



Community Health Workers in Massachusetts

IMPROVING HEALTH CARE AND PUBLIC HEALTH

**Community Health Workers in Massachusetts:
Improving Health Care and Public Health**

**Report of the Massachusetts Department of Public Health
Community Health Worker Advisory Council**



**Deval Patrick, Governor
JudyAnn Bigby, MD, Secretary of Health and Human Services
John Auerbach, Commissioner of Public Health**

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PREFACE

As specialists in outreach, education, direct services, and advocacy for some of the state's most vulnerable residents, community health workers (CHWs) play key roles in our health care and public health systems. For over fifteen years, the Massachusetts Department of Public Health (DPH) has been a leader in promoting CHWs as an employer and funding agency, and through policy initiatives. The CHW workforce survey that DPH published in 2005 provided a unified definition of CHWs and has served as a resource in national efforts for workforce development. Through our sponsorship of the annual Ounce of Prevention Conference, DPH also provided the forum through which Massachusetts CHWs united to form one of the first CHW-led professional organizations, the Massachusetts Association of Community Health Workers (MACHW). MACHW has had a major impact on policy development for CHWs here and across the nation.

DPH is proud of this legacy, and we welcomed the legislature's charge to conduct a study of the use, funding, and impacts of CHWs in Massachusetts. That charge was included in the landmark 2006 Massachusetts health care reform law. Section 110 of Chapter 58 of the Acts of 2006 required the DPH study, including recommendations on creating a sustainable CHW program in Massachusetts. It was no accident that the provision was adopted as part of health care reform. CHW advocates worked closely with legislative leaders on the bill.

When the Patrick-Murray administration took office, DPH had yet to take action on the requirements of Section 110. Recognizing its value for the implementation of health care reform, we started working on the CHW study within weeks of my assuming responsibility as DPH commissioner in the spring of 2007. The first step was to compose the CHW Advisory Council authorized in Chapter 58. We invited representatives not only of organizations named in the legislation but also from additional stakeholders.

With some 40 members, the CHW Advisory Council worked tirelessly over the course of more than a year to produce the following report. They applied the highest standards of research and analysis and produced a set of recommendations that exceeded the requirements set by the legislature. In addition to recommendations for the legislature, the Advisory Council developed a broad set of ideas and proposals for the administration, health care providers, payers, training organizations, private sector employers, and foundations.

We are indebted to the CHW Advisory Council for its thorough research, far reaching vision, identification of best practices, and creativity in thinking "outside the box." This document will make a nationally significant contribution to the growing literature on CHW practice. DPH has already received numerous inquiries about the report from researchers, consultants, professional organizations, and advocates who are awaiting its release. We thank the members of the CHW Advisory Council for their generous devotion and exceptional work.

Unfortunately, Advisory Council members finished their efforts just as the national economy accelerated its tailspin into an historic recession. At the time when we would have preferred to release the report, we were engaged in the first of several rounds of deep and painful budget cuts that would be required to help balance the state budget. Over the past year, Executive Office of Health and Human Services (EOHHS) programs have been cut by over \$351 million, excluding MassHealth, the state Medicaid program.

As it became apparent that we would not have adequate resources to consider implementing many of the recommendations in this report, we decided that it would be valuable to go back to the research literature. We turned again to CHW Advisory Council members and asked them to cull out more specific findings from emerging studies that might help guide implementation strategies. A small, dedicated team of DPH staff and Advisory Council researchers reconvened earlier this year and identified over a dozen new studies, which they examined in detail. Their work resulted in a substantial research update to complement the main report of the CHW Advisory Council. While it is incorporated here as an appendix, it could stand alone as a valuable contribution to the CHW workforce literature.

The research update summarizes a growing body of studies that use rigorous scientific methods to look at CHW impacts. The new findings confirm and elaborate a critical theme of the Advisory Council report—CHWs play unique and valuable roles in increasing access to health care, decreasing racial and ethnic health disparities, improving cultural competency and quality of care, and controlling health system costs. CHWs are critical to the success of health care reform at the state and national levels. DPH is committed to doing all that we can to promote workforce development for and utilization of community health workers.

We are in a period of rapid advance in the state of knowledge about CHW practice and effectiveness. As even more studies are published utilizing advanced evaluation methods, it is likely that we will continue to refine our understanding of the roles CHWs can play in our rapidly changing health care and public health systems. It is also important to note that CHWs practice outside of the direct health arena, working in public housing and other settings where they help vulnerable community members address a wide array of social conditions that strongly influence health outcomes.

In light of the continued pressures of economic recession, and as we brace for the impacts of additional state budget cuts to vital health and human service programs, it is unfortunately necessary to state what may perhaps be obvious as we release a set of recommendations crafted last year by the CHW Advisory Council: we do not have the resources to implement many of the creative ideas that were offered before it was clear just how damaging the recession would be to state revenues.

The enduring value of the Advisory Council's contribution is the broad scope of its findings and recommendations. The report includes a total of 34 recommendations organized under four major categories—professional identity, workforce development, financing, and infrastructure development. There are 19 financing recommendations alone, directed not only to government, but also to private sector providers, payers, and philanthropies.

The report offers more than a time capsule of innovative thinking. It offers a direction, a road map of where we should be headed. The Advisory Council envisioned a multi-sector partnership coordinated by the administration and supported by the legislature, employers, insurers, educators, advocates, and CHWs alike. As the administration releases this report, we want to identify priorities for implementing recommendations that fall within our locus of responsibility and control. If the report offers a road map, this is the route that seems most open for progress given the current economic environment:

First, DPH concurs with the Advisory Council's emphasis on the importance of workforce credentialing for CHWs. All stakeholders on the Council agreed that we must promote a unified definition of CHW core competencies, define a common scope of practice, and establish a publicly sanctioned credential for CHWs. Toward this end, the DPH Division of Health Professions Licensure worked closely with CHW advocates on drafting enabling language to create a board of certification for CHWs, as proposed in the report (recommendation 2.6). This language has been incorporated into H.4130, currently pending in the legislature.

In the Advisory Council, representatives of public and private insurers emphasized the importance of establishing a reliable basis for confidence about CHW workforce capacity and qualifications. Some payers advocated CHW certification as a prerequisite for considering implementation of any of the Council's financing recommendations. Establishing a board of CHW certification can be established without net cost to the Commonwealth by using existing professional licensure trust funds for start-up costs and then reimbursing the trust funds with CHW licensing fees that advocates have agreed would be affordable for CHWs. Licensing fees, likewise, will make operations of the board of CHW certification self-sustaining. Passage of H.4130, An Act to Establish a Board of Certification for Community Health Workers, is the administration's top priority for integrating CHWs into the health care workforce.

Second, DPH will continue to provide leadership within state government for CHW workforce development and utilization. The CHW Advisory Council proposed that CHW initiatives be coordinated under the auspices of a new Office of Health Equity at EOHHS (recommendation 4.1) and that EOHHS provide staff support for quarterly meetings of a new CHW Advisory Council (recommendation 4.2). Unfortunately, because no funds have been allocated by the legislature for such work, implementing these recommendations is not currently possible. The administration concurs on the value of developing inter-agency policy and cooperation to promote CHW workforce development and utilization not only in the health system but also in other sectors of government involved with social determinants of health. DPH has support from the EOHHS Secretary to identify and promote cross-cutting initiatives as resources allow. We will coordinate this work through DPH's Office of Community Health Workers within the Health Care Workforce Center of our Division of Primary Care and Health Access.

No fewer than eight of the Advisory Council's recommendations—almost one quarter of the report's total—involve MassHealth policy and funding. Implementing most of these would require a combination of strategies, including changes to the state's Medicaid waiver, amendments to provider contracts, and/or new funding from the legislature. The Advisory Council tacitly acknowledged that it was offering an ambitious agenda by setting relatively long term time frames for implementing these financing policy recommendations. In retrospect, even those time frames now appear optimistic in most cases.

As the state's economic climate improves, DPH will continue to promote dialogue and planning within EOHHS about opportunities to implement promising ideas, such as administrative cost claims for utilizing CHWs (recommendation 3.1) and integrating CHWs into Primary Care Clinician pilot programs for advanced medical homes (recommendation 3.4). We will also periodically revisit the entirety of the Advisory Council's recommendations and continue to stay abreast of developments in other states in order to reframe an action agenda to accomplish the report's core objectives.

Third, as a practical matter, DPH has already taken action on some of the Advisory Council's recommendations. We will continue to do so, utilizing available resources, in order to maintain our track record of leadership. For instance, even before the Advisory Council's work was complete, DPH cooperated with the Office of the Attorney General to include language about CHWs in the Attorney General's revised community benefits guidelines for hospitals and health maintenance organizations (recommendation 3.11). Similarly, DPH incorporated language about CHWs into our own policies and procedures for planning Determination of Need community health initiatives (recommendation 3.12). DPH staff are also presently involved in promoting CHW professional identity, education and information for private sector organizations, work with employers, and efforts to strengthen the CHW training infrastructure.

DPH efforts to strengthen CHW training are focused on strategies that can be accomplished with currently available resources, including cooperation with outside partners to develop training standards that can be adopted by a new board of CHW certification; support of emerging models to provide community college credit for completion of specialized CHW skill training; and planning about how to stabilize funding for existing CHW training entities and possibly expand CHW training capacity to additional regions of the state through public-private partnerships. DPH has also convened an internal leadership team to improve enforcement of our own purchase of service policy on CHW training and supervision (recommendation 2.5) and to coordinate planning about utilization of CHWs in DPH-funded programs (recommendation 3.13).

Finally, we commend the legislature for its wisdom in envisioning a sustainable Massachusetts CHW program in the context of health care reform. Many of the Advisory Council's recommendations require legislative support through changes in statute and or funding appropriations. The administration anticipates working closely with legislators in reviewing this report and distilling its recommendations into priorities for bills and budgets as we look forward to a more promising financial future.

On behalf of Governor Deval Patrick and EOHHS Secretary Dr. JudyAnn Bigby, I extend sincere thanks again to members of the CHW Advisory Council for their outstanding work.

John Auerbach, Commissioner
Massachusetts Department of Public Health
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EXECUTIVE SUMMARY

In its landmark 2006 health care reform law, the Massachusetts General Court recognized the importance of community health workers (CHWs) in helping to expand access to medical insurance coverage and eliminate health disparities. Section 110 of Chapter 58 of the Acts of 2006 required the Massachusetts Department of Public Health (DPH) to conduct a workforce investigation and to develop recommendations for a sustainable CHW program for the Commonwealth (see Appendix A). The law required the recommendations to promote: 1) public and private partnerships to improve access to care, eliminate disparities, increase the use of primary care, and reduce inappropriate hospital emergency room use; and 2) stronger workforce development, including a training curriculum and certification program to insure high standards, cultural competency and quality of services.

Massachusetts already has received national attention for including CHWs in its health care reform model from the National Council of State Legislatures and from the Commonwealth Fund, which cited Section 110 among its “best practices” for promoting equity in state health care reform. With enactment of Chapter 305 of the Acts of 2008, Massachusetts has embarked on a new phase of health care reform to deal with outstanding challenges including barriers to insurance and primary care, inappropriate utilization of health care services and care related to increased chronic disease, and a payment system that recognizes frequency and severity of conditions over health quality and outcomes.

In 2005, the Massachusetts legislature also took action to address the problem of racial and ethnic health disparities by establishing a Commission which, in its 2007 report, identified several issues that make access to quality care difficult, including cultural and geographic distances between communities and health care providers and systems, insufficient health education and inadequate knowledge about the availability of services, and a complex health care system that presents barriers for many people to navigate effectively.

DPH and the CHW Advisory Council determined in the course of investigation that there is strong evidence to support increased public and private investment in CHW workforce development. CHWs have demonstrated value in addressing the goals of health care reform, including reducing health disparities, promoting health care access and primary care, improving quality of care, delivering culturally competent preventive services, helping to manage chronic illnesses, and helping to prevent unnecessary emergency room visits and other costly care. Implementing the recommendations of this report will have wide significance for the Massachusetts health care and public health systems, as well as for the CHW workforce.

CHW Advisory Council and Study Methods

The CHW Advisory Council was convened by DPH in August 2007 and met quarterly through July 2008. In addition to the fourteen named organizations in the legislation, fifteen other organizations were identified as key stakeholders and participated in the Council. The Council was divided into four workgroups, each of which met frequently to address legislative mandates. These included a research workgroup, which reviewed the national literature and conducted statewide focus groups with CHWs; a survey workgroup, which contracted with the University

of Massachusetts Medical School to conduct a survey of CHW employers across the state; a workforce training workgroup; and a finance policy workgroup.

Defining the CHW Workforce

DPH defines CHWs as public health workers who apply their unique understanding of the experience, language, and/or culture of the populations they serve in order to carry out one or more of the following roles:

- Providing culturally appropriate health education, information, and outreach in community-based settings, such as homes, schools, clinics, shelters, local businesses, and community centers;
- Bridging/culturally mediating between individuals, communities, and health and human services, including actively building individual and community capacity;
- Assuring that people access the services they need;
- Providing direct services, such as informal counseling, social support, care coordination, and health screenings; and
- Advocating for individual and community needs.

CHWs are distinguished from other health professionals because they:

- Are hired primarily for their understanding of the populations and communities they serve;
- Conduct outreach a significant portion of the time in one or more of the categories above;
- Have experience providing services in community settings.

“Community health worker” is an umbrella term for a number of job titles that perform one or more of the functions listed in the DPH definition. In its 2005 report, *Community Health Workers: Essential to Improving Health in Massachusetts*, DPH reported some 50 job titles in current use that fit the department’s CHW job description. Examples include:

- | | |
|-----------------------------|-------------------------|
| • Outreach Worker | • Health Advocate |
| • Street Outreach Worker | • Family Advocate |
| • Outreach Educator | • Peer Advocate |
| • Health Educator | • Peer Leader |
| • Community Health Educator | • Promotor(a) |
| • Patient Navigator | • Promotor(a) de Salud |
| • Enrollment Worker | • Family Support Worker |

The Work of CHWs

Common to all of these functions and models of service delivery are four main strategies CHWs employ in their work, namely *client advocacy*, *health education*, *outreach*, and *health system navigation*. CHWs enroll clients in health insurance programs such as MassHealth, Commonwealth Care, and Commonwealth Choice; provide information and referrals to health and human services for clients in community-based settings; help clients navigate complex care systems; conduct home visits as part of care coordination activities for clients with multiple health conditions; provide interpretation for clients who speak a language other than English;

identify and address barriers to care, including housing, employment, public assistance, and poverty; and advocate to ensure clients receive appropriate and culturally competent services.

CHWs are distinguished from other health care and public health workers by the activities they perform and by their identity—typically—as members of the communities they serve. CHW roles and activities are different from, yet complementary to, the services of many other health care workers, including licensed medical clinicians and support service providers such as home health aides and personal care attendants. While physicians, nurses, and other allied health professionals work primarily in clinics or offices, CHWs spend significant portions of their time working in community-based settings and in clients' homes. This community-based work allows CHWs to reach deep into their communities and to connect people who are isolated and hard-to-reach with needed health and human services.

Development of an Emerging Profession

CHWs have been widely recognized as vital to health care and public health systems in the U.S. and around the world for many years. Coordinated efforts to professionalize the field in the U.S. began in the 1990s when CHWs from across the country agreed to use the title “Community Health Worker” as an umbrella term for the dozens of job titles that were in use among the workforce. At the same time, CHWs began to initiate local and national efforts to organize into professional networks and associations.

Standardized training for CHWs also started to be developed in different areas of the country in the 1990s, including the Community Health Education Center (CHEC) of the Boston Public Health Commission. With the development of core CHW training programs that cut across categorically funded programs, the notion of a CHW profession strengthened. A second CHW training program, the Outreach Worker Training Institute (OWTI) of the Central Massachusetts Area Health Education Center (CMAHEC) was initiated in 1999 with its courses starting in 2001.

Also in 2001, the American Public Health Association passed an official policy resolution, “Recognition and Support for Community Health Workers’ Contributions to Meeting our Nation’s Health Care Needs,” which identified the need to “brand” the profession in order to promote policy, program development, program evaluation and the growth of the field. Massachusetts CHWs organized the Massachusetts Association of Community Health Workers (MACHW) in 2000, with support from DPH and other key stakeholders. MACHW’s mission is to “strengthen the professional identity of and foster leadership among CHWs, and to promote the integration of CHWs into the health care, public health and human services workforce.” MACHW is active in national workforce development efforts, including the newly formed American Association of Community Health Workers, which released a CHW core values document and a code of ethics for the field in 2008.

Challenges

Despite increased utilization of CHWs by public and private sector providers and a growing body of research about the positive impacts CHWs have in improving access to health care, reducing health disparities, improving quality of care, and controlling costs, CHWs have yet to be integrated as professionals in the mainstream health care system. CHWs also face formidable

financial challenges. DPH has found that CHW wages are low, turnover is high, and job security is limited by unpredictable funding. The CHW field lacks a unified professional identity and is still defining its scope of practice and its core knowledge base. Job classifications and payment codes are still under development. Training and educational opportunities for CHWs vary widely. Massachusetts lacks a statewide training infrastructure for CHWs, and funding for CHW training programs depend primarily on grant funding. The field is just beginning to establish certification protocols. Increased professional status for the field is expected to help CHWs earn family sustaining wages and attain greater financial stability, but professional development is a long-term and complex process with uncertain outcomes, particularly in our rapidly changing health care system.

The Massachusetts CHW Workforce

DPH's 2008 investigation identified 2,932 CHWs across the state, an estimate that is consistent with a 2007 workforce study conducted by the Health Resources and Services Administration (HRSA) in the U.S. Department of Health and Human Services. Both studies may understate the actual number of CHWs because of methodological limitations and difficulties in identifying members of the workforce, who work under many different job titles. According to 2005 DPH data, the majority of CHWs are women (76.2%), with a median age range of 36-40 years old. Sixty percent have a degree beyond high school. The CHW workforce reflects the growing racial and ethnic diversity in communities throughout the Commonwealth. Over half of the CHW workforce is people of color, including 23.7% African-American, 20.6% Hispanic, and 4.9% Asian or Pacific Islander. Over half (58.6%) of CHWs in Massachusetts are bi- or multi-lingual, speaking the preferred language of their clients.

CHWs are employed by a wide variety of agencies, including community health centers, hospitals, community-based organizations, housing authorities, immigrant and refugee associations, and faith-based organizations. Forty-one percent of CHWs work in Boston, 21.6 percent are employed in the Metro region, 14.4 percent in Central Massachusetts, and less than 10 percent in each of the other regions of the state. Thirty percent of CHWs are employed by agencies that serve rural clients. CHWs also work with a wide variety of at-risk populations, including, but not limited to, people with substance abuse disorders, homeless persons, immigrants and refugees, persons at risk for or living with HIV/AIDS, and adolescents, among others. Most clients served by CHWs receive or are eligible for publicly funded health insurance.

Training and Certification

Currently, there is no statewide infrastructure to support standardized training for the CHW field. Formal CHW training opportunities exist in only three locations in the state, offered through two community-based training programs, CHEC in Boston and Lowell and OWTI in Worcester. Some CHWs receive on-site training from their employers for their jobs, and others receive training in specialized health topics for their jobs in various settings. Often, CHWs are hired to work in programs that focus on specific health issues, such as asthma, HIV/AIDS, or diabetes, and are trained in those areas, but they do not receive training in the broader set of core competencies needed to conduct their work. Almost 30% of the workforce is employed in agencies that report no CHWs have received formal CHW training.

Data suggest a relationship between the availability of a training program and the number of CHWs who work at agencies that report high levels of training among their CHW workforce: 82.4% of CHWs in Central MA, where OWTI is located, work in agencies that report over 50% of their CHWs have received formal training. In Boston, the demand for training outstrips availability. Employers cite a number of barriers to formal training for CHWs, including that trainings are not offered at convenient times, CHWs are too busy to attend, training costs are prohibitive, trainings are not available in all regions of the state, transportation is limited or lacking, and back-up staff are unavailable to cover for CHWs in training. Some employers indicated that they did not know formal training opportunities for CHWs existed. CHWs across the state indicated that training and opportunities for higher education are important to their effectiveness in their work and advancement in the field.

In addition to standardized training, DPH's investigation found that CHWs, employers, and payers agree that certification of CHWs and of CHW training entities is critical to advancing the professional status of the workforce. Several states have already passed legislation formalizing certification programs for CHWs.

Funding

Rather than being integrated into the operating budgets of provider institutions and organizations, funding for CHW employment is insecure and typically allocated through categorical, cyclical grants related to specific populations, diseases and conditions. Funding priorities and amounts change from year to year, leaving CHWs and the people they serve vulnerable. The unstable nature of funding for CHWs undermines their unique effectiveness in successfully engaging clients through building relationships based on trust.

Currently, 34.5% of CHWs in Massachusetts make less than \$15 per hour, which is below \$30,000 a year for a full-time position. These data are similar across the six regions of the state, with roughly a third of CHWs working in each region earning less than \$15 per hour. *These wages place over a third of Massachusetts CHWs below 150% of the federal poverty level (FPL) for a family of four and far below self-sufficiency estimates for a family of four in all regions of MA.*

To date, funding for CHW training has also been reliant primarily upon public and private grants. Funding in this manner renders programs vulnerable to shifting grant priorities.

The Critical Role of CHWs

In its 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, the Institute of Medicine (IOM) found, "Community health workers offer promise as a community-based resource to increase racial and ethnic minorities' access to healthcare and to serve as a liaison between healthcare providers and the communities they serve." The IOM specifically recommended that programs supporting "the use of community health workers... especially among medically underserved and racial and ethnic minority populations, should be expanded, evaluated and replicated."

