup>9,10,42</sup>

### Recognition of the CHW Workforce

The Patient Protection and Affordable Care Act of 2010 includes provisions relevant to CHWs that are to become effective during the next 4 years. Section 5313, Grants to Promote the Community Health Workforce, amends Part P of Title III of the Public Health Service Act (42 U.S.C. 280g et seq.) to authorize CDC in collaboration with the Secretary of Health and Human Services to award grants to “eligible entities to promote positive health behaviors and outcomes for populations in medically underserved communities through the use of community health workers” using evidence-based interventions to educate, guide, and provide outreach in community settings regarding health problems prevalent in medically underserved communities; effective strategies to promote positive health behaviors and discourage risky health behaviors; enrollment in health insurance; enrollment and referral to appropriate health care agencies; and maternal health and prenatal care.



The Act states that a CHW is “an individual who promotes 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; and g) by proactively

identifying and enrolling eligible individuals in Federal, State, and local private or nonprofit health and human services programs.” The evidence shows that CHWs are well positioned for success because they already serve in these roles.<sup>43</sup>

### Selected Examples of CDC Programs in Chronic Disease Promoting the Integration of CHWs into the Public Health Workforce

#### Division for Heart Disease and Stroke Prevention

A number of state Heart Disease and Stroke Prevention (HDSP) programs have been active in initiating training of CHWs or have promoted interventions by these workers to prevent and control chronic diseases. In California’s WISE-WOMAN (Well-Integrated Screening and Evaluation for Women Across the Nation) program, “Heart of the Family,” a lifestyle intervention offered by CHWs resulted in a significantly greater reduction in blood pressure in the intervention group than among those in the control group.<sup>44</sup>

#### Division for Diabetes Translation (DDT)

A number of state and territorial diabetes prevention and control programs (DPCPs) have initiated interventions by CHWs to prevent diabetes and its complications. In Rhode Island, for example, a DPCP has partnered with the Diabetes Multicultural Coalition, which trains CHWs to teach diabetes self-management to members of diverse populations. In Florida, a DPCP has partnered with statewide coalitions to train CHWs who are working with high-risk pregnant women by using the Road to Health Toolkit, while in Texas, a DPCP provides leadership in a CHW training and certification program. In Georgia, there is a partnership to establish interventions with promotores in faith-based settings, while in Micronesia, CHWs have led efforts to establish foot paths for safe walking. The U.S.-Mexico border DPCP research project is a good example of binational efforts and collaboration from both countries to determine the prevalence of diabetes, identify the risk factors, and develop a program for prevention and control of diabetes to respond to the needs of the border population. In phase 2 of this project, public health interventions focused on preventing and controlling diabetes along the border included promotores working with individuals with diabetes or at risk and their families. Recommendations from this research include incorporating CHWs/promotores to improve patient education and

follow-up and ensure adequate management of diabetes to prevent or delay complications.<sup>45</sup>

In addition, CHWs are being trained as lifestyle coaches to work with participants in diabetes prevention programs across the country. These programs, based on a collaboration among DDT, the YMCA, and the United Health Group, will guide participants through a 16-week curriculum to support lifestyle changes that can prevent or delay the onset of type 2 diabetes among people with prediabetes.<sup>4</sup>

### **Division of Cancer Prevention and Control (DCPC)**

Efforts at the state, territory, and tribal level also are including CHWs as part of an overall strategy to control cancer. In fact, DCPC reports that 35 state cancer control plans include references to CHWs, patient navigators, outreach workers, community health representatives, promotores, community health advisors, lay health educators, lay health advisors, or peer educators.

Since 1991, DCPC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) has provided screening and diagnostic exams for breast and cervical cancer to low-income women with little or no health insurance. In a variety of states, NBCCEDP grantees use the community health advisor/patient navigator model for targeted outreach, patient navigation, and case management. Examples include providing community-based education (Alabama), assisting with tracking and follow-up of women who have abnormal screens for either breast or cervical cancer (Georgia), navigating women to program services and providing outreach through the Witness Project's "Girlfriends Brigade" (Connecticut), and scheduling women for exams (Southeast Alaska Regional Health Consortium). As part of DCPC's National Comprehensive Cancer Control Program, the Vermont Cancer Survivor Network, with funding from the Vermont Department of Health and community foundations, developed a peer-to-peer support program for cancer survivors called Kindred Connections. In this program, CHWs who are cancer survivors provide support and encouragement to community members who have cancer. Kindred Connections has proven successful at meeting the complex needs of cancer survivors looking for support in rural Vermont.