A growing body of research on CHW programs and their impact demonstrates that CHWs are vital to achieving the goals of health care reform, including increasing access to care, reducing

disparities, improving quality, and controlling costs. A number of landmark studies and reports providing overviews of the field have been published recently. Findings from the literature include:

CHWs Increase Access to Care

It is well documented that CHWs improve access to health care services for people who previously experienced limited access to these services. CHWs are highly effective in recruiting and enrolling individuals in health insurance plans, linking individuals with primary care physicians, and ensuring the use of preventive care. Their community-based work and linguistic, cultural, and/or experiential characteristics shared with the community enable CHWs to reach families and individuals who are institutionally marginalized and may lack knowledge or understanding of services.

- ***Health Insurance Enrollment:*** CHWs have played an important role in the early success of health reform in Massachusetts by contributing their skills to the work of Outreach and Enrollment grantee organizations funded through health reform legislation. The role they have most commonly played has been in helping to identify and assist uninsured residents to enroll in publicly or privately funded insurance plans. During 2007 alone, seven CHWs at Project H.O.P.E. in Hyannis, MA, enrolled 4,000 people in MassHealth and 2,200 in subsidized Commonwealth Care plans.
- ***Linking to Primary Care Providers:*** Many CHWs successfully link individuals and families to primary care providers after assisting them with enrollment in health insurance and ensure ongoing connections through case management activities. In fact, research has shown that CHWs who perform case management activities are more successful at engaging and helping sustain patients' relationships with providers than workers who make a simple one time contact. *Enrollment specialists stress that initial enrollment is only the first step of engaging and keeping previously uninsured people covered.* The challenge of overcoming ongoing barriers to required regular re-enrollment, as well as effective use of the health care system, is a task for which CHWs are very well suited.
- ***Ensuring Use of Preventive Care:*** CHWs are effective at helping people change behavior to improve their health as well as to access a wide variety of preventive health services, including general education and referral for chronic and acute health conditions, comprehensive perinatal care, preventive health screenings, and immunizations.

CHWs Improve Health Care Quality

In recent years, health care professionals have identified patient-centered care—care that is respectful and responsive to “patient preferences, needs and values”—as a key component to improving health care quality. High quality, patient-centered care includes:

- open communication between patients and providers,
- delivery of culturally competent services,
- high levels of patient satisfaction with the care and services they receive, and
- ongoing chronic disease self-management.

Research shows that CHWs play an important role in improving all four of these aspects of health care quality. The Centers for Disease Control and Prevention, for instance, promote and support utilizing CHWs as an effective approach both for reducing risk of cardiovascular disease and improving cardiovascular health, and for preventing, treating, and controlling diabetes, especially in minority populations at high risk for the disease.

CHWs Reduce Health Disparities

The Institute of Medicine recommends CHWs as part of a “comprehensive, multi-level strategy to address racial and ethnic disparities in health care.” In addition, the Pew Commission says that CHWs “offer unparalleled opportunities to improve the delivery of preventive and primary care to America’s diverse communities.” A number of studies have shown that CHWs who perform patient navigation and case management activities can have a significant impact on disparities in cancer screenings. Patients of color are often in more advanced stages of illness at the time of diagnosis compared to white patients. Evidence shows that this contributes to higher rates of morbidity and death among minority populations.

It is widely recognized by health experts and policy-makers that health disparities are not only due to limited access to prevention and health care services but are also influenced by social, economic and environmental conditions. The Healthy People 2010 goals highlighted the need for approaches to address social inequities which increase entire communities’ risks for poor health. A number of projects around the country and in Massachusetts have involved CHWs as keys to such strategies.

CHWs Improve Service Delivery and Control Health Care Costs

CHWs can help reduce health care costs by helping people—often uninsured or publicly insured—to use the health care system more effectively. CHWs can have an impact on cost savings in a number of ways, including complementing clinical services as part of an integrated care team, connecting patients with a medical home for primary and preventive care, and reducing inappropriate use of emergency departments through patient navigation and care coordination. Although more research is needed in this area, initial studies show that employing CHWs can result in cost savings even in the short term.

- ***Changing the Health Service Delivery Model:*** In many settings, CHWs work as part of teams to help ensure that adults and children receive the preventive education, support and care that can help them avoid illness or complications that result in unnecessary and expensive hospitalizations and increased costs.
- ***Medical Home:*** CHWs also help people overcome obstacles to identifying a primary care “medical home” and to seeking care when appropriate, rather than using more expensive emergency department services.
- ***Reducing Inappropriate Use of Emergency Departments and Hospitalizations:*** CHWs reduce inappropriate use of emergency departments by helping locate and enroll uninsured people in public insurance programs for which they qualify, as well as addressing disparities in access to the health care system. The success CHWs have in connecting patients with primary and preventive care and helping them manage chronic conditions also leads to decreased emergency room visits and to cost savings.

Recommendations for a Sustainable CHW Program in Massachusetts

The DPH CHW Advisory Council makes recommendations for a sustainable CHW program in Massachusetts in the following four areas:

- Conduct a Statewide CHW Identity Campaign
- Strengthen Workforce Development
- Expand Financing Mechanisms

- Establish an Infrastructure to Ensure Implementation of Recommendations

Ultimately, the success of developing a reliable, sustainable CHW workforce depends on the interests and commitments of policy makers and institutional leaders to pursue and support these recommendations. Challenges to implementation exist for each, but all of them are technically feasible.

Statewide CHW Identity Campaign

Enhanced understanding and awareness of who CHWs are and their role within the health and human service systems is essential to improving service delivery through more effective integration into health care teams. It will also potentially expand employment and advancement opportunities for CHWs.

- 1.1 Encourage all state and local government agencies to adopt the “community health worker” term and DPH CHW definition in rules, regulations and program guidelines, as per the DPH 2002 policy.
- 1.2 Develop an educational campaign about CHWs targeted at CHWs, employers of CHWs, funders, policy makers, city and town health departments, and residents receiving CHW services that is similar to other public health awareness campaigns conducted by EOHHS and DPH.
- 1.3 Encourage private and public funders of CHWs to use the term “community health worker” when releasing funding opportunities involving outreach, community-based health education and promotion, and connecting community members to health care and social services.
- 1.4 Advise individuals, agencies and institutions which provide CHW training and education to adopt and utilize the CHW term when designing and implementing programs, including use in their curricula, promotional materials, and public presentations.
- 1.5 Incorporate the role of CHWs in the content of training and education curricula for health care and human service professionals, particularly in the community and state college and university systems.

Create a Statewide CHW Training, Education, and Certification Infrastructure

All stakeholders—including CHWs, employers, educators, foundations, and payers—agree that Massachusetts needs to strengthen the CHW workforce through a comprehensive set of strategies involving training, higher education, certification, and career development. In order to achieve the goals of health care reform and promote public health most effectively, we need to expand available CHW training programs and develop a model certification process. Innovative public-private partnerships are already helping to strengthen CHW workforce development, but a modest investment in infrastructure is required by the Commonwealth to assure quality and provide the basis for full participation by public and private payers in utilizing CHWs more widely to strengthen primary care and community-based health systems.

- 2.1 Develop a statewide CHW training and education infrastructure, including multiple points of access and entry.
- 2.2 Engage key public and private partners to develop financing strategies for a sustainable, consistent, high quality CHW training infrastructure.

- 2.3 Develop an approved CHW training curriculum, including defined core competencies, and a curriculum for supervisor training, for use by all certified CHW training programs.
- 2.4 Encourage all CHW training programs to include training for supervisors of CHWs based on an identified curriculum.
- 2.5 Enforce systematically across DPH the 2002 policy requiring contractors to develop internal agency plans for the training, supervision, and support of CHWs, including implementation of specified operational measures for training and supervision.
- 2.6 Establish a Community Health Worker Board of Certification within the DPH Division of Health Professions Licensure, appointed by the governor, with balanced representation from the CHW workforce, CHW employers, CHW training and educational organizations, and other engaged stakeholders.
- 2.7 Develop and implement a certification process for CHW trainers and training entities.
- 2.8 Develop, pilot, and implement a certification process for individual CHWs, including “grandfathering” provisions for experienced members of the workforce and continuing education and re-certification requirements.

Expand Funding Mechanisms

In addition to addressing issues such as defining the CHW workforce, educational preparation, and formal credentialing, it is critical to arrange sustainable financing for CHW positions. A 2006 report by the National Fund for Medical Education notes that, “It is time to explore and develop viable financing arrangements that go beyond short term grants.”¹

Research by the Advisory Council identified four major funding models for CHWs nationally:

- public and commercial insurance;
- public and private sector operating budgets;
- public grants and contracts;
- private foundation grants.

Accordingly, the CHW Advisory Council’s financing recommendations are grouped by potential funding source. For each financing option, the Council considered legal, financial, operational, and political feasibility. Public payer recommendations include a combination of insurance, contracting, and direct employment options for MassHealth and Commonwealth Care. Recommendations are summarized below. Detailed suggestions and considerations for policy are included in the narrative. MassHealth contributed to developing public payer recommendations included in this report.

Some in the commercial sector assert that establishing certification and coding standards for CHWs should be considered as prerequisites to changes in any financing policies. The Advisory Council’s majority opinion is that financing and workforce development recommendations are complementary and should be implemented in a coordinated fashion as the entire health care system places increasing emphasis on quality of care and improved health outcomes.

Public Payers: MassHealth and Commonwealth Care

Administrative Activities

- 3.1 Include CHWs and CHW services, such as insurance enrollment assistance, coverage maintenance, and health education, in MassHealth’s administrative cost claims.

- 3.2 Increase and sustain funding for MassHealth Enrollment Outreach Grants, and structure the grants to increase utilization of CHWs for outreach, education, and enrollment.
- 3.3 Expand the administrative tools used by the Commonwealth Connector to ensure enrollment of eligible populations by directly employing CHWs to outreach, educate, assist, and enroll hard-to-reach populations and those eligible individuals needing assistance with re-determination procedures.

Care Team Integration

- 3.4 As part of its efforts to enhance the Primary Care Clinician (PCC) Plan, MassHealth could develop a pilot program to explore enhancing the PCC rate for PCCs who hire CHWs for outreach efforts and/or who integrate CHWs into their care models and care teams.
- 3.5 Provide financial incentives (e.g., through increased capitation rates or “pay-for-performance” mechanisms) or otherwise encourage the Medicaid Managed Care Organizations (MMCOs) to hire CHWs for outreach efforts and/or to integrate CHWs into their care models and care teams.
- 3.6 Incentivize or otherwise encourage the use of CHWs and CHW services in managed care models and/or delivery systems for elderly and disabled populations, who particularly are likely to benefit from CHW services and activities.
- 3.7 Incentivize fee-for-service (FFS) providers in the current long-term care system and in the pending Community First 1115 Waiver program to integrate CHWs and CHW services into care teams designed to maintain elderly/disabled individuals in the community.
- 3.8 Commend use of CHWs as part of health care teams as a model practice for consideration in order to support improved performance in one of the existing performance measures under the MassHealth P4P program(s).

Direct Provider Payment to CHWs and for CHW Services

- 3.9 Request that MassHealth prepare a study or convene a workgroup to explore the possibility and impact on patient health of directly reimbursing CHWs and CHW services by adding CHWs as a recognized and billable MassHealth provider type.

Private Sector Organizations

- 3.10 Encourage private sector organizations in Massachusetts, such as hospitals, community health centers, health provider systems, managed care organizations, commercial insurers, and other entities, to replicate existing models and innovate new approaches for utilizing CHWs in their health care teams, programs, and payment systems to support health education, outreach, patient navigation, emergency room diversion, employee wellness (e.g., smoking cessation, healthy nutrition programs), and other appropriate activities. Progress with supporting CHWs through private payment systems requires establishing a standard payment coding mechanism and implementing a recognized certification process for CHWs in Massachusetts.
- 3.11 Request that the Massachusetts Attorney General’s Community Benefits Advisory Task Force consider ways in which the revised Community Benefits Guidelines can continue to encourage hospitals and HMOs to develop and implement a variety of community benefit programs to address identified health needs in their target communities, including those that utilize CHWs.
- 3.12 Encourage implementation of best practices related to the use and support of CHWs through the Department of Public Health’s Determination of Need (DoN) process.

Public Agency Grants and Contracts

- 3.13 Increase categorical grant and contract funding for CHW services.
- 3.14 Expand and target public funds for CHW workforce development, training and support.
- 3.15 Promote grant, contract support, and demonstration projects for CHWs employed in sectors outside the clinical health care delivery system.
- 3.16 Ensure that agencies employing CHWs know about the human service salary reserve and that agencies meeting eligibility requirements register to qualify for reserve adjustments to benefit the CHW workforce.
- 3.17 Provide incentives for hiring CHWs, e.g., preferential rating of public contract applications, demonstration project funding, etc., in all public agency contracting.

Private Foundation Grants

- 3.18 Increase grant funding for demonstration projects and to promote effective models of using CHW services within the health care system.
- 3.19 Promote grant, contract support, and demonstration projects for CHWs employed in sectors outside the clinical health care delivery system.

Establish an Infrastructure to Support CHW Work

Section 110 of Chapter 58 of the Acts of 2006 charged DPH to convene a statewide advisory council to help conduct this investigation, interpret its results, and aid in developing recommendations for a sustainable CHW program. The legislation did not define an ongoing role for the advisory council once its statutory task was complete. The CHW Advisory Council will therefore be excused after this report is submitted to the legislature, with lasting gratitude from the Department for the extraordinary contributions of time and talent that its members made over the course of the Council's work.

In order to ensure that Massachusetts develops a sustainable CHW program, it is essential to charge an agency of government with responsibility for implementing the recommendations of this study in partnership with public and private stakeholders. Massachusetts needs a reliable infrastructure for continued research about the impacts of CHWs, policy development, implementation of financing recommendations, development of a CHW identity campaign, coordination of activities among state agencies and private partners, and communications, technical assistance, and capacity building with CHWs and other stakeholders.

- 4.1 Request that the Office of Health Equity at the Executive Office of Health and Human Services, in cooperation with the Division of Primary Care and Health Access at DPH, be responsible for implementing recommendations of this report to develop a sustainable community health workers program for the Commonwealth. The legislature should provide adequate resources to support this effort.
- 4.2 Request that EOHHS establish a standing CHW Advisory Council to meet not less than quarterly to assist with the implementation of the recommendations of this study. The Advisory Council should be chaired by the secretary of the Massachusetts Executive Office of Health and Human Services or her designee. Its members should include, but need not be limited to, the chief executives or their designees from stakeholder agencies and organizations designated in the narrative of the report.

I. Introduction

In its landmark 2006 health care reform law, the Massachusetts General Court recognized the importance of community health workers (CHWs) in helping to expand access to medical insurance coverage and eliminate health disparities. Section 110 of Chapter 58 of the Acts of 2006 required the Massachusetts Department of Public Health (DPH) to conduct a workforce investigation and to develop recommendations for a sustainable CHW program for the Commonwealth (see Appendix A).

Specifically, DPH was charged to study: 1) CHW use and funding throughout the state; 2) CHW impacts in increasing access to health care, particularly Medicaid-funded health and public health services; and 3) CHW impacts in eliminating health disparities among vulnerable populations. The law required DPH to convene a statewide advisory council, comprised of 14 named organizations and chaired by the commissioner of DPH, to assist in developing the investigation, interpreting its results, and developing recommendations to the legislature. The law required the recommendations to promote: 1) public and private partnerships to improve access to care, eliminate disparities, increase the use of primary care, and reduce inappropriate hospital emergency room use; and 2) stronger workforce development, including a training curriculum and certification program to insure high standards, cultural competency and quality of services.

Massachusetts received national praise for including CHWs in its health care reform model. In an April 2008 report, *Identifying and Evaluating Equity Provisions in State Health Care Reform*, the Commonwealth Fund cited Section 110 among its “best practices.”² The authors said that “such an investigation has the potential to drive and inform community health planning for specifically reducing health disparities and increasing the training and reimbursement of community health workers.”³ In general, they conclude that promoting the use of community health workers is an important strategy for expanding health care access for disparity populations.⁴ In addition, the National Council of State Legislatures, in its April 2008 policy brief, *Community Health Workers: Expanding the Scope of the Health Care Delivery System*, highlighted Massachusetts’ inclusion of CHWs in health care reform, and noted in particular DPH mandate to convene a statewide advisory council and make recommendations for a sustainable CHW program.⁵

Challenges remain to implementing health care reform and CHWs will play an important role in meeting them. In a June 2008 report from the Urban Institute, *On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year*, Sharon Long noted that the rate of uninsurance among working age adults was reduced by almost half in the first year of implementing Chapter 58.⁶ While lauding the early success of health reform implementation, notably an increase of 355,000 people with health insurance in the state, Long and fellow expert panelists, at a June 3, 2008 health care summit convened by Blue Cross Blue Shield of Massachusetts Foundation, noted significant challenges ahead, including:

- barriers to enrolling remaining uninsured adults, including cultural and linguistic minorities, people with low literacy levels, and young, low-income, and relatively healthy males;
- difficulties in annually redetermining eligibility and reenrolling people into publicly supported health insurance plans;
- primary care physician shortages;
- continued high costs associated with inappropriate use of emergency rooms;

- rising costs of diabetes, asthma, and other debilitating chronic diseases;
- a health care payment system that provides financial incentives for high tech, tertiary care and medical specialty practices, at the expense of primary care;
- costs for covering undocumented immigrants and refugees;
- non-medical costs from competing demand for resources of low-income individuals and families; and
- the need to shift focus in the payment system to health quality and outcomes over frequency and severity of treatments and conditions.⁷

The Institute of Medicine's 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* documented alarming disparities in mortality rates, disease incidence, rates of uninsured, and differences in the types of insurance coverage between whites and people of color in the United States.⁸ In 2005, the Massachusetts legislature took action to address this issue by establishing a Commission to End Racial and Ethnic Health Disparities. The Commission's 2007 report identified several issues that make access to quality care difficult, including:

- Cultural and geographic distances between communities and health care providers and systems;
- Insufficient health education as well as inadequate knowledge about the availability and even necessity of some services; and
- A complex health care system that presents barriers for many people to navigate effectively, particularly those who have historically received poorer treatment from health or other institutions.⁹

Providing access to care and a "medical home" are important elements in achieving the goals of health care reform. However, the on-going shortage of primary care providers has resulted in longer waits for appointments and continued use of emergency departments and free care programs by the newly insured. In its 2006 Physician Workforce Study, the Massachusetts Medical Society reported supply shortages in internal medicine, family practice, and psychiatry. The report found that the number of people who waited more than two months to see a primary care physician jumped from 10 percent in 2005 to 16 percent in 2006. The findings concerning internal medicine and family practice were particularly alarming, because this was the first time shortages in primary care physicians have been recorded in Massachusetts.¹⁰

Innovative strategies to engage patients in care prior to actually seeing a provider need to be developed and implemented. Expanding the "care model" that incorporates a team approach to managing chronic conditions is a way to enhance the ability of any one provider to deal with multiple issues confronting patients and increasing pressure to improve access. One national leader in the movement to improve such care observed that, "Relying on the physician and 15-minute acute care visits initiated by patients with problems doesn't lend itself to effective chronic disease management."¹¹

Since September 11, 2001 the medical care and public health systems have been challenged to improve planning and preparedness for responding to natural and man-made emergencies. This work has required developing new sets of skills and new collaborations between hospitals, community health centers, public health, fire, safety, emergency medical services and

government. The aftermath of the 2005 hurricanes brought more urgency to the need to link community-based public health with comprehensive emergency planning and response.

With enactment of Chapter 305 of the Acts of 2008, Massachusetts has embarked on a new phase of health care reform. The bill's comprehensive scope and expansion of regulatory power underscores the legislature's intent, with strong backing from the administration, to focus on sustaining the gains in coverage, eliminating health disparities, promoting primary care, improving health care quality, and containing costs. Known by some as "Health Care Reform II," Chapter 305 is a fitting complement to the 2006 legislation that gave rise to this CHW investigation. DPH and the CHW Advisory Council have found in the course of study that there is strong evidence to support increased public and private investment in CHW workforce development. CHWs have demonstrated value in addressing the goals of health care reform, including promoting health care access and primary care, delivering culturally competent preventive services, helping to manage chronic illnesses, and helping to prevent unnecessary emergency room visits and other costly acute care. Implementation of the recommendations of this report will have wide value for the Massachusetts health care and public health systems, as well as for the CHW workforce.

CHW Advisory Council and Study Methods

The CHW Advisory Council was convened in August 2007 and met quarterly through July 2008. In addition to the fourteen named organizations in the legislation, fifteen other organizations were identified as key stakeholders and participated in the Council. (A complete list of Council members can be found in Appendix B.) The Council generally operated by consensus in adopting its recommendations. It was divided into four workgroups, each of which met frequently to address legislative mandates:

- The **Research Workgroup** investigated the impacts of CHWs on increasing access to health care, quality of care, health outcomes, system costs, and eliminating health disparities among vulnerable populations. The workgroup employed a combination of quantitative and qualitative methods, including extensive review of the national research literature and focus groups with CHWs in five regions across the state. Quotes from some of those sessions are included in the report narrative that follows.¹²
- The **Survey Workgroup** developed, administered and analyzed the results of a CHW employer survey that addressed the use and funding of CHWs by public and private organizations in Massachusetts. Conducted under contract with the University of Massachusetts Medical School, the survey was completed by CEOs or senior program managers of 187 eligible employers across the state.
- The **Workforce Training Workgroup** assessed the current status of CHW training in the Commonwealth, and developed recommendations related to workforce development, including a CHW training curriculum and a statewide certification program. Toward this end, the Workforce Training Workgroup conducted a range of activities to gather information to assist with the development of recommendations.¹³
- The **Finance Policy Workgroup** developed recommendations for public and private sector funding for a sustainable statewide CHW program.

II. Defining the CHW Workforce

A. Who are CHWs?

The Massachusetts Department of Public Health (DPH) defines CHWs as public health workers who apply their unique understanding of the experience, language, and/or culture of the populations they serve in order to carry out one or more of the following roles:

- Providing culturally appropriate health education, information, and outreach in community-based settings, such as homes, schools, clinics, shelters, local businesses, and community centers;
- Bridging/culturally mediating between individuals, communities and health and human services, including actively building individual and community capacity;
- Assuring that people access the services they need;
- Providing direct services, such as informal counseling, social support, care coordination, and health screenings; and
- Advocating for individual and community needs.

CHWs are distinguished from other health professionals because they:

- Are hired primarily for their understanding of the populations and communities they serve;
- Conduct outreach a significant portion of the time in one or more of the categories above;
- Have experience providing services in community settings.

DPH uses this standard definition in public health practice, policy development, and community-based contracts. This definition is similar to one recommended by the Standard Occupational Classification Policy Committee of the Bureau of Labor Statistics for inclusion as a Standard Occupational Classification (21-1091) in its revised listing for 2010. At the invitation of the Bureau, the following definition was submitted by the American Public Health Association CHW Special Primary Interest Group (APHA CHW SPIG) and is endorsed by the American Association of CHWs (AACHW). In January 2009, the Office of Management and Budget officially published the 2010 Standard Occupational Classifications (SOC) listing in the Federal Register, which includes a unique occupational classification for Community Health Worker (SOC 21-1094).

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.

“Community health worker” is an umbrella term for a number of job titles that perform one or more of the functions listed above in the DPH definition. In its 2005 report, *Community Health Workers: Essential to Improving Health in Massachusetts*, DPH reported some 50 job titles in current use that fit the department’s CHW job description.¹⁴ Examples of the job titles that organizations and agencies use for CHW positions include:

- Outreach Worker
- Street Outreach Worker
- Outreach Educator
- Health Educator
- Community Health Educator
- Patient Navigator
- Enrollment Worker
- Health Advocate
- Family Advocate
- Peer Advocate
- Peer Leader
- Promotor(a)
- Promotor(a) de Salud
- Family Support Worker

For me [community health workers] are more “community health warriors” because ...they serve such a huge purpose when they are out in the community. It is not just about delivering health information. You are a case manager. You are a housing specialist. You are a nutrition specialist....You have to be an educator on many different levels because health encompasses so much. There are so many roles that community health workers play....They are warriors.

- CHW in Boston

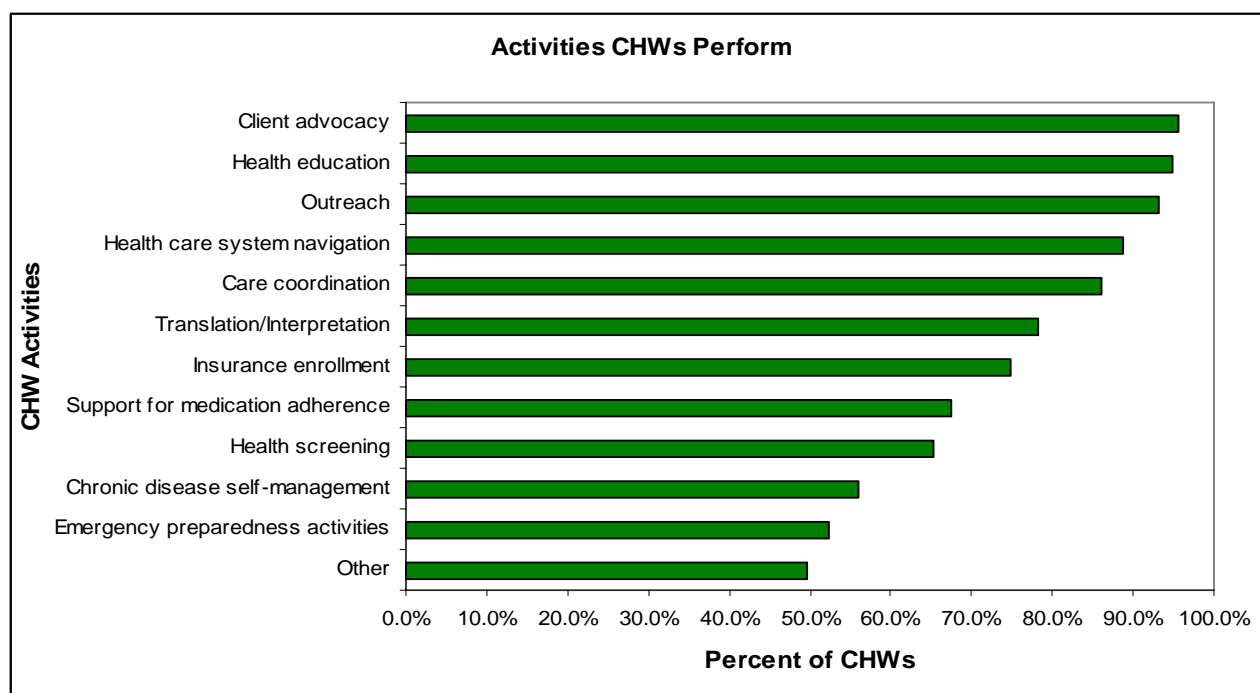
B. What do CHWs do?

CHWs perform many significant activities important to improving health care and public health for the communities they serve. For example: CHWs enroll clients in health insurance programs such as MassHealth, Commonwealth Care, and Commonwealth Choice; provide information and referrals to health and human services for clients in community-based settings; help clients navigate complex care systems; conduct home visits as part of care coordination activities for clients with multiple health conditions; provide interpretation for clients who speak a language other than English; identify and address barriers to care, including housing, employment, public assistance, and poverty; and advocate to ensure clients receive appropriate and culturally competent services.

CHWs in Massachusetts had the opportunity to share their experiences in six regional focus groups, and excerpts from these discussions are used throughout this section to illustrate the diverse work and experience of CHWs in the state. Other data presented are from the 2008 DPH CHW Workforce Survey of CHW employers, and additional sources as indicated.

I think that part of what is involved with being a community health worker is being able to have enough willingness and courage and creativity to stay the course. Even when the person you're working with feels like, I can't do this one more day. The community health worker is like, okay, then how about one more hour? Let's have a cup of coffee and see what comes next. But there has to be a certain amount of vision in seeing kind of beyond the problem.... Often that comes from surviving our own experiences well enough to not just be the bridge but to be able to say I've crossed the bridge and it's safe.

-CHW from Springfield, MA



Source: 2008 DPH CHW Workforce Survey.

The final report of the National Community Health Advisor Study categorized CHW functions into the following seven core areas:

1. **Cultural mediation between communities and the health and social services system** (how to use these systems, increase use of preventive care and decrease urgent or emergency care);
2. **Providing culturally appropriate health education and information** (prevention related information, managing and controlling illnesses such as diabetes and asthma);
3. **Assuring that people get the services they need** (case finding, motivating and accompanying patients to appointments and follow-up care, making referrals and promoting continuity of care);
4. **Providing informal counseling and social support** (individuals and groups, to improve mental and physical health);
5. **Advocating for individual and community needs** (serve as intermediaries between clients and bureaucratic entities);
6. **Providing direct services** (basic first aid, administering some health screening tests);
7. **Building individual and community capacity** (facilitate health behavior change, act as community leaders to bring about community-wide change).¹⁵

Common to all of these functions and models of service delivery are four main strategies CHWs employ in their work, namely **client advocacy**, **health education**, **outreach**, and **health system navigation**. In fact these four strategies were the most frequently cited activities by CHW employers in the 2008 DPH CHW Workforce Survey. CHWs agree that these activities are essential components of their work.

Client Advocacy

CHWs regularly advocate for their clients by acting as an intermediary with health care bureaucracies, helping clients overcome barriers, and educating clients on their rights within the

health care system. In addition to “speaking up” on behalf of clients, CHWs also empower their clients to advocate for themselves within the health and human service systems.

I think that what we can do is let the community that we serve know the correct way that they should be treated, the rights that they have and what they qualify for, and if they understand that, if they know what to expect, then they know what they can ask for. I can't go[to the doctor's office] and see if [the doctor] is treating client A and client B the same way, but I can teach client A and B exactly the way they should be treated and they know what to expect. I think that is the way that we could try to eliminate disparities.

- CHW from Cape Cod

Health Education

Much of the work CHWs do involves educating individuals and communities about specific health issues; health promotion; disease prevention, treatment, and control; and the basics of the health care system. CHWs provide health education in both formal and informal settings, including clinics, schools, community-based organizations, and clients' homes. The ultimate goal of this health education is to enable clients to make informed health decisions and take control of their health.

I take an initiative to do a lot of in-depth education....I sit and I talk about anatomy, sexuality, reproductive health.... There are some people that explain to me that they didn't even know certain things. People have been infected for years and still don't know about the transmission of the body fluids and so forth.

- CHW from Boston

Outreach

CHWs are highly effective in reaching out to individuals and families, particularly those who are typically hard to reach and beyond those customarily contacted by health service organizations.¹⁶ CHWs work in a variety of community-based settings to educate people about and ultimately connect them to available health and human services.

I'm constantly on the street, organizing, talking to people. I can bring...people [in] and refer them to the case manager.

- CHW from Central Massachusetts

We're going to knock on each door and ask people what's up, what's happening; gather some information, find out what are the needs and then connect people with the appropriate resource.

- CHW from Western Massachusetts

Health System Navigation

CHWs ensure access and utilization of services through helping clients navigate the health care system. This navigation involves educating clients about how the system works, how to access services, scheduling appointments for clients, and providing ongoing case management activities, to ensure continued use of services. CHWs also assist clients with navigation between health and human service systems.

[We connect people] with other social services to create a more coherent chain that people can follow. That's the extra mile and the extra connection that's provided [by] a community health worker that nobody in the clinical office has the time or flexibility to do.

- CHW from Central Massachusetts

A lot of times I just try to empower them to kind of go forward and try to navigate themselves with me there to support so that [they are] able to do it themselves. And that's a lot of work. It's very intimidating to deal with the government and it's very intimidating to deal with social services and health services, with MassHealth... [It's] frustrating and they don't have a lot of time and they've got kids. So there's a lot of stuff that you have to work through to...get them to that point [where they can navigate themselves].

- CHW from Central Massachusetts

When we finished the [MassHealth] application he was like, 'Wow, I did that all by myself.' I said, 'Yeah, you did. Now, you know how to do it. Now you don't have to come back and ask me to do it. I can help you with something else.' So now, he always says thank you because of that thing. I didn't even do anything, but ... I helped him do it himself.

- CHW from Northeastern Massachusetts

C. How are CHWs distinguished from other health and human service providers?

CHWs are distinguished from other health care and public health workers by the activities they perform, by their skills, and by their identity, typically, as members of the communities they serve. Where physicians, nurses, and other allied health professionals work primarily in clinics or offices, CHWs spend a significant portion of their time working in community-based settings and clients' homes. This community-based work allows CHWs to reach deep into the community and to connect people who are isolated and hard-to-reach with needed health and human services.

What makes me different from the people I work with [my colleagues]? I am who I serve.

- CHW from Springfield

CHW functions and strategies are different from, yet complementary to, the services of many other health care workers, including licensed medical clinicians and support service providers, such as home health aides and personal care attendants (PCAs). Unlike home health aides and PCAs, who perform primarily home-based direct care tasks with older or disabled individuals, CHWs work with a variety of at-risk populations in community, home, and clinic-based settings. CHW activities focus on connecting individuals with health care and other services, helping clients overcome barriers within the health care system, providing health education, and supporting behavior change for healthy lifestyles. CHWs function as a bridge between clients and a broad array of necessary services. Their experience and skills in communicating and advocating both within the community and within the health care system uniquely position them as effective and needed liaisons.

We are meeting people where they are, just like a taxi, you know. [We] pick you up where you are and take you where you want to go.

- CHW from Boston

CHWs are highly effective in their work because they are able to build trusting relationships with clients, typically based on shared cultural characteristics and life experiences. This trust stems from a shared culture, language, and/or life experiences between the CHW and the clients, and is a key factor in the efficacy of CHWs in the communities they serve. Although other health and human service professionals may share these cultural characteristics with clients, they are not defining characteristics of those professions as they are with CHWs. This trust-building and shared cultural and life experiences facilitate CHWs' success in reaching out to isolated and hard-to-reach individuals. A CHW in Western Massachusetts explained, "[T]he community trusts in you....They trust in you, they believe you, and that's why they're looking for you. [They think], 'I know this person; I know this person will help me.' In my case, that's what happened."

Clients from the Prevention and Access to Care and Treatment (PACT) program in Roxbury, MA, which serves people who are HIV/AIDS-positive and have difficulty adhering to their medical regimens, credit CHWs in the program with helping them take control of their disease. One client said, "They [the CHWs] were persistent. They came to my house everyday. Some days I wouldn't answer the door, but the times that I would we would sit down and I would take my pills. I got used to them being there for me to take my pills, so it was easier. Then they were meeting me at the dialysis center and taking my pills with me there and eventually it just got easier. They really helped me to be able to take my pills without a babysitter." Another client explained, "I'd still be in the hospital or dead without them [CHWs]. They help me relax, laugh ...have someone to talk to. They're not pushy, they listen and they understand. They're working with me. They gave me structure and encouragement ...without them I would be in a lot of trouble."

Employers acknowledge the importance of CHWs working in the community. Many respondents to the 2008 DPH survey of employers indicated that CHWs' community-based outreach is instrumental to increased access to health care and social services and reduced disparities among vulnerable populations. One employer stated, "If the state is really going to reduce health care disparities, reaching out to the most vulnerable members of our community, it will require working with [clients] in their homes and neighborhoods. This is what community health workers do best."

Many CHWs distinguished themselves from their coworkers because of their capacity to go the extra mile for clients, which stems from the flexibility of their positions, their knowledge of the community and their connection to social services. This broad public health approach allows CHWs to be leaders and organizers in the community to effect change on an individual and community level, improving health, and enhancing community capacity.

I had a woman who had a preemie...in the dead of winter.... She called me in the middle of the day and said 'I don't have any heat in my house. I don't know what has happened and I've called the landlord all last night and all this morning.' ...I called the Department of Health and [they] sent an inspector, but they were still trying to run down the landlord. In the meantime, I still got a baby in this cold house. I literally went to one of my churches, told one of my pastors, 'I need a

heater. Call some of your parishioners and get me three heaters because she's got three rooms.' And I went and picked them up, physically picked them up, and took them to her. So it doesn't get more basic than that.

- CHW from Central Massachusetts

I built a relationship with the landlord where we were placing [this woman who needed housing]. I laid it right on the table and said, 'This lady has done everything she was supposed to have done.... Now, do you want to contribute to her continuing to be homeless?' ... And what happened is this; he took her in on my word.... And to make a long story short, she's still in her apartment today, has gotten her Bachelor's degree and is working as a case manager herself. And every once in awhile she'll come in and see me. She feels down and we encourage each other. [This experience has] opened the door for me to make other referrals to this [landlord]. [When] one does well, it's human nature to think that others are going to do well, too. And actually they've all done well, the ones that have been placed.... [This woman] was the trailblazer for the rest.

- CHW from Western Massachusetts

D. Development of an Emerging Profession

History

CHWs have been widely recognized as vital to health care and public health systems in the US and around the world for many years. Historically, the emergence of CHWs in the US was a response to persistent poverty. CHWs were key members to the community health center movement in the 1960s. Subsequently, special projects funded by public and private grants produced significant evidence of the efficacy of CHWs in health promotion and increasing access to health and human services. Internationally, CHWs have played a role in the health of their communities for several centuries in Europe, Asia and Africa.¹⁷

Coordinated efforts to professionalize the field in the U.S. began in the 1990s when CHWs from across the country agreed to use the title "Community Health Worker" as an umbrella term for the more than 60 job titles that were currently in use among the workforce. CHW leaders and supporters understood that a common term was necessary for unifying and advancing the field. CHWs began to initiate local and national efforts to organize into professional networks and associations.

Standardized training for CHWs also developed in different areas of the country in the 1990s, including the model core CHW training program created at Community Health Education Center (CHEC) of the Boston Public Health Commission. With the development of core CHW training programs that cut across categorically funded programs, the notion of a CHW profession strengthened. A second CHW core training program, the Outreach Worker Training Institute (OWTI) of the Central Massachusetts Area Health Education Center (AHEC) was founded in 2001. In recent years, federal agencies and state legislatures have implemented policies and legislation to address the growing use of CHWs, and specifically training and certification.

In 2000, the CHW group of the American Public Health Association voted to change its name from the "New Professionals" Special Primary Interest Group (SPIG) to the "Community Health Worker" SPIG of the APHA. Shortly after, the APHA issued its 2001 Policy Resolution

(#200115), “Recognition and Support for Community Health Workers’ Contributions to Meeting our Nation’s Health Care Needs” (See Appendix K). The APHA identified the need to “brand” the profession in order to promote policy, program development, program evaluation and the growth of the field.

At the same time, Massachusetts CHWs organized, with support from DPH and other key stakeholders, to form the Massachusetts Association of Community Health Workers (MACHW). MACHW’s mission is to “strengthen the professional identity of and foster leadership among CHWs, and to promote the integration of CHWs into the health care, public health and human services workforce.” MACHW has grown to a membership of 800 and is active in national workforce efforts, such as the APHA CHW SPIG and the newly formed American Association of Community Health Workers (AACHW). This national association was established in 2006 with financial support from Georgetown University’s Harrison Institute of Law after a series of earlier national organizing meetings hosted by the Center for Sustainable Outreach (CSHO). AACHW has recently released a CHW core values document and code of ethics for the field (See Appendix M).

The Community Health Worker Initiative of Boston is one of the newest initiatives in Massachusetts to address CHW workforce development. Funded by the Robert Wood Johnson Foundation, Boston Foundation, and other private philanthropies, the CHW Initiative is a collaboration of 35 organizations, led by Action for Boston Community Development (ABCD). It includes employers, policy makers, trainers, academics, and other stakeholders. The CHW Initiative focuses its efforts on creating durable structures for career advancement, including increased wages, career ladders, and opportunities for advanced education. The Initiative has developed a recommended career pathway with a progression from CHW I, II, III through supervisor to department head, as well as a recommended educational ladder that allows CHWs to pursue an Associate’s degree at community colleges and eventually a Bachelor’s degree in human services with a concentration in community health.

Challenges

Despite increased utilization of CHWs by public and private sector providers, buttressed by a growing body of research about the positive impact CHWs have in improving access to health care services and reducing health disparities, CHWs have yet to be recognized as legitimate health care professionals. One challenge to integrating CHWs into the mainstream health care system is acceptance and use of the CHW term to describe the workforce. DPH found that CHWs in regional focus groups had varying reactions to the term. Most did not have “community health worker” as their job title. Many, but not all, identified with the term. Most institutions employing CHWs continue to use a variety of titles for their workers, making it very difficult to track the number, variety, and impact of CHWs across the nation and within Massachusetts.

Another challenge, described in detail below, is that the CHW field is still defining its scope of practice and its core knowledge base. Training and educational opportunities for CHWs vary widely. The field is beginning to establish certification protocols. Negotiations with the U.S. Department of Labor are underway about job status and coding. In January 2009, the Office of Management and Budget officially published the 2010 Standard Occupational Classifications (SOC) listing in the Federal Register, which includes a unique occupational classification for Community Health Worker (SOC 21-1094).

CHWs also face formidable financial challenges. In its 2005 report, *Community Health Workers: Essential to Improving Health in Massachusetts*, DPH found that:

- CHW wages are low;
- CHW turnover is high; and
- CHW job security is limited by unpredictable funding.¹⁸

Professionalization of the field is expected to help CHWs earn family sustaining wages and attain greater financial stability, but professional development is a long-term and complex process with uncertain outcomes, particularly in the rapidly changing U.S. health care system. In states that have begun to certify CHWs, CHW leaders report that there is no apparent correlation yet between more rigorous professional standards and improved financial status for certified CHWs. Savings in health care systems do not necessarily accrue for the benefit of the organizations and workforces whose innovations and efforts help produce cost benefits.

This has led to discussion about the potential impacts of organizing CHWs into collective bargaining units, a strategy which the CHW Advisory Council identified but did not explore in sufficient detail to warrant making recommendations. Other health and human service workforces—such as nurses, social workers, and home health aides—have experiences that CHW leaders nationally may consider. For now, Massachusetts CHW leaders are focused on professional development of the field, including defining a recognized body of knowledge and skills, promoting a newly developed code of ethics, fostering a sense of identity and loyalty among CHWs, advocating for policies and legislation, and developing state and national professional associations, standards of practice, training programs, and plans for certification. Progress in all of these areas demonstrate that CHWs are on the path to becoming a recognized, integrated, and valued profession within the health care, public health and human service delivery systems.