In Texas, DCPC-funded research studies tested the effectiveness of an intervention using lay health workers to increase screening for breast and cervical cancer among low-income

Hispanic women. At follow-up, completion of screening was higher among women in the intervention group than in the control group for both mammography screening (40.8% vs. 29.9%;  $p < 0.05$ ) and Pap testing (39.5% vs. 23.6%;  $p < 0.05$ ).<sup>15</sup>

DCPC's Colorectal Cancer Control Program encourages patient navigation, and grantees use the model to reach low-income men and women aged 50–64 years who are underinsured or uninsured to assist patients with the screening process. Patient navigation was a key component of Louisiana's FIT Colon Program, a pilot initiative for screening colorectal cancer that was established through a partnership between the Louisiana Comprehensive Cancer Control program and state partners, with funding from the state legislature. In New York City, patient navigators at 18 hospitals educate patients about colon cancer and encourage them to get screening colonoscopies. With the help of the patient navigators, the hospitals have seen the patient no-show rate for colonoscopies drop more than 45%, while the number of screened adults jumped by 24% between 2003 and 2009.<sup>46</sup>

### **REACH U.S.**

REACH Across the U.S. (REACH U.S.) is a national, multilevel program that serves as the cornerstone of CDC's efforts to eliminate racial and ethnic disparities in health.



Communities participating in REACH U.S. develop action plans using the principles of the community-based participatory approach to identify evidence-based strategies that will affect all levels of the Socio-Ecological Model. Eighteen of the 40 REACH coalitions rely on CHWs as a grassroots empowerment strategy to reduce health inequities among various populations and to improve health outcomes. CHW services consist of not only education and disease and case management (for heart disease and stroke, diabetes, prenatal care, immunizations, breast and cervical cancer, diabetes, and asthma) but also the promotion of change in three areas: the social environment, systems, and policy (e.g., school wellness programs, access to healthy foods, and reimbursement for CHWs' services). Advocacy efforts by CHWs in Alabama resulted in the passage of House Bill 147, in 2009, which expands treatment through Medicaid reimbursement for eligible women diagnosed with breast and/or cervical cancer. As a result, coverage for breast and cervical cancer treatment has

increased for uninsured and underinsured women in Alabama, regardless of where they receive a diagnosis. Finally, the University of Alabama legacy grantee, My Brother's Keeper, Inc., is training and certifying 25 community health educators to address breast and cervical cancer in four African American communities.

From 2007 to 2010, CHW home visitors in the Children's Hospital of Boston Community Asthma Initiative (CAI) performed 206 home visits without an asthma nurse case manager and 59 visits with such a manager. A comparison of parental reports at 12 months and at pre-enrollment revealed significant reductions in any visits to the emergency department (reduction of 65%,  $p < 0.001$ ), hospitalizations (81%,  $p < 0.001$ ), missed school days (39%,  $p < 0.001$ ), and missed workdays for parents/guardians (49%,  $p < 0.001$ ) and an increase in having a current action plan for asthma (71%,  $p < 0.001$ ). Using outcomes from the CAI as evidence, the Office of Child Advocacy at Children's Hospital of Boston has worked with state legislators on an amendment to the state budget that would direct the Massachusetts Medicaid program to establish a bundled payment for the management of high-risk pediatric asthma patients. This payment would enable providers to deliver a set of evidence-based interventions, including home visits by CHWs. The language on asthma was included in the budget approved by both the state House of Representatives and state Senate and is awaiting final approval by the joint conference committee and then the governor.<sup>47</sup>

### **What Policy Actions Are States Taking to Strengthen the Role of CHWs and the Sustainability of Their Occupation?**

While several states have passed limited legislation on CHWs, especially in the area of occupational regulation, a narrow policy focus (e.g., occupational regulation) has had only a limited to modest impact.<sup>48,49</sup>

Two states in particular, however, Minnesota and Massachusetts, have taken comprehensive approaches to the development of policy, and their implementations of systems changes to build capacity for an integrated and sustainable CHW workforce can serve as models.<sup>48</sup>