III. CHWs in Massachusetts

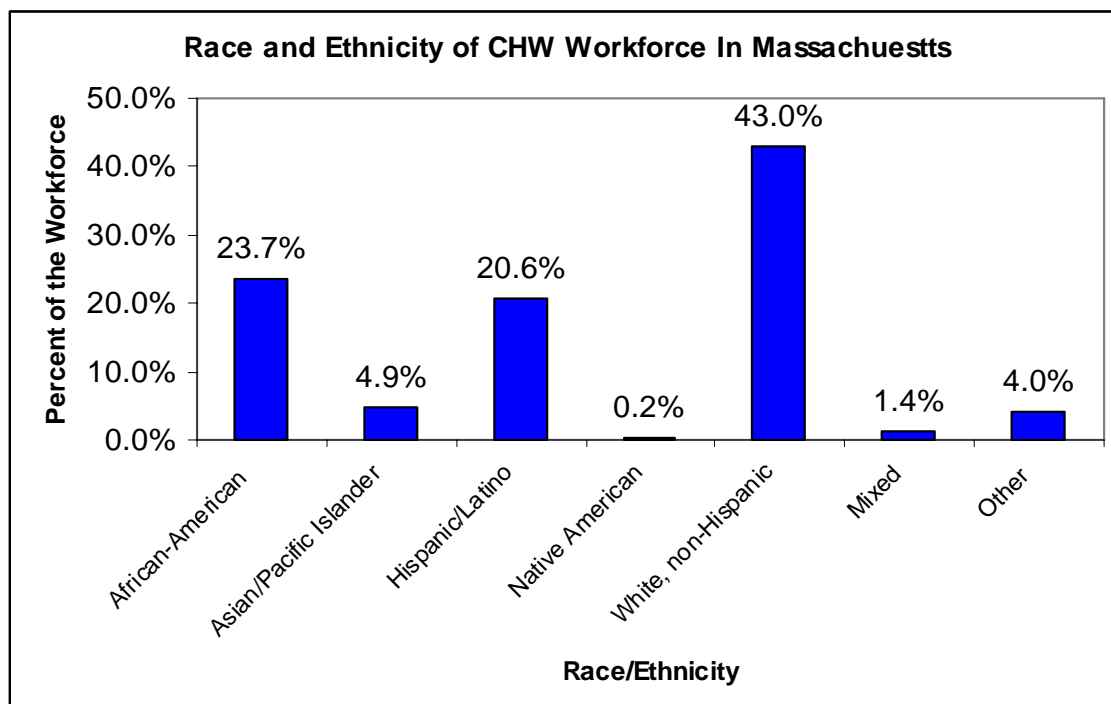
Data on the CHW workforce in Massachusetts were gathered from the 2008 DPH survey of CHW employers, which was conducted as part of the Section 110 investigation for this report, and the 2005 DPH survey of CHWs and their supervisors, which resulted in the report, *Community Health Workers: Essential to Improving Health in Massachusetts*. Other supplemental data in this section come from the 2007 HRSA CHW National Workforce Study.

A. Demographics

The 2008 DPH investigation of the workforce identified 2,932 CHWs across the state. This estimate is consistent with, though slightly more than, the size of the Massachusetts CHW workforce of 2,441 CHWs reported in the HRSA CHW National Workforce Study (2007). However, it may actually be a conservative estimate given the limitations of the sampling methodology used for the DPH CHW employer survey.¹⁹

The 2005 DPH survey of the workforce found that the majority of CHWs are women (76.2%), with a median age range of 36-40 years old, and 60% have a degree beyond high school. These numbers are similar to HRSA's description of the national CHW workforce, although CHWs in the 2005 DPH survey reported a higher level of education than CHWs nationally.²⁰

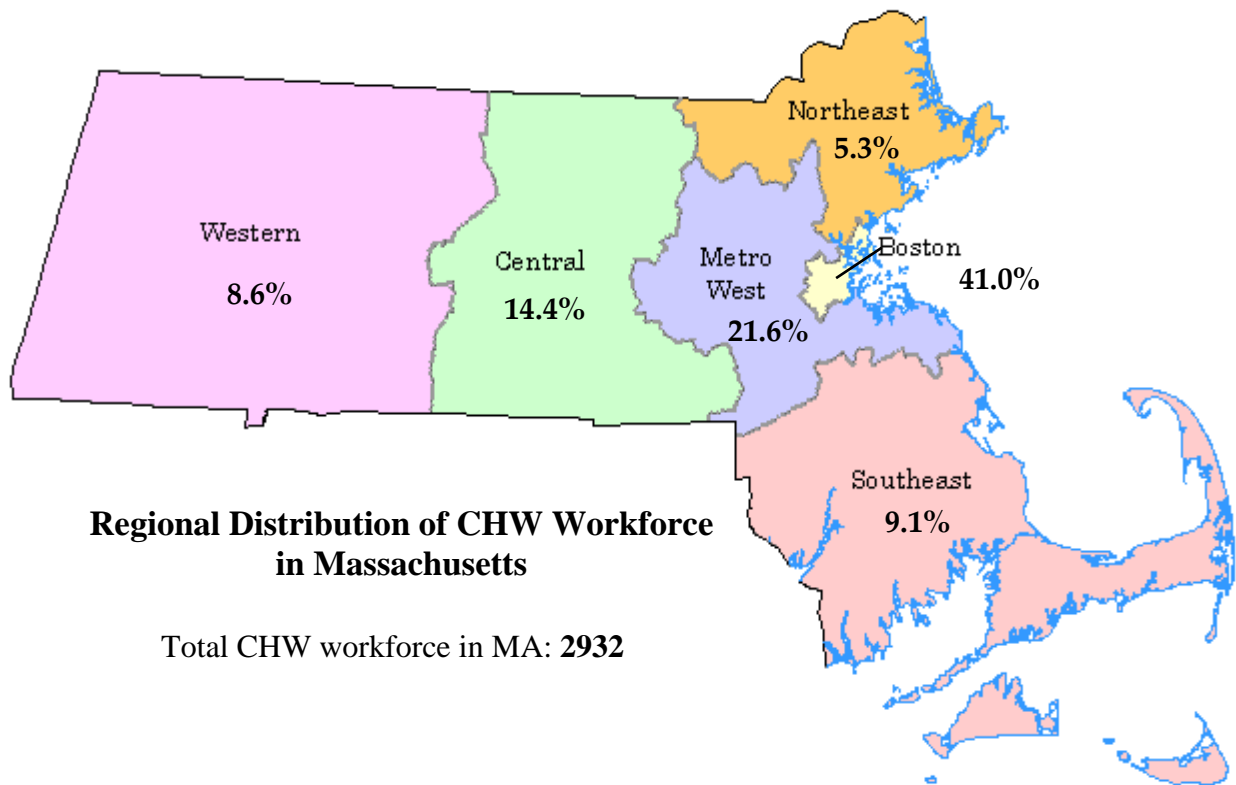
The CHW workforce reflects the growing racial and ethnic diversity in communities throughout the Commonwealth. Over half of the CHW workforce are people of color, with 23.7% African-American, 20.6% Hispanic, 4.9% Asian or Pacific Islander, 0.2% Native American, and 1.4% one or more races or ethnicities. More specifically, CHWs identify with many different ethnicities, including African (various ethnicities), Cambodian, Chinese, Dominican, Haitian, Puerto Rican, Russian, and Vietnamese, among many others.²¹ In Massachusetts, 19% of the state's population is people of color (African-American, Asian, Native Hawaiian or Pacific Islander, Hispanic, or American Indian or Alaska Native), 14% is foreign born, and 20% speaks a language other than English at home.²² This is a 4% increase in the proportion of people of color in the state from the 2000 census (15% of state population was people of color) and a 7% increase from 1990 (12% of the state population was people of color).²³ Over half (58.6%) of CHWs in Massachusetts are bi- or multi-lingual, speaking the preferred language of their clients.



Source: 2008 DPH CHW Workforce Survey.

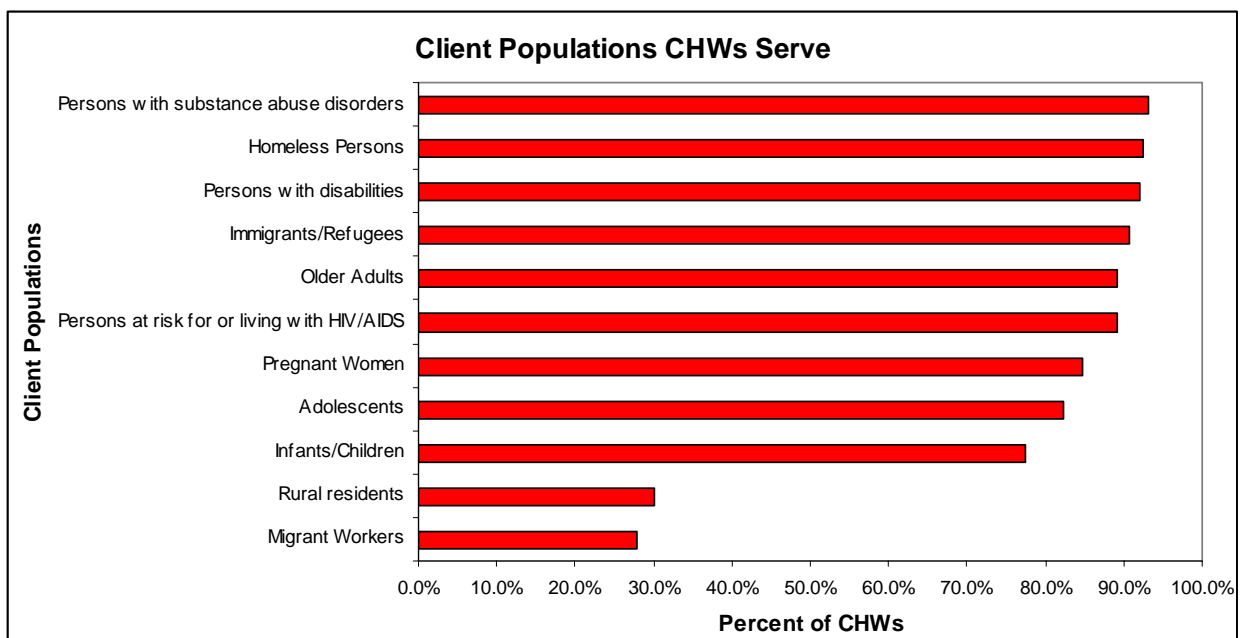
B. Where and with whom CHWs work

CHWs are employed by a wide variety of agencies, including community health centers, hospitals, community-based organizations, housing authorities, immigrant and refugee associations, and faith-based organizations. Based on research conducted for this study, 41% of CHW works in Boston, 21.6% are employed in the Metro region, 14.4% work in Central Massachusetts, 9.1% are employed in the Southeast, including Cape Cod, 8.6% work in Western Massachusetts, and 5.3% of the workforce is employed in the Northeast region of the state. Thirty percent of the workforce is employed by agencies that serve rural clients.

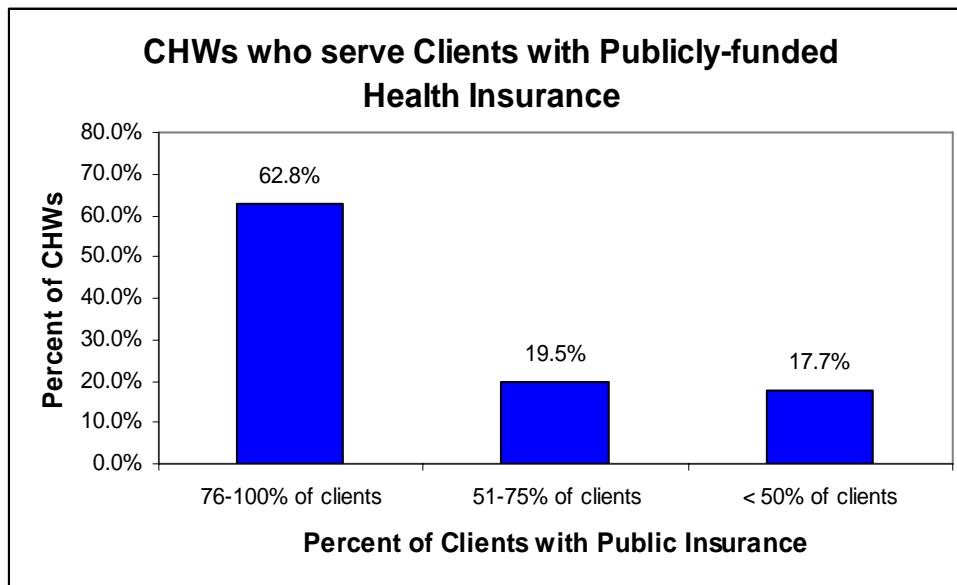


Source: 2008 DPH CHW Workforce Survey.

CHWs also work with a wide variety of at-risk populations, including but not limited to people with substance abuse disorders, homeless persons, immigrants and refugees, persons at risk for or living with HIV/AIDS, and adolescents, among others. Most clients served by CHWs receive or are eligible for publicly funded health insurance. In fact, the 2008 DPH workforce survey found that 62.8% of CHWs work at agencies that report 76-100% of clients receive or are eligible for publicly funded insurance.



Source: 2008 DPH CHW Workforce Survey.



Source: 2008 DPH CHW Workforce Survey.

C. Training and Certification

A significant number of CHWs receive some training for the work they do, although the type and source of training varies. Some CHWs are trained in specially designed, formal training programs based on identified core competencies for CHWs. Some receive on-site training from their employers for their jobs, and others receive training in specialized health topics for their jobs in various settings. Often, CHWs are hired to work in programs that focus on specific health issues, such as asthma, HIV/AIDS, or diabetes, and are trained in those areas, but they do not receive training in the broader set of core competencies needed to conduct their work. A significant number of CHWs do not receive any training at all.

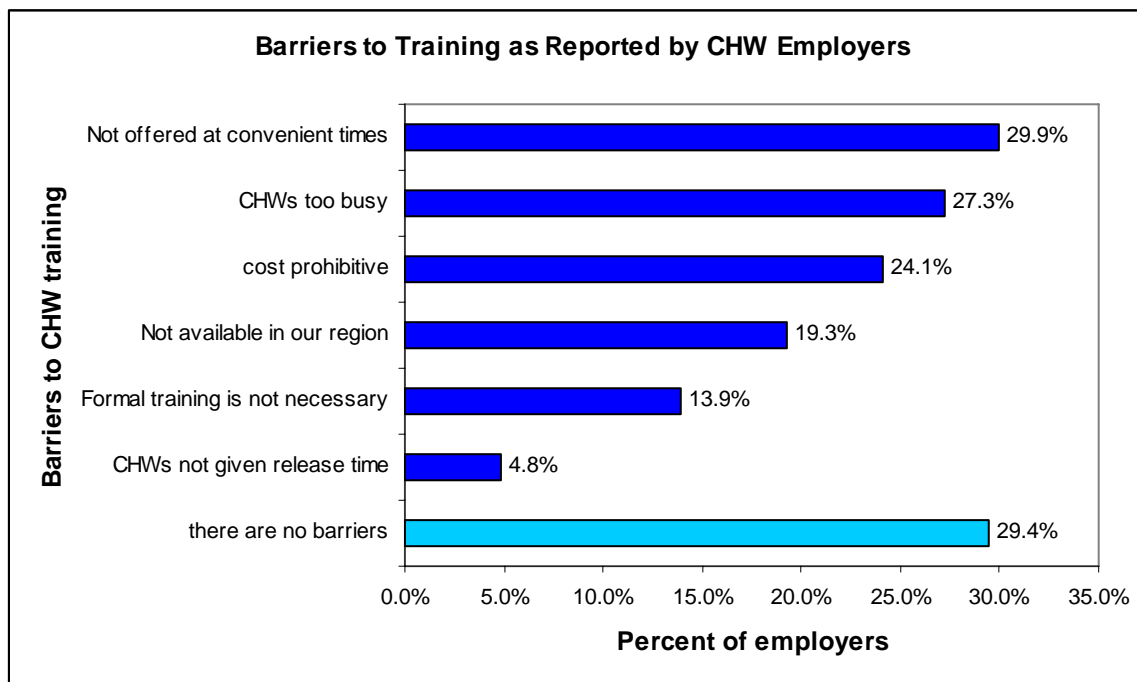
Currently, there is no statewide infrastructure to support standardized training for the CHW field. Formal CHW training opportunities exist in only three locations in the state, offered through two community-based training programs: Community Health Education Center (CHEC), with locations in Boston and Lowell, and the Outreach Worker Training Institute (OWTI) of the Central Massachusetts Area Health Education Center (AHEC), located in Worcester (See Sidebar 1). At the end of the formal training at CHEC and OWTI, CHW participants receive a certificate of completion. Approximately 1300 CHWs (less than half the workforce) have received formal CHW core training.

According to the DPH CHW 2008 Workforce Survey, only 7.4% of the total CHW workforce is employed by agencies that report 76-100% of their CHWs are formally trained, whereas almost 30% of the workforce is employed in agencies that report no CHWs have received formal training. Nearly thirteen percent (12.6%) of CHW employers report that 76-100% of the CHWs at their agency/organization have received formal CHW training; however, more than three times as many agencies (42.6%) report that none of their CHWs have received formal CHW training. **Error! Not a valid link.**

Source: 2008 DPH CHW Workforce Survey.

2008 Workforce Survey data suggest a relationship between training availability and the number of CHWs who work at agencies that report high levels of training among their CHW workforce. Of the CHWs in Central MA, where OWTI is located, 82.4% work in agencies that report over 50% of their CHWs have received formal training, and 40.6% of CHWs in the Northeast, where one CHEC location is, work in agencies that report over 50% of their CHWs have received formal training. In contrast, in the Metro, Southeast, and Western regions, the largest proportion of the workforce in each of these regions work at agencies that reported none of their CHWs have received formal training. The majority of CHWs in Boston (63.0%) work at agencies that report less than 50% of CHWs are formally trained. These data suggest that in Boston, where CHEC is located, the demand for training and CHW services outstrips the availability of training.

Massachusetts has been highlighted nationally for its leadership in innovative CHW training programs;²⁴ however, barriers exist to CHWs' access to these training programs. In the 2008 DPH survey, employers cited a number of barriers to formal training for CHWs, including that trainings are not offered at convenient times (29.9% of employers); CHWs are too busy to attend trainings (27.3%); training costs are prohibitive (24.1%); and trainings are not available in all regions of the state (19.3%). Other employers indicated that they did not know formal training opportunities for CHWs existed; that there is no back-up staff to cover when a CHW is at a training session; and that there is limited or lack of transportation to training sites.



Although a relatively small proportion of CHWs have received formal training to date, many members of the workforce receive specific training from their employers, and, furthermore, have received a post-secondary degree or taken college courses to gain knowledge and skills. CHWs at the DPH regional focus groups and the MACHW regional meetings on credentialing indicated that training and opportunities for higher education are important to their effectiveness in their work and advancement in the field.

Both CHEC and OWTI have established linkages to state and community colleges in their regions, so that core training translates into community college credit. The Community Health Worker Initiative of Boston has created higher educational opportunities for CHWs with community colleges and state universities in the Boston area by developing Certificate and Associate degree programs in Community Health for CHWs, based on collaboration with CHEC. Bunker Hill Community College and MassBay Community Colleges honor students who have completed a total of 109 hours of training at CHEC with a maximum of 6 college credits for prior learning for students who have completed both the Comprehensive Outreach Educator Certificate (COEC) and the Advanced Comprehensive Outreach Educator Certificate.

Upon successfully completing the COEC and Advanced COEC, students may receive 6 credits from Bunker Hill or MassBay. The training focuses on CHWs' core competencies, skills that increase the community health workers natural ability to work with their community. Students are required to submit a report of their learning at CHEC to the college in the form of a Prior Learning Portfolio. To facilitate this process, CHEC provides students with instructions on how to complete a Prior Learning Portfolio and a class audit that reports all trainings they attended. The Community Health Worker Initiative of Boston, which has provided facilitation and financial support to CHEC, Bunker Hill and MassBay to create this credit granting relationship, will also provide one-on-one assistance through their Career Coaching Program to students interested in creating a Prior Learning Portfolio. The Certificate and Associate degree will potentially be credited towards a Bachelors degree in human services with a concentration in community health.

In addition to standardized training, DPH's investigation found that CHWs, employers, funders, and payers agree that certification of CHWs is critical to the advancement and professionalization of the workforce. Both CHWs and employers testify to the need for a standardized training program for CHWs, with the ultimate goal of certification of CHWs for core competencies. Several states have already passed legislation formalizing certification programs for CHWs. For example, Texas and Ohio require CHWs to show completion of an approved training program to receive certification, but there is no direct evaluation or assessment of their skills and knowledge. Indiana and Alaska have created CHW certification programs limited to specific health services or programs. Minnesota has created a credentialing requirement for CHWs who can be paid through Medicaid and work under the supervision of a registered Medicaid provider. To date, the majority of states which implemented a certification process have not implemented third party reimbursement for CHW services. Further study is needed to assess the effectiveness of existing CHW certification programs.

Massachusetts lacks a systematic commitment to or infrastructure for supporting CHW training. To date, funding for CHW training has been reliant primarily upon "soft" money (e.g., public and private grants) and the allocation of discretionary funds from host organizations to subsidize CHEC and OWTI operations. Funding in this manner renders programs vulnerable to shifting grant priorities and makes CHW training dependent upon the entrepreneurial skills and commitments of individual program leaders.

Formal CHW Training Programs in Massachusetts

CHWs can receive formal CHW training from either CHEC, which has training locations in Boston and in Lowell, or the Outreach Worker Training Institute (OWTI) which is located in Worcester. CHEC Boston is funded by the City of Boston and the CHEC Northeast program is funded by DPH. OWTI is funded by Central Massachusetts AHEC, DPH and MassAHEC Network of the Commonwealth Medicine Program at University of Massachusetts Medical School. Both programs have been recognized in Massachusetts and nationally as best practices in the training of CHWs (e.g., HRSA CHW Workforce Development Study, 2007, Robert Wood Johnson Foundation, the National Educational Collaborative, in press).