#### **Minnesota**

The Minnesota Community Health Worker Alliance,<sup>50</sup> a stakeholder consortium that includes state agencies, government officials, academic institutions, nonprofit organizations,

health care providers, and CHWs, has worked collaboratively to develop a statewide standardized curriculum for CHWs that is based in core competencies, professional standards that define the roles of CHWs in the health care delivery system (scope of practice), and competencies related to protocols for reimbursing providers. In addition, the Alliance has laid the groundwork for ways to reimburse CHWs. Support from a diverse group of stakeholders, coupled with widespread recognition of the cost-effective care provided by CHWs, culminated in the development of state legislation in 2008 (State Statute 256B.0625.Subd 49 and 256D.03.Subd 4) that authorizes hourly reimbursement for CHWs.<sup>51</sup> Under the legislation, CHWs who have graduated from the standardized curriculum and received a certificate are eligible to enroll under the Minnesota Health Care Plans and can provide services—supervised by either a physician, advanced practice nurse, dentist, or public health nurse—that are billable to Medicaid. In 2009, additional legislation (HF599 SF890) was passed to allow for payment for CHW services through the CHW Medicaid reimbursement bill when they are working under the supervision of mental health professionals.<sup>51</sup> Finally, the Alliance is now working to restructure the payment system to include reimbursement from federally qualified health centers and is advocating for the inclusion of CHWs in health care reform and as a member of the Medical Home Model.

#### **Massachusetts**

Efforts to address health disparities in Massachusetts have increasingly relied on the work of CHWs to improve enrollment in health care programs and increase the use of health care among underserved groups. Long-time collaboration among the Massachusetts Department of Public Health, CHWs, community-based health care providers, and health policy advocates resulted in the formation of the Massachusetts Association of CHWs in 2000 and the inclusion of CHWs in Massachusetts health care reform (in Section 110, Chapter 58, the Acts of 2006).<sup>52</sup> Within the reform language, which was included as a provision for reducing health disparities, the Massachusetts Department of Public Health was charged with conducting a study of the CHW workforce and developing a legislative report with recommendations for increasing sustainability of that workforce within the state.<sup>53</sup> In addition, through the Massachusetts Association of CHWs, CHWs were able to secure a seat for themselves on the state's Public Health Council.<sup>48</sup> Since the study, CHWs have been included in the State CHW

Certification Act (H4130), which was introduced in June 2009. In January 2010, the Massachusetts Department of Public Health released the findings of the study in a report entitled *Community Health Workers in Massachusetts: Improving Health Care and Public Health*. The report showed strong evidence that the state’s nearly 3,000 CHWs have improved access to health care and the quality of that care, and it provides 34 recommendations for further integrating CHWs into health care and public health services in the state and sustaining their involvement in those areas.<sup>54</sup>

## Guidance to Stimulate Comprehensive Policy Change

### 1. Policy Development

State health departments should be aware that both Minnesota and Massachusetts took a multipronged, comprehensive approach towards incorporating CHWs into their states’

health care systems. With the exception of legislation dealing with research and evaluation, these states have implemented the legislation and actions listed in the box below. To support the integration of CHWs at the state level, state health departments can collaborate with a variety of partners to develop a comprehensive approach to developing policy for CHWs that includes the components delineated in the box.<sup>55</sup>

### 2. Forming Partnerships

Many internal partners within state health departments, including programs in heart disease and stroke, diabetes, cancer, asthma, maternal and child health, and HIV/AIDS, can collaborate with CHWs to build state capacity for implementing policy on these valuable health workers. Additional partners, such as health plans, insurers, health providers, CHW associations and leaders, community-based health agencies, organizations, and colleges can play important roles as well. To

Key Comprehensive Policies	Policy Components
Financing mechanisms for sustainable employment	<p>CHW services are:</p> <ul style="list-style-type: none"> <li>• reimbursable by public payers (e.g., Medicaid, Medicare, SCHIP) and private payers, including fee-for-service and managed care models</li> <li>• reimbursable in specific domains (e.g., federally qualified health centers, community health centers)</li> <li>• reimbursable to public health and to community-based organizations</li> <li>• reimbursable on levels that are commensurate with a living wage</li> </ul>
Workforce development	<p>CHW training:</p> <ul style="list-style-type: none"> <li>• allocates specific resources for the CHW workforce</li> <li>• focuses on core skills and competency-based education<sup>41</sup></li> <li>• includes core training and disease-specific training needed by CHWs for the jobs for which they are hired<sup>11</sup></li> <li>• includes continuing education to increase knowledge and improve skills and practices</li> <li>• includes programs for supervisors of CHWs as well as the CHWs themselves</li> </ul>
Occupational regulation	<p>The parameters of the CHW workforce:</p> <ul style="list-style-type: none"> <li>• develop competency-based standards for CHWs that are compatible with a set of “core competency skills” recognized statewide</li> <li>• include state-level standards for certification that are determined by practitioners (CHWs) and employers</li> <li>• include a defined “scope of practice”</li> <li>• recognize the CHW Standard Occupational Classification<sup>56</sup></li> </ul>
Standards/guidelines for publicly funded research and program evaluation on CHWs	<p>CHW research:</p> <ul style="list-style-type: none"> <li>• incorporates common metrics to improve its comparability and generalizability</li> <li>• incorporates program evaluation and community involvement</li> <li>• contributes to the evidence base<sup>57-61</sup></li> </ul>