Both programs offer a similar core curriculum based on the seven core areas of CHW activities as reported in the National Community Health Advisor Study.²⁵ These core areas (see page 18 of this report for the full list) encompass a set of core competencies necessary for community health work in a variety of settings. The core competencies, which are a set of skills and applied knowledge essential for effective community health work and advancement in the field, cover a broad range of skills and knowledge consistent with the broad scope of CHW work. For example, the core competencies cover the knowledge and skills needed to conduct outreach, health education and advocacy with individual clients, as well as to conduct community organizing and mobilization.

The core training course at both programs is between 45 and 55 hours. The training programs at CHEC and OWTI equip CHWs who are currently employed as CHWs with a specific knowledge and skills base necessary for their positions. CHWs receive a certificate of completion at the end of the training course. CHWs can earn academic credit from local area collaborating universities and colleges. In addition to the core curriculum, CHEC and OWTI offer disease-specific modules, general health information and resources, and supervisor training. CHEC is working with the Community Health Worker Initiative of Boston to offer an advanced core training that includes additional competencies, at the end of which CHWs receive a certificate of completion. OWTI has worked closely with the Women's Health Network and men's Health Partnership at DPH to develop a Patient Navigator training course. Both CHEC and OWTI are currently collaborating with DPH to develop the training curriculum for the new "Integrated Chronic Disease Management Utilizing CHWs Program".

CHEC and OWTI are based on adult education models and use a variety of instructional techniques. OWTI utilizes a team instructor approach, which includes a CHW co-trainer. Because of this instruction model, OWTI was recognized by the Community Health Worker National Education Collaborative as a model CHW training and educational program for "Addressing CHW Leadership and Faculty Development in CHW Training Programs."

CHW Core Competencies (*see Appendix H for full description*)

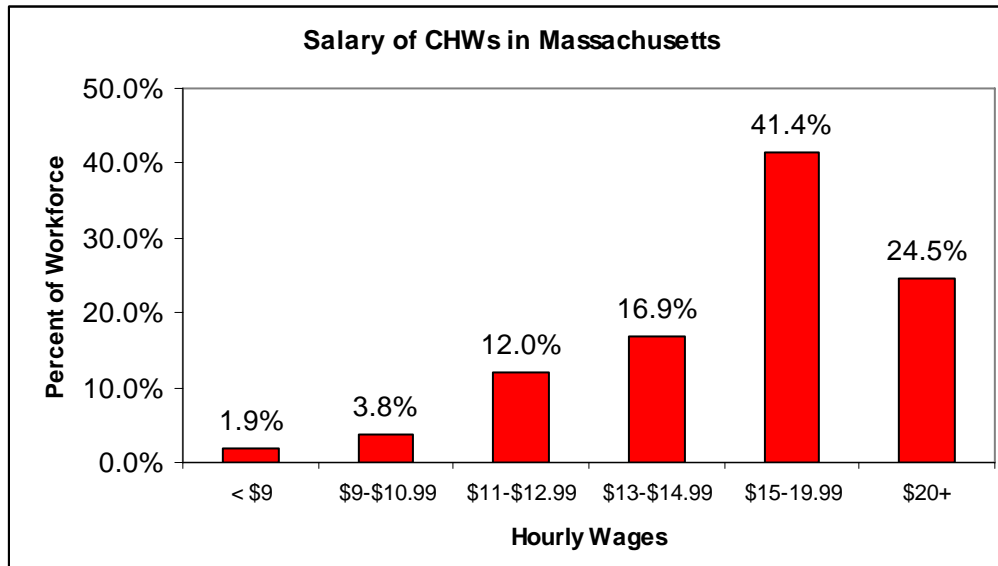
1. Outreach Methods and Strategies
2. Client and Community Assessment
3. Effective Communication
4. Culturally Based Communication and Care
5. Health Education for Behavior Change
6. Support, Advocacy and Care Coordination for Clients
7. Application of Public Health Concepts and Approaches
8. Community Capacity Building
9. Writing and Technical Communication Skills
10. Special Topics in Community Health

D. Funding for CHWs

Rather than being integrated into the operating budgets of provider institutions and organizations, funding for CHWs is typically insecure and allocated through categorical, cyclical grants related to specific populations, diseases and conditions. Funding priorities and amounts change from year to year, leaving CHWs and the people they serve vulnerable. The unstable nature of funding for CHWs undermines their unique effectiveness in successfully engaging clients through building relationships based on trust. One employer respondent to the survey said, “CHWs need to receive compensation that allows them to stay in the field even if they are working for a small CBO. Funding for programs must be more than a year or two. Otherwise [there is] less impact, more turnover, and excellent staff are lost [leading to] a constant need to hire new staff and train them only to have them leave [when] the position ends.”

According to the 2008 DPH survey of employers, funding streams that contribute to CHW salaries including federal, state, and local government contracts, private foundation grants, non-profit funding, such as through the United Way, support from program fees, and health plan funding. On average, employers indicated that 48.9% of funding for CHW programs comes from state agencies, followed by 26.2% from federal funding and 20.6% from private foundations. DPH is the largest funder of CHWs, either through direct employment or through its community-based contracts. According to a survey of DPH program data, \$18,285,349 supports 586 full-time and part-time CHW positions throughout the state.

Currently, 34.5% of CHWs in Massachusetts make less than \$15 per hour, which is below \$30,000 a year for a full-time position. These data are similar across the six regions of the state, with roughly a third of CHWs working in each region earning less than \$15 per hour. These wages place CHWs below 150% of the federal poverty level (FPL) for a family of four. They are also far below self-sufficiency estimates for a family of four in all regions of MA.²⁶ Livable family-sustaining wages that increase with experience, education, and cost of living are necessary to retain members of the workforce and reduce turnover.



Source: 2008 DPH CHW Workforce Survey.

In addition to wages, employee benefits are crucial to retention of the workforce. Currently, the vast majority of CHW employers (93.6%) offer benefits for full-time CHWs. Ninety-eight percent of those that offer benefits offer health insurance, 88% offer dental insurance, 84% offer disability insurance, 79% offer a pension or 401(k) plan, and 68% offer support for tuition or continuing education. Most employers (72.6%) also offer similar benefits to part-time CHWs.

I think we need sustainable funding and I know it is for community health worker positions, but the sustainable funding is actually for the community because ... we need to continue to be here to help them.... [We receive] the funding and then the community is the one that feels it. They are the ones that drive the services. So the sustainable funding is for the community health workers, but the reality is the sustainable funding is for the community.

- CHW from Cape Cod

IV. The Critical Roles of CHWs

In its 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, the Institute of Medicine (IOM) found, “Community health workers offer promise as a community-based resource to increase racial and ethnic minorities’ access to healthcare and to serve as a liaison between healthcare providers and the communities they serve.” The IOM specifically recommended that programs supporting “the use of community health workers..., especially among medically underserved and racial and ethnic minority populations, should be expanded, evaluated and replicated.”²⁷

CHWs also bring needed health information and support to individuals and communities that have historically lacked access to both. As a result, they strengthen community capacity to improve social determinants of health, including inadequate education and lack of access to health insurance.

Improvements in four key domains of health care —access, quality, disparities, and cost—are closely interrelated and are central to the success of health care reform in Massachusetts. For example, making services more accessible to and improving the quality of those services for vulnerable and underserved communities, helps to reduce health disparities. As part of health care reform, concerns about cost containment stress the importance of widespread access to health coverage, appropriate use of services, including primary and preventive care, and ensuring high quality care. All of these qualities are essential to improving health outcomes and reducing disparities, as well as to reducing costs. Although these facets of the health care system are closely connected and interdependent, they are discussed separately in this section to highlight the evidence of CHW effectiveness in these areas.

A growing body of research on CHW programs and impacts demonstrates that CHWs are vital to achieving the goals of health care reform, including increasing access to care, reducing disparities, improving quality, and controlling costs. Since the early 1990’s, the number of published academic and professional journal articles including referencing the role of CHWs has greatly expanded. Between 2002 and 2006, nine literature reviews of studies of CHW effectiveness in primary care and medical specialty interventions were published. Early studies of the impact of interventions including CHWs varied greatly in design and implementation and their uses for clinical or policy purposes were often limited. However, the trend in published studies over the past decade has favored more rigorous research.

A number of landmark studies and reports providing overviews of the field have been published recently, including a comprehensive study of the national CHW workforce,²⁸ an annotated bibliography of rigorous impact studies,²⁹ and a review and policy analysis of financing options and best practices.³⁰ Additionally, in 2007 a national research agenda for studying the effectiveness of CHWs was released at the annual meeting of the American Public Health Association.³¹

While there is a need for ongoing and improved evaluation, the current evidence is strong and convincing that CHWs have positive impacts within the health care and public health systems, and for the communities in which they work.

A. CHWs Increase Access to Care

Access to care, according to the Institute of Medicine, is “the timely use of personal health services to achieve the best possible health outcomes.”³² Both timely use of services and optimal health outcomes are dependent upon having health insurance to cover costs of services, having a regular primary care physician, and receiving preventive education and services.

It is well documented that CHWs improve access to health care services for people who previously experienced limited access to these services.³³ CHWs are highly effective in recruiting and enrolling individuals in health insurance plans, linking individuals with primary care physicians, and ensuring the use of preventive care. Their community-based work and linguistic, cultural, and/or experiential characteristics shared with the community enable CHWs to reach families and individuals who are institutionally marginalized and may lack knowledge or understanding of services.

Health Insurance Enrollment

CHWs have played an important role in the early success of health reform in Massachusetts by contributing their skills to the work of Outreach and Enrollment grantee organizations funded through health reform legislation. The role they have most commonly played has been in helping to identify and assist uninsured residents to enroll in publicly or privately funded insurance plans. To date, far more uninsured people than had been estimated have been identified and enrolled in MassHealth, the Massachusetts Medicaid program, and Commonwealth Care plans. This success helped to substantially reduce the use of the Health Safety Net Trust Fund to offset the cost of care for uninsured or underinsured Massachusetts residents.

Most organizations that received Outreach and Enrollment Grants from MassHealth employ CHWs to locate, screen, and enroll residents in appropriate plans.³⁴ Based on legislative specifications for these grants, MassHealth gave funding priority to organizations whose staff offered the greatest knowledge of the community, linguistic and cultural sensitivity, and had the technical skills needed to assist residents with enrollment. These skills are most commonly offered by—and indeed help to define—community health workers.³⁵

- Since the inception of health care reform in 2006, Outreach and Enrollment grantee organizations have enrolled over 164,600 individuals in subsidized health insurance plans, namely MassHealth and Commonwealth Care.³⁶
- Outreach and Enrollment grantee organizations have also assisted 45,900 individuals to retain their insurance coverage through the annual renewal process.³⁷
- During 2007, seven CHWs at Project H.O.P.E. in Hyannis, MA—an Outreach and Enrollment grantee program—enrolled 4,000 people in MassHealth and 2,200 in subsidized Commonwealth Care plans.³⁸

Linking to Primary Care Providers

Another important aspect of gaining access to care is having a regular primary care provider who coordinates patients’ care and offers a medical home. Many CHWs successfully link individuals and families to primary care providers after assisting them with enrollment in health insurance and ensure ongoing connections through case management activities. In fact, research has shown that CHWs who perform case management activities are more successful at engaging and

helping sustain patients' relationships with providers, than workers who make a simple one time contact.³⁹

- The team of CHWs at Project H.O.P.E. in Hyannis, MA, in 2007, helped 4,990 people select a primary care physician and educated them about available services and how to navigate the health care system.⁴⁰
- A randomized, controlled trial in Massachusetts concluded that CHWs can more successfully improve the chances that newly insured individuals not only enroll but also maintain their coverage over time compared to other standard enrollment approaches.⁴¹

Enrollment specialists stress that initial enrollment is only the first step of engaging and keeping previously uninsured people covered. The challenge of overcoming ongoing barriers to required regular re-enrollment, as well as effective use of the health system is a task for which CHWs are very well suited.⁴²

BEST PRACTICE STUDY: A randomized controlled trial conducted in Massachusetts provides scientific evidence for the significantly greater success of CHWs, compared to the standard Medicaid and SCHIP outreach and enrollment approaches, in making sure uninsured Latino children received health insurance. The CHWs were from similar ethnic and cultural backgrounds as the families they were helping, and they were trained to do the complex work of explaining options and helping with decision-making regarding enrollment, as well as advocating and serving as a liaison with bureaucracies to help maintain coverage. Seventy-eight percent of children in the CHW intervention group were insured continuously, compared with 30% of control group children receiving traditional approaches. Children in the CHW intervention group obtained insurance significantly faster (mean: 87.5 vs. 134.8 days), and their parents were significantly more satisfied with the process of obtaining insurance compared to the control group.⁴³

Ensuring Use of Preventive Care

CHWs are effective at helping people change behavior to improve their health as well as to access a wide variety of preventive health services, including general education and referral for chronic and acute health conditions, comprehensive perinatal care, preventive health screenings, and immunizations.

Education and Referral

Kentucky Homeplace employs and trains 40 resident CHWs in rural, medically underserved areas to educate and improve their peers' access to health care.⁴⁴ Approximately 75% of residents served by CHWs in the Kentucky Homeplace program were found to be at significant risk of having or developing diabetes. In response to this identified need, the CHWs distributed 3,000 self tests for diabetes. They also met with more than 1,200 clients to discuss the risks of colorectal cancer and the available resources for medical information, screenings and care. CHWs improved screening rates for these diseases through teaching interventions and raising residents' awareness about their risk and the importance of early screening.⁴⁵

Perinatal Health

Published studies have shown CHW effectiveness in improving maternal and child health outcomes. In a review of 14 studies of the effectiveness of CHW programs that aim to improve

pregnancy outcomes, eight studies showed a positive impact on prenatal care; three demonstrated a positive impact on low birth weight delivery; and one study showed positive impact on preterm delivery.⁴⁶ Additional examples include the following:

- The low birth weight rate in two targeted Ohio counties fell significantly after the Community Health Access Program (CHAP), which relies heavily on CHWs, was implemented. Data from more than 300 clients show a low birth weight rate of less than 5 percent in an impoverished area that previously had a low birth weight rate of over 23 percent.⁴⁷
- An evaluation of the Massachusetts DPH Early Intervention Partnership Program (EIPP), which serves high risk pregnant women, found that participants in the program, which uses CHWs in integrated care teams, were significantly less likely to have an infant with an abnormal condition reported on the birth certificate and significantly more likely to breastfeed at time of hospital discharge than non-EIPP participants.⁴⁸

Preventive Health Screenings

CHWs have been shown to contribute to increased rates of screening for a number of health conditions, including cancers. An analysis of 15 CHW studies showed a positive effect of CHW interventions' on people's use of preventive services, including breast cancer screenings.⁴⁹

- In one study, conducted at six urban primary care practices in Rochester, New York, culturally appropriate CHW case management activities were shown to result in three times the mammogram completion rate compared to the rate among women receiving the usual care, which does not include CHW services.⁵⁰

Immunizations

Keeping immunization rates high among children is a top public health priority. While overall rates of immunization in the US are high among children, there are disparities across communities. CHWs are able to communicate the importance of timely immunizations to families in a way that can lead to changes in communities where rates are relatively low.

- In one randomized controlled study in a largely Dominican community in New York City, education, support, and home visits with intervention group families by CHWs from the community significantly improved the immunization status of young children compared to families who were only notified of the need for immunization (75% were up-to-date versus 54% in the control group).⁵¹

B. CHWs Improve Health Care Quality

The importance of timely preventive screenings and primary care is also recognized by health and social service providers as essential to improved quality of care and better health outcomes. The IOM defines health care quality as “The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁵² In recent years, health care professionals have identified patient-centered care—care that is respectful and responsive to “patient preferences, needs and values”⁵³—as a key component to improving health care quality. High quality, patient-centered care includes:

- open communication between patients and providers,
- delivery of culturally competent services,

- high levels of patient satisfaction with the care and services they receive, and
- ongoing chronic disease self-management.

CHWs play an important role in improving all four of these aspects of health care quality. Examples of research findings include:

Improving Communication between Patients and Providers

A home visiting program in Chicago saw marked improvements in infant mortality and immunization rates among low-income African American and Hispanic families when they integrated CHWs into their service delivery model. These improvements were contributed to the CHWs' abilities to enhance communication and connection between these families and the health care system. Program outcomes include fewer infant deaths compared to citywide and community rates, higher immunization rates compared to local and national statistics, and normal infant health and development.⁵⁴

Improving Cultural Competency

The Southeast Asian Birthing and Infancy Project (SABAI) in Lowell, MA, provided enhanced prenatal care for ethnic and linguistic minorities through culturally matched staff and program features.⁵⁵ SABAI trained bilingual and bicultural staff who provided general health advocacy and education for pregnant and parenting women. The program dramatically increased enrollment in earlier prenatal care among women participants over time. For example, two years into the program, only 5% of young pregnant women waited until their third trimester of pregnancy to register for prenatal care compared to 40% at the beginning of the program.⁵⁶

Improving Patient Satisfaction

A randomized study of 309 African American men with hypertension found that the men who received more intensive services from a nurse practitioner-CHW care team were over twice as likely to be extremely satisfied with the way they were treated and the care they received for their high blood pressure (HBP) compared to men who received one-time education and referral.⁵⁷

Improving Self-management of Chronic Diseases

The increasing prevalence of chronic illnesses such as cardiovascular disease, diabetes, and asthma, has been a force for changing how primary care is practiced in the U.S. In fact, the Institute of Medicine (IOM) recommended that improving the quality of care should begin with chronic illnesses.⁵⁸ The Centers for Disease Control and Prevention (CDC) promote and support utilizing CHWs as an effective approach both for reducing risk of cardiovascular disease and improving cardiovascular health, and for preventing, treating, and controlling diabetes, especially in minority populations at high risk for the disease.⁵⁹

Among the core strategies of chronic care management approaches are: 1) engaging and educating patients in managing their own conditions, and 2) helping them to take advantage of supportive resources in their communities, both of which are central roles of CHWs.⁶⁰

Prevention and Management of Heart Disease

A review of six studies related to heart disease and stroke concluded that CHW interventions were associated with “significant improvements in participants’ blood pressure care and control.”⁶¹

- CHWs improved control of hypertension among African American men in a randomized controlled trial study in Baltimore. CHWs conducted home visits, educating and motivating clients and their families to adhere to hypertension management measures, as well as referring clients to services.⁶²
- In a Baltimore study, CHWs have been shown to be an effective part of multidisciplinary teams in improving control of hypertension among low income African American men. Patients receiving services from care teams that included CHWs had significantly improved blood pressure and reduced heart disease rates compared to patients who received standard education and referrals.⁶³

Prevention and Management of Diabetes

- In a non-randomized comparison group study of Hispanic women with diabetes attending a diabetes management clinic in East Harlem, 80% of the women assisted by CHWs completed the program, compared to only 47% of those without the CHW intervention.⁶⁴

In Massachusetts, community health centers (CHCs) collectively care for nearly 30,000 African American and Latino patients living with diabetes.⁶⁵

- Data from the Holyoke Health Center’s diabetes self-management program, which employs CHWs for patient outreach and support, indicate that patients’ participation in self management was associated with improved health measures, reducing the risk of related complications from the disease. In fact, the authors of the research state that the ability to engage patients in this program “has been largely due to the role played by the CHWs in establishing personal relationships with patients, modeling behavior, promoting self-management, and creating the important linkages between patients’ home situations, participation in self-management activities, and the patients’ clinical care.”⁶⁶

Massachusetts CHW diabetes intervention research: Evidence for CHW effectiveness in Massachusetts diabetes care teams is so promising that there are currently two initiatives underway in the Commonwealth focused on evaluating the effectiveness of CHWs’ contribution to increasing diabetes patients’ ability to improve their self care and control their blood sugar levels. The Massachusetts League of Community Health Centers, together with the University of Massachusetts Medical School, is completing the first year of research on the impact of adding CHWs trained in the chronic care model and in diabetes management to existing teams in health centers funded to reduce health disparities (Hargraves, unpublished). Additionally, the Prevention and Access to Care and Treatment program (PACT), in collaboration with Codman Square Health Center, Joslin Diabetes Center and Harvard’s Medical and Public Health Schools, proposes to examine the effectiveness of a CHW intervention in improving the care and health of vulnerable diabetes patients unsuccessful at treatment and self care.⁶⁷

C. CHWs Reduce Health Disparities

The Institute of Medicine recommends CHWs as part of a “comprehensive, multi-level strategy to address racial and ethnic disparities in health care.”⁶⁸ In addition, the Pew Commission says that CHWs “offer unparalleled opportunities to improve the delivery of preventive and primary care to America’s diverse communities.”⁶⁹ The Massachusetts Commission to End Racial and Ethnic Health Disparities also reported hearing testimony that said CHWs “can be examples of effective resources for increasing access to...health care systems...because they help minority populations better utilize primary care and preventive resources.”⁷⁰

Improving Health among Vulnerable Populations

A number of studies have shown that CHWs who perform patient navigation and case management activities can have a significant impact on disparities in cancer screenings. Patients of color are often in more advanced stages of illness at the time of diagnosis compared to white patients. Evidence shows that this contributes to higher rates of mortality and death among minority populations,⁷¹ so improving cancer screening rates is a critical strategy for reducing disparities in cancer deaths.

- A recent randomized controlled trial study in Atlanta found African-American women in a CHW intervention group significantly more likely to complete follow-up appointments after their mammograms than those in the control group (91.7% of this group kept all of their scheduled appointments compared to only 74.3% of the control group).⁷²
- In a study in Santa Clara County California among Vietnamese American women, (who have the highest incidence of cervical cancer of any racial and ethnic group in the U.S.), pap smear rates increased significantly more among women in the CHW intervention group compared to women receiving only media education. Among those women who had never before screened for cervical cancer, 46% of the CHW intervention group received a pap smear compared to 27.1% of the control group.^{73, 74}
- African American and Hispanic patients receiving CHW services at a teaching hospital in New York completed colonoscopies at a rate of 66%, compared to a citywide average completion rate of 47%. There were also fewer cancellations of screenings and a very high rate of patient satisfaction (98%), with the majority (66%) saying they would not have completed the procedure without the CHW navigation services.⁷⁵

Baltimore CHW Initiative: In 2007-2008, the Baltimore City Health Department proposed a partnership with Baltimore County to reduce disparities among African Americans in rates of cardiovascular disease and diabetes. A key strategy of the plan is the employment of as many as 20 community health workers located at community health centers. The CHWs would be assigned a case load of approximately 30 patients who presented at a center with diabetes and/or hypertension and follow an evidence-based protocol of conducting home visits, educating, supporting and referring patients to improve their health and health care.⁷⁶

Addressing Social Determinants of Health and Strengthening Communities

It is widely recognized by health experts and policy-makers that health disparities are not only due to poorer access to prevention and health care services but are also influenced by social, economic and environmental conditions.⁷⁷ The Healthy People 2010 goals highlighted the need

for approaches to address social inequities which increase entire communities' risks for poor health.⁷⁸ Many public health practitioners and researchers support improving the involvement of community members in addressing problems and building 'social capital'⁷⁹ as effective public health approaches. A number of projects around the country and in Massachusetts have involved community health workers as keys to such strategies.

- A community-based participatory research program for low income African American and Latino communities in Portland, Oregon aimed to build and strengthen social capital within the community. CHWs were selected as one of the key strategies because of their effectiveness in identifying and addressing social determinants of health, including disparities in education, power and access to services. CHWs, together with local church members, identified lack of health insurance, jobs and self employment possibilities as key local determinants of health. Residents created a cooperative to address all three areas. In another neighborhood, residents identified violence among youth and police violence as reasons they were afraid to leave their homes. The result was a broad-based community coalition that included young police cadets and a Peace Campaign to improve the situation.^{80, 81}

CHWs help increase access to care in Springfield

In the North End of Springfield, MA, 10% of the residents pass through the jail yearly, only 35-40% of children graduate from high school, the median family income is among the lowest in Massachusetts, and rates of HIV, asthma, diabetes and heart disease are extremely high. Hepatitis C is widespread. According to a physician with the program, "People feel alienated from the schools, the government, and health care."⁸² The philosophy of local activists and of the NEON program (North End Outreach Network) is that the community must work together to solve these problems. NEON CHWs took on the goal of engaging their neighbors in community life and in the pursuit of good health. They have met door to door with most residents. They build relationships, identify people's priorities and interests and help them participate in community life by bringing them to after school programs, salsa classes, story telling programs, ESL. They also help people find classes to learn how to file tax returns. Between 2003 and 2006, the CHWs directly contacted over half of the North End residents (5,600 out of 10,000). During their conversations they found that nearly 30% of households had asthma and 20% had diabetes. Over the three years, the CHWs' work informing and assisting people with health insurance helped to reduce the Brightwood Health Center's uninsured patient rate by half (from 16% to 8%).⁸³

D. CHWs Improve Service Delivery and Reduce Health Care Costs

CHWs can help reduce health care costs by helping people—often uninsured or publicly insured—to use the health care system more effectively. CHWs can have an impact on cost savings in a number of ways, including complementing clinical services as part of an integrated care team, connecting patients with a medical home for primary and preventive care, and reducing inappropriate use of emergency departments through patient navigation and care coordination. Although more research is needed in this area, initial studies show that employing CHWs can result in cost savings even in the short term.

Changing the Health Service Delivery Model

In many settings, CHWs work as part of teams to help ensure that adults and children receive the preventive education, support and care that can help them avoid illness or complications that

result in unnecessary and expensive hospitalizations and increased costs. A one year pilot program of Molina Healthcare in New Mexico showed that CHWs who worked on teams with social workers were able to help high-risk patients with multiple health problems use the plan's services more effectively. CHW services provided to 15 plan members over six months led to a cost savings of \$7,676 during that period.⁸⁴

The projected four year net savings per individual participant in the Seattle King County Healthy Homes Program, which works to improve management of asthma among low income children and children on Medicaid, ranged from \$189-\$721. CHWs in the program, who delivered services in clients' homes, helped improve caregivers' quality of life, and reduced asthma symptoms and related urgent care services use significantly more than for those patients who only received the usual care.⁸⁵

Medical Home

CHWs also help people overcome obstacles to identifying a primary care 'medical home' and to seeking care when appropriate, rather than using more expensive emergency department services.

- The Denver Health and Hospital Authority reports that, as a result of CHW interventions with underserved men, these patients' use of urgent care, behavioral health and inpatient visits decreased and their use of primary and specialty care increased.⁸⁶ The return on investment (the ratio of savings as a result of the intervention divided by the program costs) calculation for this program showed a savings of \$2.28 for every dollar invested by Denver Health in the CHW program—or a total of \$95,941 in annual savings.
- Denver Health also calculated the return on investment for a CHW program to help women conduct pregnancy tests, enroll in a medical coverage plan if they were pregnant, and locate a medical home. The resulting increase in Denver Health deliveries and related revenue increases netted the system \$295,919, a return on investment of \$6.69 for every dollar spent.⁸⁷

Reducing Inappropriate Use of Emergency Departments and Hospitalizations

CHWs reduce inappropriate use of emergency departments by helping locate and enroll uninsured people in public insurance programs for which they qualify, as well as addressing disparities in access to the health care system. The success CHWs have in connecting patients with primary and preventive care and helping them manage chronic conditions also leads to decreased emergency room visits and to cost savings.

- CHRISTUS Spohn Health System in Nueces County, Texas, has observed reductions in inappropriate Emergency Department usage based on the services their four full-time CHWs provide within the system's hospital and health centers. CHRISTUS Spohn estimates that the average savings to the hospital per ER patient assigned to a community health worker is \$56,000 over the course of a year.⁸⁸
- In Baltimore, CHWs worked intensively with a Medicaid sample of 117 African American men with both hypertension and diabetes to help them manage both conditions. ER visits declined for the men by 40% compared to the period prior to the CHW intervention, and hospital admissions declined by 33%. These changes yielded an average cost-savings per patient of \$2,245.⁸⁹

- In Boston, the Prevention and Access to Care and Treatment program (PACT) has employed CHWs as key staff in their efforts to improve care delivery and health status among the most marginalized and least successfully treated HIV/AIDS patients. Unsuccessfully treated HIV/AIDS patients have been shown to be twice as costly to treat as patients who can sustain adherence to treatment. PACT has shown a decrease in MassHealth costs of 2.4% for a closely studied sample of such patients after they received CHW interventions.⁹⁰

The potential for improving cost effectiveness and efficiencies of health care interventions in Massachusetts by improving care utilization and quality is evident when one considers the extent, patterns, and costs of preventable hospitalizations in the Commonwealth.

- In 2002-2003, African-Americans and Hispanics had more than two times the rate of preventable emergency department visits than whites, reflecting a higher rate of emergency room visits overall for these populations compared to whites and other groups. This difference in rates may indicate poorer access to primary care for African-Americans and Hispanics.⁹¹

V. CHW Workforce Development

All stakeholders—including CHWs, employers, educators, foundations, and payers—agree that Massachusetts needs to strengthen the CHW workforce through a comprehensive set of strategies involving training, higher education, certification, and career development. In order to achieve the goals of health care reform and promote public health most effectively, the Commonwealth needs to expand available CHW training programs and develop a model certification process. Innovative public-private partnerships are already helping to strengthen CHW workforce development, but a modest investment in infrastructure is required by the Commonwealth to assure quality and provide the basis for full participation by public and private payers in utilizing CHWs more widely to strengthen primary care and community-based health systems.

A. CHW Training and Education

The DPH investigation indicates that there are both strengths within current training programs and challenges to establishing a statewide accessible standardized CHW training system in Massachusetts. The major strengths include the two existing well-established and highly successful core CHW training programs in certain areas of the state. These training programs (Boston Public Health Commission's CHEC and Central MA AHEC's OWTI) use a similar curriculum based on sound principles of interactive adult education, address similar core competencies, are both 45-55 hours long, and have linkages to higher education. Other program strengths include the employment of strategies which are culturally sensitive and supportive of diversity, flexibility in their implementation, the use of CHW co-trainers, provision of individual support to participants to assist them in addressing systemic/organizational barriers, and support for individual professional development.

While Massachusetts possesses strong training programs for CHWs, the investigation also identified significant challenges, notably the lack of training opportunities for CHWs in western and southeastern Massachusetts and other areas of the state. Additional challenges include the lack of sustained funding for existing programs, the need for a standardized core curriculum, lack of a certification process for trainers or training organizations, limited recognition within higher education of the CHW field and its training needs, and limited capacity to develop and deliver specialized health curricula for CHW training. There has been a marked increase over the past two years in requests for specialized training, particularly in the area of chronic disease management. The OWTI and CHEC, for example, have developed and implemented customized curricula for the DPH, the Massachusetts League of Community Health Centers, and the Robert Wood Johnson Foundation in the areas of diabetes, asthma, cardiovascular disease, and breast, cervical, and prostate cancers.

In addition to specialized CHW training from programs like CHEC and OWTI, CHWs need improved opportunities to earn college and university degrees through programs that recognize and promote CHW skills. The Community Health Worker Initiative of Boston is developing a promising model that includes both a higher education certificate program and an Associates degree in Human Services with a concentration in community health at the community college level. A Bachelors degree program with a strong emphasis on prior learning and public and community service is also in development in partnership with the College of Public and Community Service at University of Massachusetts Boston. Providing portable college credit linked to successful completion of CHW training programs like CHEC and OWTI could greatly

enhance CHW academic advancement by making completion of an AA/BA degree more attainable.

Continuing education is necessary both to support individual CHW skill development and to serve as a foundation for CHW re-certification. Similarly, CHWs need on-the-job supervision, employer-supported training, mentoring within their organizations, and defined career pathways that enable growth within the field. This comprehensive approach to workforce development will not only benefit CHWs, but also their employers, who can expect improved retention of experienced workers and improved effectiveness of multi-disciplinary health teams.

B. CHW Certification: Developing a Massachusetts Blueprint

CHWs, CHW employers, CHW funders, and health and human service providers agree that some form of certification, i.e., documentation of the skills and competencies of CHWs, has the potential to advance the field and maximize the contributions CHWs can make to improve the health of our communities. A state-sponsored certification process should be part of a comprehensive statewide systemic policy initiative to recruit, train, and sustain a well-prepared and effective workforce.

The CHW Advisory Council reviewed certification efforts in other states, including Texas, Ohio, and Minnesota. Consideration was given not only to the mechanics of other state models, but also to impacts upon wages and career advancement, the roles CHWs had in developing certification processes, and unintended consequences observed. Developing a successful process for Massachusetts will require particular consideration to the Commonwealth's experience with health care reform and concern for the unique needs of CHWs and CHW employers here. The roles, responsibilities, benefits, and potential pitfalls for stakeholders in the certification process should be carefully weighed and articulated. To define desired outcomes, it will be helpful to look further into questions involving how certification may affect CHW compensation, workforce stability, recruitment and retention, educational opportunities, and improved community health outcomes.

It is important to avoid narrowing the scope of CHW practice through certification. The capacity of CHWs to work flexibly and holistically helps to define the field and the value CHWs bring to the health care and public health systems. Likewise, it is vital to avoid making certification a barrier to entry for people who seek to practice community health work. CHW Advisory Council members agree there is a danger that a poorly designed certification process could foster exclusivity. By involving CHWs directly in crafting and overseeing a certification process in Massachusetts, it should be possible to retain the qualities that make CHWs so effective. Otherwise, Massachusetts may inadvertently create the need to develop a replacement workforce. Strengthening the primary care system and improving the prevention of injury and disease will continue, by definition, to require the services of people who are specially qualified to "connect" with vulnerable community members.

VI. Recommendations for a Sustainable Massachusetts CHW Program

The DPH CHW Advisory Council makes recommendations for a sustainable CHW program in Massachusetts in the following areas:

1. Conduct a Statewide Identity Campaign for the CHW Profession
2. Strengthen Workforce Development
3. Expand Financing Mechanisms
4. Establish an Infrastructure to Ensure Implementation of Recommendations

Challenges to implementation exist for each recommendation but all of them are technically feasible. Ultimately, the success of developing a reliable, sustainable CHW workforce depends on the interests and commitments of policy makers and institutional leaders to pursue and support these recommendations. Many recommendations include estimated timeframes that assume the necessary will for implementation.

1. Conduct a Statewide Identity Campaign for the CHW Profession

Ensuring recognition and acceptance of the CHW term throughout the health care system is important to the development of the CHW profession. The lack of a nationally standardized CHW definition presents challenges to the recognition of CHWs and their contributions within the health care system. There needs to be a better understanding and acknowledgement of their unique skills and the broad range of areas in which their skills can benefit the health care, public health and human service systems. Enhanced awareness of who CHWs are and their role within the health and human service systems will not only improve service delivery, but will also potentially expand employment and advancement opportunities for CHWs.

In order to ensure successful implementation of the recommendations of this Advisory Council for a sustainable CHW program in the Commonwealth, the Council also recommends that there be *a statewide identity campaign for the profession of community health worker*. This should be a far-reaching campaign to raise awareness of CHWs among communities and clients, other health and human service providers, CHW employers, and the CHW workforce itself. Greater awareness of the workforce and its valuable contribution to increasing access and reducing disparities is essential to effective integration of CHWs into the health and human service delivery system.

Recommendations

- 1.1: Encourage all state and local government agencies to adopt the “community health worker” term and DPH definition in rules, regulations, and program guidelines as per the DPH 2002 policy.** The adoption of the CHW term will provide ongoing opportunities for accurate data collection for the Commonwealth when tracking workforce size and contributions towards the elimination of health disparities.

Implementation timeframe: within 6-12 months.

- 1.2: Develop an educational campaign about CHWs** targeted at CHWs, employers of CHWs, funders, policy makers, city and town health departments, and residents receiving CHW services. This campaign should be similar to other public health awareness campaigns conducted by EOHHS and DPH.

Implementation timeframe: 12-18 months to allow for the development of the educational campaign.

- 1.3: Encourage private and public funders of CHWs to use the term “community health worker”** when releasing funding opportunities involving outreach, community-based health education and promotion, and connecting community members to health care and social services. The adoption of the CHW term by private and public funders will facilitate enhanced data collection for funders. The implementation of the utilization of the CHW term by all funders of CHW services will set the stage for employers of CHWs to adopt the term as well.

Implementation timeframe: within 12-24 months to allot time to adopt the CHW term as potential funding is released during various funding cycles.

As training programs are developed for CHWs, it is important that all training and education programs for CHWs also adopt the CHW term. This will clarify who should attend the training or educational program.

- 1.4: Advise individuals, agencies and institutions which provide CHW training and education to adopt and utilize the CHW term** when designing and implementing programs, including use in their curricula, promotional materials, and public presentations.

Implementation timeframe: 6-12 months and beyond.

- 1.5: Incorporate the role of CHWs in the content of training and education curricula for health care and human service professionals**, particularly in the community and state college and university systems. The inclusion of CHWs will assist healthcare and human service providers to integrate CHWs into care delivery teams and maximize the effectiveness of the health care and human service programs.

Implementation timeframe: 12-24 months and beyond to provide time for educational institutions to include CHWs in the curriculum.

2. Workforce Development: Create a Statewide CHW Training, Education, and Certification Infrastructure

In order to strengthen CHW workforce development, the CHW Advisory Council developed the following set of recommendations which address the need for adequate infrastructural support, training and education components, a certification process for both CHWs and CHW training entities, and the establishment of a CHW Board of Certification.

Recommendations:

2.1: Develop a statewide CHW training and education infrastructure, including multiple points of access and entry, based on the following models:

- Expand [make affirmative recommendations] current, successful community-based training models—community-based CHW training models have proven to be effective for many CHWs and their employers. The CHW Board should determine areas of the state where such community-based models are needed, assess the feasibility of possible expansion into these areas, and recommend strategies for their development and oversight. The CHW Board should consider multiple possible partners to serve as institutional training “homes,” e.g., community health centers, Area Health Education Centers, and other community-based organizations.
- Develop a consistent, high quality CHW training program that travels throughout the Commonwealth to offer trainings in any geographic location where a need is identified in partnership with a host organization.
- Partner with public institutions of higher education across the Commonwealth to develop and support the implementation of training and educational pathway models. College credits should be awarded for completion of CHW training programs, and those credits should be “portable” among participating educational institutions.

2.2: Engage key public and private partners to develop financing strategies for a sustainable, consistent, high quality CHW training infrastructure.

- The first step in this process should be an investigation into financing strategies other states have used to support training and certification for CHWs.
- EOHHS could seek line item funding from the General Treasury for CHW training programs.

2.3: Develop an approved CHW training curriculum, including defined core competencies, and a curriculum for CHW supervisors, for use by all certified CHW training programs.

- The CHW Board of Certification should review existing curricula and literature in the field, including learning objectives, content, teaching methods, and evaluation techniques.
- CHW training programs should include a minimum of 45 contact hours.

2.4: Encourage all CHW training programs to include training for supervisors of CHWs based on identified curricula.

- Supervisor training has been developed and is offered by the existing CHW training programs, and should serve as a model for future program development.

2.5: Enforce systematically across DPH the 2002 policy (see Appendix G) requiring contractors to develop internal agency plans for the training, supervision, and support of CHWs, including implementation of specified operational measures for training.

2.6: Establish a Community Health Worker Board of Certification

The Governor should appoint, within the DPH Division of Health Professions Licensure, a Community Health Worker Board of Certification (hereinafter “CHW Board”), to consist of at least seven members, with balanced representation from the CHW workforce, CHW employers, CHW training and educational organizations, and other engaged stakeholders. The members should be drawn from and/or appointed in consultation with the CHW Advisory Council created pursuant to Recommendation 4.2 of this report. The CHW Board should be charged specifically with regulatory oversight of training, development and implementation of a CHW and CHW trainer certification model, and recommendations regarding career pathways to promote the professional development of the CHW workforce. The CHW Board should be chaired by the Commissioner of DPH or his/her designee and meet at least quarterly to ensure implementation of the training and certification recommendations. Members of the CHW Board should be appointed for terms of three years or until a successor is appointed. At least one full time professional should be assigned to staff the CHW Board, with additional administrative support available as needed.

2.7: Develop and implement a certification process for CHW trainers and training entities.

- The CHW Board should develop and oversee implementation of standards for training of Massachusetts CHWs, guidelines and requirements for the qualifications of training entities, minimum hours of required training, and graduation requirements.
- Applicants for certification should be required to demonstrate experience and capacity to provide high quality CHW training programs.
- Strong consideration should be given to developing training teams that include CHW trainers. Utilizing CHW trainers is both an effective educational methodology and a professional development opportunity for CHWs.
- Training entities duly recognized by the CHW Board should be authorized to issue certificates of completion to graduates (individual CHWs) who attain graduation requirements.
- Oversight of CHW training will be essential to ensure high standards and consistency throughout the Commonwealth. The CHW Board should develop benchmarks for successful training program implementation, strategies for assessment, and ongoing quality assurance. Assessment strategies should include input from all key partners, including CHWs, employers, and funders.

2.8: Develop, pilot, and implement a certification process for individual CHWs, including “grandfathering” provisions for experienced members of the workforce, and continuing education and re-certification requirements.

- CHW participation is vital to the effective design and evaluation of the pilot certification process.
- The CHW Board should review certification models that have been utilized in other states and in other fields, e.g., medical interpretation, substance abuse counseling, social work, child care.
- The CHW Board should develop a pilot certification process in one or more regions of the state to ensure that identified concerns and possible pitfalls are addressed effectively before a statewide certification process is established. Adequate infrastructure and resources and a timeframe for evaluation are critical to the success of such a process.
- Many experienced CHWs, who may or may not have received core CHW training but are currently employed and effective CHWs, will need to be considered for certification. The CHW Board should define the process by which experienced CHWs may be certified. Factors to be considered should include employment history, previous CHW training and related education, employment evaluations, and documentation of core competencies.
- The Board should develop strategies for all training partners to assess the needs of CHWs for continuing education, to design and develop programs to meet those needs, and to implement and evaluate programs on an ongoing basis.
- The Board should investigate existing career pathways for CHWs and collaborate with key stakeholders to promote feasible, coordinated, and effective career advancement mechanisms.

3. Expand Financing Mechanisms

A 2006 report by the National Fund for Medical Education notes that, as the role of CHWs becomes better understood and more desirable in the overall health system, these workers “face the challenges of moving from being an exceptional add-on to the system to being more a part of the mainstream.”⁹² In addition to addressing issues such as defining the CHW workforce, educational preparation, and formal credentialing, it is critical to arrange sustainable financing for CHW positions. As the National Fund for Medical Education report states, “It is time to explore and develop viable financing arrangements that go beyond short term grants.”⁹³

Section 110 of Chapter 58 explicitly requires that the CHW Advisory Council’s investigation and study identify current funding streams for CHWs by public and private entities in the Commonwealth (See Section 2), and that the Advisory Council develop recommendations for a sustainable CHW program going forward. To this end, the CHW Advisory Council tried to “think outside the box” and explored various opportunities for new and expanded funding sources to support CHW workforce development and service provision. Efforts in Massachusetts to integrate CHWs into the mainstream health system are in their nascent stages, so financing options must include a combination of far reaching proposals and practical, incremental steps toward promoting a clearly defined, widely accepted, sustainable CHW workforce.