foster an environment supportive of integrating CHWs at a systems level, state health departments and their partners may consider the following approaches:



- Educate advocates at the state and local levels on the beneficial outcomes for the public's health of integrating CHWs into the health care system and the necessary components for comprehensive policies that support such integration.
- Educate groups of health care providers (privately or publicly funded) on the roles that CHWs can play, how CHWs fit into the Medical Home Model, and how to engage community-based organizations that employ CHWs.<sup>55</sup>
- Partner with nonprofit agencies (e.g., area health education centers, community-based organizations that employ CHWs, and academic institutions (e.g., state and community colleges) to develop certification standards and provide training. These partners also can work together to develop strategies for training CHWs and their supervisors, and they can work on a plan for related research and evaluation.<sup>55</sup>
- Develop templates for memoranda of understanding on the engagement of CHWs that can be distributed for use among health care organizations, academic institutions, and community-based organizations.<sup>55</sup>
- Develop training or certification programs on managing blood pressure within state departments of health, like the CHW certification in blood pressure offered by the Maryland Department of Health.<sup>10</sup>
- Incorporate CHWs into the planning, implementation, and leadership of the processes described above.<sup>55</sup>

### **National CHW Associations**

**American Association of Community Health Workers**  
Durrell Fox, Co-Chair, [dfoxnehec@aol.com](mailto:dfoxnehec@aol.com)

**American Public Health Association CHW Section**  
<http://www.apha.org/membergroups/sections/aphasections/chw>  
Lisa Renee Holderby, Chair, [holderbylr@aol.com](mailto:holderbylr@aol.com)

**National Association of Community Health Representatives**  
<http://www.nachr.net>  
Cindy Norris, President, (502) 808-6245,  
[cynthia.norrisc@nachr.net](mailto:cynthia.norrisc@nachr.net)

### **State/Regional CHW Organizations**

#### **ARIZONA**

Arizona Community Health Outreach  
Workers Network  
<http://azchow.org>  
(520) 705-8861, [azchow.network@gmail.com](mailto:azchow.network@gmail.com)

#### **CALIFORNIA**

Community Health Worker/Promotoras Network  
[www.visionycompromiso.org](http://www.visionycompromiso.org)  
Maria Lemus, Executive Director, (510) 303-3444,  
[chwpromotoras@aol.com](mailto:chwpromotoras@aol.com) or [mholl67174@aol.com](mailto:mholl67174@aol.com)

#### **FLORIDA**

REACH-Workers—The Community Health Workers  
of Tampa Bay  
Michelle Dublin, Chair, (727) 588-4018,  
[michelle\\_dublin@doh.state.fl.us](mailto:michelle_dublin@doh.state.fl.us)

#### **GEORGIA**

Georgia Community Health Advisor Network  
Gail McCray, (404) 752-1645, [gmccray@msm.edu](mailto:gmccray@msm.edu)

#### **ILLINOIS**

Chicago CHW Local Network  
[www.healthconnectone.org](http://www.healthconnectone.org) or <http://hco.depaulccts.org>  
Laura Bahena, (312) 878-7015

#### **MARYLAND**

Community Outreach Workers Association of  
Maryland, Inc.  
Carol Payne, (410) 664-6949, [carol.b.payne@hud.gov](mailto:carol.b.payne@hud.gov)

#### **MASSACHUSETTS**

Massachusetts Association of Community  
Health Workers  
[www.machw.org](http://www.machw.org)  
Cindy Martin, Policy Director, (617) 524-6696 ext. 108,  
[cmartin@mphaweb.org](mailto:cmartin@mphaweb.org)  
Lisa Renee Holderby, [holderbylr@aol.com](mailto:holderbylr@aol.com)

## MICHIGAN

Michigan CHW Coalition  
Gracie Cadena, [graciela.cadena@spectrum-health.org](mailto:graciela.cadena@spectrum-health.org)