Through its research, the Advisory Council identified four major funding models for CHWs nationally:

- public and commercial insurance;
- public and private sector operating budgets;
- public grants and contracts;
- private foundation grants.

Accordingly, the CHW Advisory Council’s financing recommendations are organized by potential funding source. For each financing option, the Council considered legal, financial, operational, and political feasibility. Public payer recommendations, below, include a combination of insurance, contracting, and direct employment options for MassHealth and Commonwealth Care.

Massachusetts CHW leaders are involved in national efforts to move the CHW workforce toward standardized training with a clear set of core competencies over time. They are reluctant now, however, to move Massachusetts CHWs toward seeking direct, third party reimbursements to individual CHWs. Their concern is based in part on the unique flexibility that CHWs have in providing health and public health services in home- and community-based settings and in part on general trends in overall health care financing. Direct reimbursement could result in payers restricting the scope of CHW services and inadvertently undermining the holistic approach that makes CHWs so effective. Similarly, as policy makers examine how to strengthen the primary care system and public and private insurers experiment with outcome-based payments, CHW leaders are wary of focusing strategic capital on fee-for-service models.

Because CHW concerns complement objections in the commercial sector to private insurance coverage for CHWs, the Advisory Council decided not to recommend direct reimbursement for CHW services at this time. With future certification of the CHW workforce, however, policy

makers may find reason to reconsider the matter in the future. The Advisory Council suggests that MassHealth explore the issue in anticipation of that possibility.

The Advisory Council adopted detailed recommendations related to MassHealth and Commonwealth Care, recognizing that the public sector has short- and mid-term flexibility in developing payment models to take advantage of CHW impacts on health system outcomes, including access, cost, and quality. Some in the commercial sector assert that establishing certification and coding standards for CHWs should be considered as prerequisites to changes in any financing policies. The Advisory Council's majority opinion is that financing and workforce development recommendations are complementary and should be implemented in a coordinated fashion as the entire health care system places increasing emphasis on quality of care and improved health outcomes.

Recommendations:

A. PUBLIC PAYERS: MASSHEALTH AND COMMONWEALTH CARE

Integrating more CHWs into existing staff that conduct outreach and enrollment activities and/or into established or new models of health care provider teams would promote MassHealth's and Commonwealth Care's goals of expanding access to health insurance and improving the quality of care. Both programs serve individuals whose income is below 300 percent of the federal poverty level and who cannot get health insurance from another source, like their employer. Additionally, the subset of individuals who are eligible for each program, but not enrolled, tend to be those who could benefit from either assistance with health system navigation, health literacy, or health care awareness. CHWs are experienced and known to be effective with these individuals.

CHWs have contributed to the goals of expanding access and improving quality care in primary and preventive health, management of chronic illness, and the coordination of multiple supports and community-based services for those with long-term care needs. CHWs also are skilled in patient advocacy and outreach and insurance enrollment, especially for culturally and linguistically diverse populations. Expanding the integration of CHWs into outreach activities and care teams can further the Commonwealth's health care reform goals of reducing the rate of uninsurance in Massachusetts, reducing health disparities, and containing health care cost growth while improving the quality of care delivered.

MassHealth and Commonwealth Care should recognize the critical work of CHWs in the existing staffing and payment structures of these programs, particularly because CHWs primarily target the low-income, underserved populations enrolled in or eligible to enroll in these public programs.

Administrative Activities

MassHealth is authorized under federal Medicaid law (Section 1903(a)(7) of the Social Security Act) and regulation (42 CFR 433.15) to claim federal Medicaid reimbursement for administrative activities necessary for the proper and efficient administration of the Medicaid State plan. Administrative costs related to MassHealth 1115 Waiver programs, such as Commonwealth Care, are eligible for federal Medicaid reimbursement through the Waiver. Such

administrative activities can include outreach and education activities and enrollment assistance, which are commonly performed by CHWs.

3.1: Include CHWs and CHW services, such as insurance enrollment assistance, coverage maintenance and health education, in MassHealth’s administrative cost claims.

- MassHealth could directly employ CHWs, potentially as part of the new MassHealth Health Care Reform Outreach and Education Unit mandated by the legislature in FY08 or the MassHealth Training Unit, or could contract with an entity that employs CHWs to provide these services as part of its administrative activities.
- The legislature should increase funding for the MassHealth administration account and consider earmarking in the account to provide for increased funding of CHW services for outreach, education, and enrollment through contracted services and/or direct employment of CHWs.

Implementation timeframe: within 18 months.

Chapter 58 appropriated \$3 million to MassHealth to award outreach grants to community-based organizations (CBOs) that provide MassHealth and Commonwealth Care enrollment assistance, education and outreach activities directly to consumers. Two types of grants were awarded: one for grantees who developed effective community-based strategies for reaching and enrolling eligible individuals into MassHealth and Commonwealth Care and one for grantees who developed comprehensive broad-scale media or grassroots campaigns to increase awareness about the programs. With respect to the first grant type, Chapter 58 explicitly recognized that certain individuals may require “individualized support due to geography, ethnicity, race, culture, immigration or disease status and representative of communities throughout the commonwealth.” The Commonwealth’s SFY 2008 and SFY 2009 budgets continued these outreach grants with a \$3.5 million appropriation to MassHealth.

A recent report by the Urban Institute pointed out challenges to enrolling adults who remain uninsured in Massachusetts, many of whom are relatively young, low-income males in good health.⁹⁴ In addition, people enrolled in MassHealth and Commonwealth Care must have their eligibility re-determined and must re-enroll annually. In order to support continued progress toward universal coverage and to minimize the impacts of people losing coverage, even temporarily, the CHW Advisory Council endorses proposals to institutionalize funding for outreach and enrollment grants.

3.2: Increase and sustain funding for MassHealth Enrollment Outreach Grants, and structure the grants to increase utilization of CHWs for outreach, education, and enrollment.

- Establish the MassHealth Enrollment Outreach Grant program in statute, with guaranteed annual funding based on a formula that estimates the number of people requiring outreach and enrollment or re-enrollment services.
- Condition receipt of SFY 2009 and any future MassHealth Enrollment Outreach Grants on specific employment and use of CHWs.
- Alternatively, allocate a portion of the total grant dollars specifically for community-based organizations (CBOs) that hire CHWs.

- MassHealth could also propose additional Medicaid administrative outreach and education grants specifically designated for CHWs, or for CBOs or providers who employ CHWs.

Implementation timeframe: within 18 months.

Chapter 58 establishes the Commonwealth Health Insurance Connector (the Connector) under a new section 176Q of the Massachusetts General Laws to design and implement a program of subsidized health plans that are affordable to residents with income below 300 percent of the federal poverty level, Commonwealth Care. The efforts of the Connector, in concert with the Office of Medicaid, to identify and enroll eligible individuals in Commonwealth Care to date have been very successful, but some eligible populations still remain un-enrolled, and upcoming re-enrollment processes may create disruptions in coverage not driven by ineligibility. The difficulties in enrolling hard-to-reach groups and the risk of losing eligible enrollees due to “churning” (difficulties with re-enrollment) can be reduced by thoughtful deployment of experienced CHWs.

3.3: Expand the administrative tools used by the Commonwealth Connector to ensure enrollment of eligible populations by directly employing CHWs to outreach, educate, assist, and enroll hard-to-reach populations and those eligible individuals needing assistance with re-determination procedures.

Implementation timeframe: within 18 months.

Care Team Integration

MassHealth pays for medical and support services provided to MassHealth enrollees by MassHealth-participating providers in a variety of settings and through several different delivery systems, including fee-for-service (FFS) and managed care. MassHealth offers several different managed care options. For individuals under the age of 65 who are not in an institution and do not have other health insurance, an individual can choose to enroll in the state-run managed care option, called the Primary Care Clinician (PCC) Plan, or in one of four participating Medicaid managed care organizations (MMCOs).⁹⁵ These four MMCOs also currently serve Commonwealth Care enrollees. Additionally, certain frail elderly individuals who are eligible for both Medicaid and Medicare (called “dual eligibles”) can enroll in the Senior Care Options (SCO) program. SCO enrollees receive comprehensive and coordinated Medicaid *and* Medicare services through a single managed care entity. MassHealth could provide financial incentives to or otherwise encourage (e.g., through contract negotiations over performance measures) MassHealth or Commonwealth Care providers or health plans to integrate CHWs into their current outreach activities and/or care models and care teams.

Primary Care Clinician (PCC) Plan

In general, MassHealth pays PCCs an enhanced rate of \$10 per patient per visit for providing and coordinating most medically necessary primary care services and referring individuals to other medically necessary services provided by other providers. MassHealth contracts with over 1100 PCCs, including physicians, nurse practitioners, group practices, Community Health Centers, outpatient hospital departments, and hospital-licensed health centers, to provide care to over 300,000 PCC Plan enrollees.

3.4: As part of its efforts to enhance the Primary Care Clinician (PCC) Plan, MassHealth could develop a pilot program to explore enhancing the PCC rate for PCCs who hire CHWs for outreach efforts and/or who integrate CHWs into their care models and care teams.

- This would require amendments to the PCC provider contracts.
- The Commonwealth could test this concept through a pilot program (such as an “advanced medical home”, targeted disease management, or chronic care management program) with a select number of PCCs or in a specific geographic area. Such a pilot program would require an amendment to the MassHealth 1115 Waiver, and could include an evaluation component to ensure that the enhanced fee directly funds/supports CHWs and CHW services and to measure the impact of CHW utilization.
- MassHealth may need to create a MassHealth service code for CHW services for providers to be able to claim reimbursement for CHW services.

Implementation timeframe: within 24 months.

Medicaid Managed Care Organizations (MMCOs)

MassHealth currently contracts with four MMCOs to coordinate comprehensive care for nearly 400,000 MassHealth enrollees. These MMCOs also serve roughly 170,000 Commonwealth Care Enrollees. MassHealth and Commonwealth Care pay each MMCO a monthly capitation rate per enrollee. The MCOs, in turn, contract with and negotiate rates with their own network of providers who provide all medically necessary services to MCO enrollees. MMCOs have latitude to spend their capitation rate, within parameters, as they choose, including to support CHWs or CBOs that employ CHWs.

3.5: Provide financial incentives (e.g., through increased capitation rates or “pay-for-performance” mechanisms) or otherwise encourage the MMCOs to hire CHWs for outreach efforts and/or to integrate CHWs into their care models and care teams.

- This will require amendments to the MCO provider contracts, potentially through negotiations over performance goals.
- The Commonwealth could test this concept through a pilot program (such as an “advanced medical home”, targeted disease management, or chronic care management program) in one or more MMCO or in a specific geographic area. Such a pilot program would require an amendment to the MassHealth 1115 Waiver, and could include an evaluation component to ensure that the incentive directly supports CHWs and CHW services and to measure the impact of CHW utilization.
- If the MMCO contracts with providers or CBOs that employ CHWs, MassHealth may need to create a MassHealth service code for CHW services for the providers to be paid by the MMCO for CHW services.

Implementation timeframe: within 24 months.

Long-term care Populations

Most elderly and disabled MassHealth enrollees who depend on access to long-term care services and supports to manage complex, chronic or disabling conditions receive care through the MassHealth fee-for-service system. There are some exceptions. Some non-institutionalized disabled enrollees under age 65, who do not also have Medicare or any other insurance, may enroll in the PCC Plan or an MMCO (as described above). Additionally, MassHealth operates a unique capitated managed care program called Senior Care Options (SCO) for certain frail elderly individuals who have both Medicaid and Medicare coverage (called “dual eligibles”). Through SCO, MassHealth currently contracts with three health plans specifically designed to provide and coordinate all medically necessary Medicaid *and* Medicare services for SCO enrollees using a geriatric care model and an interdisciplinary care team.

A small number of dual eligibles in MassHealth are enrolled in a similar integrated Medicaid-Medicare benefit program called the Programs of All-Inclusive Care for the Elderly (PACE). PACE is a federally-governed capitated managed care benefit for frail elderly individuals provided by not-for-profit or public entities. The PACE benefit includes comprehensive medical and social support services provided through an interdisciplinary care team. While PACE programs are guided by federal rules and regulations, there may be some opportunities for PACE programs to incorporate CHWs into their care teams.

3.6: Incentivize or otherwise encourage the use of CHWs and CHW services in managed care models and/or delivery systems for elderly and disabled populations, who particularly are likely to benefit from CHW services/activities.

- Incorporate CHWs, in a manner similar way to MMCOs described above, in SCO, PACE, or any similar capitated integrated Medicaid-Medicare program that is developed for disabled individuals.
- Note: Federal PACE rules require certain basic personnel qualifications for any member of the interdisciplinary care team with direct contact with patients, some of which CHWs do not meet at this current time. The PACE rules, however, also provide for a waiver process, whereby a PACE program can request a “waiver” from certain provisions of the federal PACE regulations, including the personnel qualification requirements. Such a waiver may facilitate the process of PACE programs including CHWs on their interdisciplinary care teams.

Implementation timeframe: within 24 months.

3.7: Incentivize fee-for-service (FFS) providers in the current long-term care system and in the pending Community First 1115 Waiver program to integrate CHWs and CHW services into care teams designed to maintain elderly/disabled individuals in the community.

- MassHealth may need to create a MassHealth service code for CHW services for providers to be able to claim reimbursement for CHW services.
- Similarly incentivize providers in any existing or new disease management or chronic care management programs that are designed in the fee-for-service system for subpopulations of the elderly and disabled populations.

Implementation timeframe: within 18 months.

Pay-for-Performance Programs

Chapter 58 mandated rate increases for hospitals and physicians to be implemented over a three-year period starting in SFY 2007. Starting in SFY 2008, Chapter 58 required that a portion of the rate increase for acute hospitals (roughly \$20 million of \$76.5 million) be contingent upon adherence to certain quality standards and performance measures, including the reduction in health disparities. As such, MassHealth implemented an acute hospital pay-for-performance (P4P) program in October 2007, and plans to expand the pay-for-performance program to the PCC Plan, nursing facilities and MMCOs. These pay-for-performance programs may provide an opportunity to encourage the use of CHWs as part of the systematic adjustments that providers may make in the process of providing care and services to patients. While it may be challenging to develop a specific measure that directly delivers an incentive to providers who use CHWs as part of the health care team, it could be recommended that CHWs be used to increase performance in specific clinic measures such as patient follow-up and outreach.

3.8: Commend use of CHWs as part of health care teams as a model practice for consideration in order to support improved performance in one of the existing performance measures under the MassHealth P4P program(s).

Implementation timeframe: within 18 months, for SFY10 and beyond

Direct Provider Payment to CHWs and for CHW Services

MassHealth directly pays providers who meet its regulatory provider eligibility criteria set forth in 130 CMR 450.212, and who provide MassHealth-covered services to MassHealth enrollees. MassHealth-participating providers enter a provider contract with MassHealth and are assigned a provider billing code and service codes to submit claims for payment to MassHealth.

MassHealth and federal Medicaid provider and procedure codes currently do not recognize CHWs as a class of providers who can bill the program directly for services provided to MassHealth enrollees, or recognize CHW services for claiming purposes. However, the federal government and some states are moving in this direction.

In April 2006, the Centers for Medicare and Medicaid Services (CMS) funded CHWs at six Cancer Patient Navigator demonstration sites under the four-year Medicare Cancer Prevention and Treatment Demonstration for Racial and Ethnic Minorities. The CHWs provide patient navigation services, not normally a covered Medicare fee-for-service (FFS) benefit, to 13,000 minority Medicare FFS beneficiaries.⁹⁶

In July 2007, the National Uniform Claim Committee (NUCC), which maintains a Health Care Provider Taxonomy Code Set classifying providers for coding on claims, adopted a series of changes to the code set, including adding CHWs as a provider category (Code 172V00000X). The NUCC uses HRSA's definition of CHW included in the CHW National Workforce Study and categorizes CHWs under "Other Service Providers." The NUCC is a voluntary organization that manages a standardized data set for non-institutional providers to transmit claims and encounter information to and from payers. The NUCC is chaired by the American Medical Society and includes CMS as a critical partner. While this change does not alter current payment policy, it opens the door administratively for providers to claim for CHW services from payers.⁹⁷

Finally, Alaska and Minnesota have received approval from CMS to bill their Medicaid programs for CHW services. In Alaska, for example, CHWs participating in Alaska's Community Health Aide/Practitioner program have been recognized as billable providers for Medicaid payment purposes since 1998. The program was created in the 1950s to provide health education and facilitate access to care given the isolation of the state's rural providers and its numerous native populations. The program is operated under a complex set of collaborations and contracts among the Alaska Medicaid program, various tribal governments and the federal government.⁹⁸

3.9: Request that MassHealth prepare a study or convene a workgroup to explore the possibility and impact on patient health of directly reimbursing CHWs and CHW services by adding CHWs as a recognized and billable MassHealth provider type.

- This would require new regulations, rate development/fee schedules, provider qualifications (education, training, and certification), Medicaid state plan development, etc.
- To the extent that CHWs conduct case management activities, their activities would be governed by new stringent CMS case management regulations that went into effect on March 3, 2008 (but are under moratorium until April 1, 2009). These regulations include requirements for case managers to become qualified MassHealth case management providers and for individuals to have a single Medicaid-reimbursed case manager, among many other things.
- Could be restricted as a billable event to those CHWs who work directly with patients under the supervision of a licensed health professional (e.g., Registered Nurse, Nurse Practitioner, etc.).

Implementation timeframe: 2 – 4 years

B. PRIVATE SECTOR ORGANIZATIONS

Integrating CHWs into Care Teams and Payment Systems

The national literature on CHW financing identifies a number of private companies, including provider systems and health maintenance organizations, which employ CHWs directly through their core operating budgets. Examples include HealthPlus, Inc., a large Medicaid managed care organization in New York City that employs some three dozen CHWs for outreach, education, and clinical care team work with enrolled members; Christus Spohn Hospital in Corpus Christi, Texas, where staff CHWs help reduce inappropriate emergency room use; and the Community Health Access Project, a provider system working in three Ohio counties, including the Columbus area, to eliminate health disparities with at-risk populations.⁹⁹ These and other organizations around the country have demonstrated cost savings and positive health outcomes by integrating CHWs into multi-disciplinary teams supported through sustainable revenue streams, as an alternative to funding CHWs through categorical, time-limited grants.

3.10: Encourage private sector organizations in Massachusetts, such as hospitals, community health centers, health provider systems, managed care organizations, commercial insurers, and other entities, to replicate existing models and innovate new approaches for utilizing CHWs in their health care teams, programs, and payment systems to support health education, outreach, patient navigation,

emergency room diversion, employee wellness (e.g., smoking cessation, healthy nutrition programs), and other appropriate activities.

- Progress with supporting CHWs through private payment systems requires establishing a standard payment coding mechanism and implementing a recognized certification process for CHWs in Massachusetts.

Implementation timeframe: within 18 months, and beyond

Attorney General’s Community Benefits Guidelines

Non-profit, acute care hospitals and Health Maintenance Organizations in Massachusetts cooperate with the Office of the Massachusetts Attorney General in a voluntary, non-regulatory approach through which institutions identify and respond to unmet community needs. The Attorney General’s *Community Benefits Guidelines* call upon institutions to formalize community benefits planning in collaboration with community representatives and to issue annual reports on their activities. The Attorney General’s Guidelines specify numerous examples of community benefits programs, many of which are consistent with the activities and contributions of CHWs in various settings, e.g., community health education, preventive care and health screenings, community oriented training, immunization programs, services to people with AIDS, violence education, anti-smoking activities, substance abuse education and treatment, domestic violence reduction, early childhood wellness programs, etc. The Attorney General’s guidelines, however, do not specifically mention CHWs. The Attorney General has convened an Advisory Task Force to review and update the current Guidelines. The following recommendation was crafted in cooperation with staff in the Office of the Attorney General:

- 3.11: Request that the Massachusetts Attorney General’s Community Benefits Advisory Task Force consider ways in which the revised Community Benefits Guidelines can continue to encourage hospitals and HMOs to develop and implement a variety of community benefit programs to address identified health needs in their target communities, including those that utilize CHWs.**

Implementation timeframe: within 12 months

Department of Public Health Determination of Need Program

The Determination of Need (DoN) program was established by the legislature to encourage equitable geographic and socioeconomic access to health care services, help maintain standards of quality, and constrain overall health care costs by eliminating duplication of expensive technologies, facilities, and services. The Massachusetts Public Health Council must approve applications from health care facilities before they are permitted to make substantial capital expenditures or changes in services. Under 105 CMR 100.533(B)(9), DoN applicants must contribute an amount—typically set at 5 percent of the maximum capital expenditure for each project—to support community health initiatives (CHIs) for primary and preventive health care for underserved populations. The Attorney General’s *Community Benefits Guidelines* for both hospitals and HMOs provide space on Annual Report Standardized Summary forms for the reporting of DoN expenditures for community benefits programs and services.

3.12: Encourage implementation of best practices related to the use and support of CHWs through the Department of Public Health’s DoN process.

Implementation timeframe: within 12 months

C. PUBLIC AGENCY GRANTS AND CONTRACTS

The Department of Public Health, through its purchase of service contracts and its staffing of selected programs, is the state’s largest employer of CHWs. Managers who responded to the CHW Advisory Council’s workforce survey reported that the Executive Office of Elder Affairs, Department of Education, Department of Social Services, Department of Youth Services, and Department of Mental Health also provide funding for CHW services. Additional state agencies provide direct or indirect support for workers whose activities fit the functional definition of CHWs, such as public housing outreach workers supported through the Department of Housing and Community Development.