## MINNESOTA

Minnesota CHW Peer Network  
[www.wellshareinternational.org/chwpeernetwork.us](http://www.wellshareinternational.org/chwpeernetwork.us)  
Anita Buel, Chair, (612) 2933502,  
[anita.dchw@gmail.com](mailto:anita.dchw@gmail.com)  
Sophia London, Co-Chair, (612) 873-8215,  
[danderson@familytreeclinic.org](mailto:danderson@familytreeclinic.org)

## NEW JERSEY

The New Jersey CHW Institute supports the development of CHW groups  
Carol Wolff, (856) 963-2432 ext. 202,  
[wolff\\_c@Camden-AHEC.org](mailto:wolff_c@Camden-AHEC.org)

## NEW MEXICO

New Mexico Community Health Workers Association  
[www.nmchwa.com](http://www.nmchwa.com)  
Bette Jo Ciesielski, (505) 255-1227, [nmchwa@yahoo.com](mailto:nmchwa@yahoo.com)

## NEW YORK

Statewide: Community Health Worker Network of New York State  
<http://chwnetwork.org/id49.html>

New York City: Community Health Worker Network of NYC  
<http://chwnetwork.org>  
Sergio Matos, Executive Director, (212) 481-7667,  
[sergio@chwnetwork.org](mailto:sergio@chwnetwork.org)  
Romy Rodriguez, Chair, [romelia@chwnetwork.org](mailto:romelia@chwnetwork.org)

Community Health Workers Association of Rochester:  
[www.chwrochesterny.org](http://www.chwrochesterny.org)  
Glenda Blanco, Chair, (585) 922-3507,  
[glenda.blanco@rochestergeneral.org](mailto:glenda.blanco@rochestergeneral.org)

## OHIO

Ohio Community Health Worker Association  
[www.med.wright.edu/CHC/programs/ochwa.html](http://www.med.wright.edu/CHC/programs/ochwa.html)  
Jewel Bell, President, (513)464-8404, [jewel.bell@att.net](mailto:jewel.bell@att.net)

## OREGON

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### 3. Evaluation

State health departments and their partners can look at effects on multiple levels when evaluating the success of initiatives involving CHWs:

- Individuals and families;
- Community health workers;
- Program performance; and
- Community and systems changes.<sup>61</sup>

For more information and valid tools for evaluating initiatives involving CHWs, including a guide to cost-benefit analysis, forms for needs assessment, and appraisals of health status, visit the University of Arizona's Evaluating CHA Services<sup>60</sup> at [www.rho.arizona.edu/Publications/CAH.aspx](http://www.rho.arizona.edu/Publications/CAH.aspx) and the CHW Evaluation Toolkit<sup>61</sup> at <https://apps.publichealth.arizona.edu/CHWtoolkit>.

### 4. Training, Capacity Building, Policy, and Integration Resources

The tools below are compatible training companions that have been used by state partners in health care, academic, work-site, and community-based settings.

## Resources for Training and Capacity Building

### *Community Health Worker's Heart Disease and Stroke Prevention Sourcebook: A Training Manual for Preventing Heart Disease and Stroke*

The Sourcebook serves as a curriculum for trainers and as a reference for CHWs. It can be used to train CHWs in risk management and the prevention of heart disease and stroke, with a total of 15 chapters on high blood pressure, high cholesterol, depression, heart attack, stroke, heart failure, cardiovascular health in adolescents and children, and other subjects. Written in plain language, the Sourcebook requires no formal training or instruction and includes a section on how to use this reference. Available at: [www.cdc.gov/dhdsp/programs/nhdsp\\_program/chw\\_sourcebook/pdfs/sourcebook.pdf](http://www.cdc.gov/dhdsp/programs/nhdsp_program/chw_sourcebook/pdfs/sourcebook.pdf). For more information, contact Nell Brownstein at [jnb1@cdc.gov](mailto:jnb1@cdc.gov).

Some examples of the Sourcebook in action:

- - In Minnesota, the Healthcare Education Industry Partnership adopted the CHW Sourcebook as part of the standardized, statewide CHW training curriculum; it also is being used by the state health department's DPCP and the Mayo Clinic to train CHWs.
- - The Sourcebook has been a key resource in a program designed to train community health promoters in Detroit, Michigan.
- - The University of Southern Mississippi used the Sourcebook to educate community health advisors about heart disease and stroke prevention throughout the Mississippi Delta.
- - Wyoming's HDSP program provided copies of the Sourcebook to its 18 cardiac rehabilitation sites throughout the state; clinics, such as the one located in Torrington, regularly use the Sourcebook to educate their patients.
- - In South Carolina, the Center for Senior Hypertension, Palmetto Health, uses the Sourcebook to educate patients.
- - Colorado has used the Sourcebook to train HDSP program staff, health department chronic disease staff, the state cardiovascular disease coalition, patient navigators, and CHWs.
- - In Ohio, the Center for Healthy Communities, which includes Wright State University and Sinclair Community

College, integrated the Sourcebook into its CHW training curriculum.

- - In Florida, the Jefferson County Health Department has used the Sourcebook in its heart disease and stroke prevention efforts.

### *Manual de Consulta para los Trabajadores de salud Comunitaria: Una herramienta para la prevención de cardiopatías y derrames cerebrales (Sourcebook for Community Health Workers: A Tool for Preventing Heart Disease and Stroke)*

This publication is the Spanish version of the Sourcebook listed above and has been pilot tested with Hispanic CHWs. It is available in hard copy and will be on the DHDSP Web site in the future.

### *Como Controlar Su Hipertension (How to Control Your Hypertension)*

This Spanish photo novella is about a family trying to help the father control his high blood pressure through diet, exercise, and prescribed medications. The photo novella also contains information and learning activities to help anyone prevent or manage high blood pressure. Available at: [https://xfiles.uth.tmc.edu/Users/hbalcazar/novellaespanol.pdf?ticket=t\\_BTd1XO6o](https://xfiles.uth.tmc.edu/Users/hbalcazar/novellaespanol.pdf?ticket=t_BTd1XO6o).

### *Honoring the Gift of Heart Health: A Heart Health Educator's Manual for American Indians; Honoring the Gift of Heart Health: A Heart Health Educator's Manual for Alaska Natives*

These culturally appropriate, user-friendly, 10-lesson courses provide heart-health education for the American Indian/Alaska Native communities. They are filled with skill-building activities, reproducible handouts, and idea starters. Appendices cover activities for training heart health educators to implement the programs, and American Indian and Alaska Native families' journeys to heart health are told with heart-healthy recipes for each family member's favorite foods. Available at: [www.nhlbi.nih.gov/health/healthdisp/an.htm](http://www.nhlbi.nih.gov/health/healthdisp/an.htm).

### *Your Heart, Your Life: A Lay Health Educator's Manual for the Hispanic Community*

This manual is designed to help promotores teach an 11-lesson course on heart health education specifically created for the Latino community. Lessons provide information for understanding, skill building, self-assessment, and goal-setting for healthy lifestyle changes. It includes culturally appropriate teaching scripts, learning activities, and

reproducible handouts. Interactive activities use telenovelas, photonovelas, role play, problem-solving, and discussion. Latino role models and family contexts appear throughout. It is available in Spanish and English. Healthy Hearts, Healthy Homes booklets are available on various topics. Available at: [www.nhlbi.nih.gov/health/healthdisp/lat.htm](http://www.nhlbi.nih.gov/health/healthdisp/lat.htm).

### ***With Every Heartbeat Is Life: A Community Health Worker's Manual for African Americans***

This educator's manual contains culturally competent and user-friendly information on multiple risk factors for cardiovascular disease and was created specifically for the African American community. It is complete with activities, ideas for group activities, and reproducible handouts. Available at: [www.nhlbi.nih.gov/health/healthdisp/aa.htm](http://www.nhlbi.nih.gov/health/healthdisp/aa.htm).

### ***Healthy Heart, Healthy Family: A Community Health Worker's Manual for the Filipino Community***

This manual, which is designed for community health educators and outreach organizations, provides tips and checklists on how to organize, market, implement, and evaluate a community-based program in any setting. Included in the guide are handouts, a 30-minute slide presentation, and questions for discussion on heart disease, its risk factors, and how to prevent it. Available at: [www.nhlbi.nih.gov/health/healthdisp/aapi.htm](http://www.nhlbi.nih.gov/health/healthdisp/aapi.htm).

### **The In-Between People: Community Health Workers in the Circle of Care<sup>20</sup>**

This is dynamic, educational DVD (22 minutes) shares first-hand accounts of the integral roles that CHWs serve in the Native American and Latino communities. Information and resources for training, education, research, and evaluation (for CHWs) also are included. Available at: [www.cdc.gov/diabetes/projects/diabetes-wellness.htm](http://www.cdc.gov/diabetes/projects/diabetes-wellness.htm).

### **The Native Diabetes Wellness Program of DDT**

This program honors the hundreds of community health representatives (CHRs) who serve their tribes by awarding them an anniversary poster by the artist Sam English, entitled Standing Tall: Honoring Community Health Representatives: 1968–2008. Free posters are available to CHRs, CHR programs, and other CHWs. The program also offers the Eagle Books, a series of stories for children, and the DVD The In-Between People: Community Health Workers in the Circle of Care. The posters and Eagle Books are available at [www.cdc.gov/diabetes/projects/diabetes-wellness.htm](http://www.cdc.gov/diabetes/projects/diabetes-wellness.htm). For the DVD, contact Dawn Satterfield at [dxs9@cdc.gov](mailto:dxs9@cdc.gov).

### **The Road to Health Toolkit**

This resource provides community health workers/promotores de salud, nurses, health educators, and dietitians with interactive tools that can be used to counsel and motivate those at high risk for type 2 diabetes. The tools will help these persons reduce their risk for this disease by encouraging healthy eating, increased physical activity, and moderate weight loss for those who are overweight. The toolkit provides materials to start a community outreach program reinforcing the message that type 2 diabetes can be delayed or prevented. Available at: <http://ndep.nih.gov/whats-new/posting.aspx?id=32>. For more information, contact Betsy Rodriguez at [bjr6@cdc.gov](mailto:bjr6@cdc.gov).

### ***Handbook for Enhancing Community Health Worker Programs: Guidance for the National Breast and Cervical Cancer Early Detection Program Part I***

This handbook synthesizes the most current information available for developing and managing effective programs for CHWs. Key components of effective CHW programs are provided, and action templates to develop tools for applying what is learned are included. Upon completing this manual, readers will have built skills in community assessment; program planning; recruiting, training, managing, and maintaining CHWs; and evaluating CHW programs. Available at: [www.cdc.gov/cancer/nbccedp/training/community.htm](http://www.cdc.gov/cancer/nbccedp/training/community.htm).

### ***Breast and Cervical Cancer Messages for Community Health Worker Programs: A Training Packet Part 2***

This packet provides an introduction to interactive methods for training CHWs, and it offers three lesson plans designed to train CHWs to include messages about breast and cervical cancer in their work. The lesson plans are: a) key facts about finding breast and cervical cancer early, b) barriers to screening for breast and cervical cancer, and c) encouraging women to get screened for these two types of cancer. Resources for trainers, handouts of additional information for participants, and transparencies also are contained in the packet. Available at: [www.cdc.gov/cancer/nbccedp/training/community.htm](http://www.cdc.gov/cancer/nbccedp/training/community.htm).

### **The Minnesota Health Worker Alliance**

The Alliance's curriculum is based on the competencies required for the scope of practice of CHWs. In addition, it incorporates an internship that provides an opportunity for CHW students to apply and integrate fully what they have

learned and to ensure that they can make an effective transition to the CHW role. Available at: [www.mnchwalliance.org](http://www.mnchwalliance.org). Contact Joan Cleary, (612) 250-0902, [Joanlcleary@gmail.com](mailto:Joanlcleary@gmail.com).

## Resources for Policy

### APHA Resolution Supporting CHWs. 2010.

This updated policy statement by the American Public Health Association includes definitions of CHWs, their roles, training and certification, impact on health outcomes, and integration in the health care system. It also has recommendations for public health, policy makers, health care advocates, and other interested persons. Available at: [www.apha.org/advocacy/policy/policysearch/default.htm?id=1393](http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1393).

### Goodwin K, Tobler L. Community Health Workers: Expanding the Scope of the Health Care Delivery System. 2008.

This legislative brief covers initiatives by various states in the areas of policy and legislation. Available at: [www.ncsl.org/print/health/CHWBrief.pdf](http://www.ncsl.org/print/health/CHWBrief.pdf).

### Ro MJ, Treadwell HM, Northridge M. Community Health Workers and Community Voices: Promoting Good Health. 2003.

This report highlights the roles and functions of CHWs, what is effective, and the challenges and policy options for the expansion of CHW programs. Available at: [www.communityvoices.org/Uploads/CHW\\_FINAL\\_00108\\_00042.pdf](http://www.communityvoices.org/Uploads/CHW_FINAL_00108_00042.pdf).

### Community Health Workers in Massachusetts: Improving Health Care and Public Health. January 2010.

This Web site has a wealth of information on comprehensive policy changes and legislation. For example, it has a resource Web page that links to key national CHW reports and publications related to workforce, financing, credentialing, research, health disparities, national CHW organizations, and state resources. Available at: [www.mass.gov/dph/communityhealthworkers](http://www.mass.gov/dph/communityhealthworkers).

### Minnesota Health Worker Alliance Web Site

This Web site contains many tools for both CHWs and their employers, and it lists current work by the Alliance in the areas of workforce, policy, research, education, and the Minnesota CHW Association. It also lists state legislation, partners, and employers, and it provides information on how CHWs can enroll as Medicaid providers. Available at: [www.mnchwalliance.org](http://www.mnchwalliance.org).

### Dower C, Know M, Lindler C, O'Neil E. Advancing Community Health Worker Practice and Utilization: The Focus on Financing. San Francisco, CA: National Fund for Medical Education; 2006.

The focus of this report, which identifies sustainable financing mechanisms for CHWs, is on existing and emerging funding, reimbursement, and payment policies for CHWs. Available at: [http://futurehealth.ucsf.edu/Content/29/2006-12\\_Advancing\\_Community\\_Health\\_Worker\\_Practice\\_and\\_Utilization\\_The\\_Focus\\_on\\_Financing.pdf](http://futurehealth.ucsf.edu/Content/29/2006-12_Advancing_Community_Health_Worker_Practice_and_Utilization_The_Focus_on_Financing.pdf).

### Joshu CE, Rangel L, Garcia O, Brownson CA, O'Toole ML. Integration of a promotora-led self-management program into a system of care. *Diabetes Educ* 2007;33 (Suppl 6):151S–158S.

This publication describes the integration of promotores into a Federally Qualified Health Center to support patient self-management strategies and evaluates the impact of this program on metabolic control. Available at: [http://tde.sagepub.com/cgi/content/abstract/33/Supplement\\_6/151S](http://tde.sagepub.com/cgi/content/abstract/33/Supplement_6/151S).

## Resources for Integration

### A Sustainable Model of Diabetes Self-Management Education/Training Involves a Multi-Level Team That Can Include Community Health Workers

This paper is designed to help diabetes educators understand how to meet the ever-increasing needs of people with diabetes while ensuring the future viability of their own program in diabetes education by expanding their educational team. Building upon the AADE (American Association of Diabetes Educators) Guidelines and Competencies, the paper offers practical ways to involve CHWs on the diabetes educational team. Scenarios present sample concepts as well as examples from real-world situations, focusing on specific activities in diabetes self-management education or training that involve CHWs and relate to behavior change. Available at: [www.diabeteseducator.org/export/sites/aade/\\_resources/pdf/research/Community\\_Health\\_Workers\\_White\\_Paper.pdf](http://www.diabeteseducator.org/export/sites/aade/_resources/pdf/research/Community_Health_Workers_White_Paper.pdf).

### Guide to Integrating Community Health Workers into Health Disparities Collaboratives

Migrant Clinicians Network and Migrant Health Promotion have developed a new resource that is specifically tailored to the needs and objectives of teams participating in the Health Disparities Collaboratives. This document should

help participants to maximize the benefits of integrating CHWs. The first section of the document is tailored to each Collaborative topic with suggestions for how CHWs can promote significant outcomes within a variety of measures. The second section includes a grid that describes roles for CHWs in five of the six components of the Chronic Care Model. Available at: [http://migranthealth.org/index.php?option=com\\_content&view=article&id=104&fotype=category&Itemid=6](http://migranthealth.org/index.php?option=com_content&view=article&id=104&fotype=category&Itemid=6) and [http://migranthealth.org/index.php?option=com\\_content&view=article&id=104&fotype=category&Itemid=6&facion=view&fkey=12801721614c4de08166b062.7356896](http://migranthealth.org/index.php?option=com_content&view=article&id=104&fotype=category&Itemid=6&facion=view&fkey=12801721614c4de08166b062.7356896).

## Summary

CHWs can play an important role in a variety of populations, especially those that have disparities in health, in facilitating the prevention and control of chronic diseases. State Heart Disease and Stroke Prevention Programs, WISEWOMAN, Diabetes Prevention and Control, REACH US, Cancer Prevention and Control, and other programs should consider partnering with groups or programs around the United States to facilitate the inclusion of CHWs as sustainable members of health care teams. Various guidance and resource documents exist to promote this effort.

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