Public grants and contracts must continue to play a major role in supporting the use of CHWs, not only in the health sector, but through other government programs that address social determinants of health. Lack of insurance and other problems with health care services are estimated to account for only 10 percent of premature deaths in the U.S., while environmental and socio-behavioral factors account for 70 percent.¹⁰⁰ Fundamental conditions and resources for good health include safety, shelter, education, food, income, a stable ecosystem, and social justice. Public spending by any government agency that addresses these issues should take advantage of the abilities of CHWs to address diverse needs of the individuals and families they serve. Recommendations to sustain and increase public funding for CHW services include:

3.13: Increase categorical grant and contract funding for CHW services.

- Expand DPH wellness and chronic disease contracts utilizing CHWs in community health centers, community-based organizations, and other settings.
- Expand utilization of CHWs through other DPH contracts, e.g., Women’s Health Network, WIC, EIPP (outreach and enrollment, “patient navigator” funds, prevention services, maternal home visiting), etc.
- Explore possible new sources of grant funding, e.g., correctional health.
- Build upon the existing Community Connections program at the Department of Social Services.
- Expand utilization of CHWs through federal grants to state and private entities, e.g., medical capacity, 330 funding, Ryan White, community hospitals, emergency preparedness, etc.
- Target additional funds to DPH for a program to educate employers about CHW practices and impacts on health care cost and quality and to promote utilization of CHWs for disease and injury prevention as well as medical care services.

Implementation timeframe: SFY10 and beyond (require legislative support)

3.14: Expand and target public funds for CHW workforce development, training and support.

- Allocate a line item for statewide procurement of CHW training that supports experienced CHW training entities and fosters additional, new training, including pilots in regions of the state where no training is readily accessible, e.g., western Massachusetts.
- Allocate Department of Labor Workforce Competitiveness Trust funds for regional CHW workforce development.
- Launch a CHW-specific RFR through Commonwealth Corps for the Workforce Competitiveness Trust Fund program.
- Expand Department of Education training funds with targets for CHW training.
- Target Department of Transitional Assistance welfare-to-work training funds for CHWs.

Implementation timeframe: SFY10 and beyond (require legislative support)

3.15: Promote grant, contract support, and demonstration projects for CHWs employed in sectors outside the clinical health care delivery system, e.g., in Community Development Organizations, Regional Opportunity Councils, Community Action Programs, Area Health Education Centers (AHEC), Head Start, Early Childhood/Early Intervention programs, City Housing Authorities, Elder Services, Homeless Shelters, Refugee/Immigrant Services, Food Banks, Faith-Based Organizations, WIC, Boards of Health and Health Departments, etc.

Implementation timeframe: SFY10 and beyond

3.16: Ensure that agencies employing CHWs know about the human service salary reserve and that agencies meeting eligibility requirements register to qualify for reserve adjustments to benefit the CHW workforce.

Implementation timeframe: within 18 months and beyond

3.17: Provide incentives for hiring CHWs, e.g., preferential rating of public contract applications, demonstration project funding, etc., in all public agency contracting.

Implementation timeframe: SFY10 and beyond

D. PRIVATE FOUNDATION GRANTS

Private philanthropic organizations at the local, state, regional, and national levels have long recognized the value of CHWs and continue to play major roles in promoting utilization and development of the CHW workforce. In Massachusetts, private foundations including the Robert Wood Johnson Foundation, Kellogg Foundation, Blue Cross Blue Shield of Massachusetts Foundation, Boston Foundation, and Jesse B. Cox Charitable Trust, are supporting innovative programs, policy development, and research involving CHWs. The CHW Advisory Council encourages the expansion and replication of these efforts. Promising policy proposals, service delivery models, and research findings supported through foundation grants should be widely

reported, disseminated, and adapted in the policy and resource allocation decisions of public and private sector organizations.

3.18: Increase grant funding for demonstration projects and to promote effective models of using CHW services within the health care system.

Implementation timeframe: within 18 months and beyond

3.19: Promote grant, contract support, and demonstration projects for CHWs employed in sectors outside the clinical health care delivery system (see 3.C., above).

Implementation timeframe: SFY10 and beyond

4. Establish an Infrastructure to Support CHW Work

Section 110 of Chapter 58 of the Acts of 2006 charged DPH to convene a statewide advisory council to help conduct this investigation, interpret its results, and aid in developing recommendations for a sustainable CHW program. The legislation did not define an ongoing role for the advisory council once its statutory task was complete. The CHW Advisory Council will therefore be excused after this report is submitted to the legislature, with lasting gratitude from the Department for the extraordinary contributions of time and talent that its members made over the course of the Council's work.

In order to ensure that Massachusetts develops a sustainable CHW program, it is essential to charge an agency of government with responsibility for implementing the recommendations of this study in partnership with public and private stakeholders. Massachusetts needs a reliable infrastructure for work in the following areas:

- Continued research about the impacts of CHWs on health outcomes, access, disparities, costs, and quality of care;
- Surveillance of CHW workforce and market trends;
- Policy development to promote utilization of a stable, supported CHW workforce;
- Oversight of training, career ladder development, and certification to promote professional development of the CHW workforce;
- Implementation of CHW financing recommendations;
- Development of a professional identity campaign to increase awareness of the important role CHWs play in reducing health disparities, in overcoming barriers to needed services, and in addressing social determinants of health;
- Coordination among state agencies and private partners; and
- Communications, technical assistance, and capacity building with CHWs and other stakeholders.

For over ten years, the Division of Primary Care and Health Access at DPH has led efforts to develop and strengthen the CHW workforce in Massachusetts and has also played key roles in national research, policy, and program development to promote CHWs. DPH helped to foster the creation and development of the Massachusetts Association of Community Health Workers (MACHW) and maintains effective partnerships with all of the state's stakeholders in CHW workforce utilization and development. The CHW Advisory Council agrees, however, that it is advisable to locate responsibility for implementing this study's recommendations within the office of the secretary of the Executive Office of Health and Human Services (EOHHS), in order to facilitate intra-government cooperation across EOHHS departments and among other secretariats that currently support or could benefit from supporting CHWs.

Recommendations:

- 4.1: Request that the Office of Health Equity at the Executive Office of Health and Human Services, in cooperation with the Division of Primary Care and Health Access at DPH, be responsible for implementing recommendations of this report to develop a sustainable community health workers program for the Commonwealth. The legislature should provide adequate resources to support this effort.**

4.2: Request that EOHHS establish a standing CHW Advisory Council to meet not less than quarterly to assist with the implementation of the recommendations of this study.

- The Advisory Council should be chaired by the secretary of the Massachusetts Executive Office of Health and Human Services or her designee.
- Its members should include, but need not be limited to, the chief executives or their designees from the following agencies and organizations: Massachusetts Department of Public Health, Massachusetts Office of Medicaid, Massachusetts Department of Labor, Massachusetts Association of Community Health Workers, Massachusetts League of Community Health Centers, MassAHEC Network, Community Health Education Center, Outreach Worker Training Institute, University of Massachusetts Medical School Center for Health Law and Economics, MassBay Community College, Bunker Hill Community College, University of Massachusetts Boston College of Public and Community Service, Massachusetts Public Health Association, Health Care for All, Blue Cross Blue Shield of Massachusetts Foundation, the Boston Foundation, Massachusetts Hospital Association, Massachusetts Association of Health Plans, and the Massachusetts region of Service Employees International Union Local 1199.

CONCLUSION

The DPH Community Health Worker Advisory Council is confident that these recommendations will ensure a sustainable community health worker program in the Commonwealth, involving public and private partnerships that improve access to health care, reduce health disparities, increase use of primary care and reduce inappropriate use of hospital emergency rooms. These recommendations serve as the foundation for stronger CHW workforce development in Massachusetts, including a standardized training curriculum and community health worker certification program to insure high standards, cultural competency and quality of services.

¹ Dower C, Knox M, Lindler V, O'Neil E (a). *Advancing Community Health Worker Practice and Utilization: The Focus on Financing*. San Francisco, CA: National Fund for Medical Education; 2006., pg. iii.

² Smedley B, Alvarez B, Panares R, Fish-Parcham C, Adland S. *Identifying and Evaluating Equity Provisions in State Health Care Reform*. The Commonwealth Fund; April 2008. p. 14. Available at: http://www.commonwealthfund.org/usr_doc/Smedley_identifyingequityprovisions_1124.pdf?section=4039.

³ Smedley, et al. 2008, p. 17.

⁴ Smedley, et al. 2008.

⁵ Goodwin K, Tobler L. *Community Health Workers: Expanding the Scope of the Health Care Delivery System*. Issue Brief. Washington, DC: National Conference of State Legislatures; 2008. p. 6.

⁶ Long SK. On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year. *Health Affairs*. 2008;27(4):w285-w297. Available at: <http://content.healthaffairs.org/cgi/reprint/27/4/w270>.

⁷ Blue Cross Blue Shield Foundation of Massachusetts. Health Reform Turns Two: Monitoring the Impact of Expanded Coverage. Summit Meeting, June 3, 2008.

⁸ Smedley BD, Stith AY, Nelson AR eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, D.C.: Institute of Medicine; 2002.

⁹ Koutoujian PJ, Wilkerson D. *Commission to End Racial and Ethnic Health Disparities: Final Report*. August, 2007. Available at: <http://www.wbur.org/weblogs/commonhealth/wp-content/uploads/2007/08/hcdr-final.pdf>. Accessed August 27, 2008.

¹⁰ Massachusetts Medical Society. *Physician Workforce Study*. Waltham, MA: Massachusetts Medical Society; 2006.

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- ¹¹ Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Aff.* 2001;20:64-78.
- ¹² The Research Workgroup employed the following investigative methods: literature review of published CHW research studies and annotated bibliographies of CHW studies; and key informant interviews, with national and state CHW leaders and directors of best practice programs.
- ¹³ The Workforce Training Workgroup employed the following methods to inform development of recommendations: a review of the CHW training literature and reports; a review of the CHW training and certification strategies and outcomes throughout the United States, including initiatives in Texas, Minnesota, California, and New Mexico; an exploration of efforts in other fields (e.g., medical interpretation, substance abuse counseling, social work) related to credentialing; a review of the policy recommendations of strategic public health entities, including the American Public Health Association and the American Association of Community Health Workers; an ongoing partnership with MACHW to ensure that the recommendations were closely informed by the direct needs and viewpoints of practicing CHWs; a review of the information gathered through the CHEC and OWTI supported DPH CHW Focus Groups; consultation with the Finance, Survey and Research Workgroups to evaluate data and recommendations that would have potential implications for the training and certification recommendations; and participation in the Community Health Worker Initiative of Boston to evaluate currently existing training options for CHWs and Supervisors of CHWs across the state, various course curricula and instructional methodologies.
- ¹⁴ Ballester G. *Community Health Workers: Essential to Improving Health in Massachusetts, Findings from the Massachusetts Community Health Worker Survey*. Boston (MA): Massachusetts Department of Public Health; March 2005.
- ¹⁵ Rosenthal EL, Wiggins N, Brownstein JN, et al. *The Final Report of the National Community Health Advisor Study*. A policy project of the Annie E. Casey Foundation. Tucson, AZ: University of Arizona; 1998.
- ¹⁶ Health Resources and Services Administration, Bureau of Health Professions [HRSA (a)]; *Community Health Workers National Workforce Study*. Rockville, MD:U.S. Department of Health and Human Services; 2007.
- ¹⁷ Community Health Worker Program Resources, South Texas Health Research Center. *What is a Community Health Worker? A Brief History*. Available at: <http://www.famhealth.org/CHWResources/CHWDEFN2.htm>. Accessed August 27, 2008.
- ¹⁸ Ballester, 2005.
- ¹⁹ The sample for the 2008 DPH CHW Workforce Survey was comprised of known or possible employers of CHWs whose contact information came from POS and EIM databases at DPH and from other organizations who work with CHW employers. Given the variation in information contained on these lists, some organizations in the sample were ineligible to respond because they did not employ CHWs. The sample was also limited in that it did not include every employer of CHWs in the state, so the estimated size of the workforce is probably less than the actual number of CHWs working in the state.
- ²⁰ HRSA (a), 2007.
- ²¹ Ballester, 2005.
- ²² U.S. Census Bureau. Massachusetts Fact Sheet. Available at: http://factfinder.census.gov/servlet/ACSSAFFacts?_event=Search&_lang=en&_sse=on&geo_id=04000US25&state=04000US25. Accessed August 27, 2008.
- ²³ US Census Bureau.
- ²⁴ e.g., HRSA (a), 2007; Proulx, D, Rosenthal EL, Fox D, Lacey Y, Community Health Worker National Education Collaborative (CHW-NEC) contributors. *Key Considerations for Opening Doors: Developing Community Health Worker Educational Programs*. Tucson, AZ: University of Arizona; 2008.
- ²⁵ Rosenthal et al., 1998.
- ²⁶ In Boston, the self-sufficiency estimate is \$62,095 annually per household; in the Metro region it is \$66,116; in the Northeast \$64,689; in the Southeast, including Cape Cod, it is \$57,919; in Central Massachusetts, \$52,246; and in the Western part of the state a family of four must earn \$54,182 to be self-sufficient. (Crittenton Women's Union. Self-Sufficiency Calculator. Available at: <http://www.liveworkthrive.org/calculator.php>. Accessed August 27, 2008.)
- ²⁷ Smedley, et al., 2002, p. 195.
- ²⁸ HRSA (a), 2007.
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- ³⁴ 80 organizations received regular Outreach and Enrollment grants (35 in FY07; 45 in FY08). Of these 51 were community health centers, 5 hospital-based and 44 community-based organizations (T. Glenn, M.P.H. Office of Community Programs. Commonwealth Medicine University of Massachusetts Medical School, Telephone interview and personal written communications; June, 2008).
- ³⁵ T. Glenn, June, 2008.
- ³⁶ C. Pitzi, Director of Health Care Reform Outreach and Education Unit, Massachusetts Executive Office of Health and Human Services, Office of Medicaid. E-mail communication; April 9, 2009.
- ³⁷ C. Pitzi, April, 2009.
- ³⁸ I. Reyes, Community Health Worker, and J. Dowd, Data Manager, from Project H.O.P.E., Hyannis, MA. Telephone interview; January 18, 2008; data from program grant reporting records.
- ³⁹ Andrews et al., 2004; Swider, 2003.
- ⁴⁰ I. Reyes, January, 2008; data from program grant reporting records.
- ⁴¹ Flores G, Abreu M, Chaisson CE, et al. A randomized, controlled trial of the effectiveness of community-based case management in insuring uninsured Latino children. *Pediatrics*. 2005;116(6):1433-1441.
- ⁴² T. Glenn, June, 2008.
- ⁴³ Flores et al., 2005.
- ⁴⁴ Kentucky Homeplace is one of the longest standing and best known CHW programs in the country. The program has been continuously funded by the Legislature out of general funds for the past 14 years. It was designed as a cost effective means to reduce health disparities in rural Kentucky, where cancer, diabetes, and heart disease rates are unusually high and many people do not have health insurance, and services are limited. Today this program, which employs trained residents of rural areas to work in their home districts, receives \$2 million annually from general funds and employs 40 CHW (called Family Health Care Advisors) to bring services to rural medically underserved people living in 58 counties of the state. The CHWs are "generalists," in that they focus on families in a geographic area and link them to a wide variety of services while teaching them how to solve problems and prevent health and other problems from occurring. (F. Feltner, R.N. Director Lay Health Workers Division. Kentucky Homeplace. Telephone interview; January 25, 2008).
- ⁴⁵ F. Feltner, January 25, 2008.
- ⁴⁶ Persily, 2003; HRSA (a), 2007.
- ⁴⁷ In one Ohio county served by CHAP CHWs, the number of at-risk pregnant women receiving prenatal services increased from 19 to 146 in one year, a level that has been maintained over three years. Directors of this program assert the essential role of CHWs in recruiting, educating and supporting pregnant women, as well as assessing their needs and helping them to overcome a wide range of challenges to make sure they receive and benefit from appropriate, high quality health care. (Agency for Healthcare Research and Quality. *Community Health Workers Develop "Pathways" to Facilitate Access to Needed Services For At-Risk Populations, Leading to Improved Outcomes*. Available at: <http://www.innovations.ahrq.gov/content.aspx?id=2040>. Accessed August 12, 2008.)
- ⁴⁸ Early Intervention Partnership Program (EIPP). 2008 Program Evaluation. Massachusetts Department of Public Health. Unpublished.
- ⁴⁹ Lewin SA, Dick J, Pond P, et al. Lay health workers in primary and community health care. *The Cochrane Database of Systematic Rev*. 2003; 4(Art. No: CD004015). The review included only randomized controlled trials (43 studies, 24 in the US). The meta-analysis was possible with only 15 studies only because others were too varied in methods to compare.
- ⁵⁰ Weber B, Reilly B. Enhancing mammography use in inner city: A randomized trial of intensive case management. *Arch Intern Med*. 1997;157(20):2345-9. Another study compared rural African American women exposed to culturally appropriate health promotion by CHWs who were breast cancer survivors to a sample of similar women not receiving this education. Participants in the CHW project reported significantly improved practice of breast self exam and mammography compared with women in the control locations (Erwin DO, Spatz TS, Stotts RC, Hollenberg JA. Increasing mammography practice by African American women. *Cancer Practice*. 1999;7(2):78-85).

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- ⁵¹ Barnes K, et al. Impact of community volunteers on immunization rates of children younger than 2 years. *Arch Pediatr Adolesc Med.* 1999;153:518-524.
- ⁵² Lohr KN ed. *Medicare: A Strategy for Quality Assurance.* Washington, DC: National Academy Press; 1990.
- ⁵³ Institute of Medicine (IOM), Committee on Quality of Health Care in America. *Report Brief: Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, D.C.: National Academies Press. 2001. Available at: <http://www.iom.edu/CMS/8089/5432/27184.aspx>. Accessed August 27, 2008. p. 3.
- ⁵⁴ Barnes-Boyd C, Fordham NK, Nacion KW. Promoting infant health through home visiting by a nurse-managed community worker team. *Public Health Nursing.* 2001;18(4):225-235.
- ⁵⁵ The program developed in response to evidence that there was a huge gap between the needs, experiences, and culture of the Southeast Asian, largely Cambodian, population in Lowell and the facilities and skills of the health and social systems in the region. As a result there was a much lower rate of pre-natal care among these women compared to others in the state and city. DPH data for 1987 showed that prenatal care adequacy rate for all women in the state was 89%, for all women in Lowell was 78%, and for Southeast Asian women in Lowell was 28% (Strunin L, Huppe L. Final Evaluation Report on Southeast Asian Birthing and Infancy Project (SABAI and SABAI-2). Submitted to Massachusetts Department of Public Health. Unpublished).
- ⁵⁶ Strunin, Huppe. Unpublished.
- ⁵⁷ Felix-Aaron K, Hill MN, Rubin HR. Randomized trial of nurse practitioner-community health worker intervention: Impact on young black men's satisfaction with high blood pressure care. *Abstr Acad Health Serv Res Health Policy Meet.* 2000;17:unknown. Available at: <http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102272635.html>. Accessed June 26, 2008.
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- ⁶⁰ Wagner et al., 2001.
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- ⁶² Levine DM, Bone LR, Hill MN, et al. The effectiveness of a community/academic health center partnership in decreasing the level of blood pressure in an urban African-American population. *Ethnicity and Disease.* 2003;13(3):354-61.
- ⁶³ Hill MN, Han HR, Dennison CR, et al. Hypertension care and control in underserved urban African American men: behavioral and physiologic outcomes at 36 months. *Am J Hyperten.* 2003;16(11 Pt 1):906-13.
- ⁶⁴ Corkery E, Palmer C, Schechter CB, et al. Effect of a bicultural community health worker on completion of diabetes education in a Hispanic population. *Diabetes Care.* 1997;20(3):254-7. This 33% difference in success rates is due in large part to the intensity of the CHW intervention, which included CHWs attending clinical sessions with the women, serving as interpreters, reinforcing self care instructions, reminding participants of appointments and rescheduling appointments when necessary.
- ⁶⁵ Massachusetts League of Community Health Centers. *Finding Answers: Disparities Research for Change, Using Community Health Workers to Reduce Disparities in Diabetes Care.* Unpublished (n.d.). Available at: <http://www.massleague.org/ClinicalCorner/RWJF.htm>. Accessed August 27, 2008.
- ⁶⁶ Liebman J, Heffernan D, Sarvela P. Establishing diabetes self-management in a community health center serving low-income Latinos. *The Diabetes Educator.* June, 2007;33(Supplement 6):132s-138s, p 137s. Elsewhere in Massachusetts, the Brockton Neighborhood Health Center as well as the Cambridge Health Alliance both report improved health outcomes with diabetic patients in part due to culturally sensitive and supportive assistance from community health workers (Brockton Neighborhood Health Center. CenterCare Program Report to the Department of Community Based Primary Care Services, Massachusetts Department of Public Health. 2007. [unpublished].; Chan D, et al. The Haitian Diabetic Support Group: An innovative strategy to improve diabetic management in a PACW program. [unpublished abstract]. Cambridge, MA: Department of Medicine, Cambridge Health Alliance.). In fact, these Massachusetts programs were so effective, in 2007, the DPH developed a new program for community health centers entitled, "Integrated Chronic Disease Management Utilizing Community Health Workers." Funding of this program is dedicated towards CHW salaries, training for CHWs and their supervisors and evaluation of team integration.
- ⁶⁷ H. Behforouz, Director of Prevention and Access to Care and Treatment (PACT), Partners in Health and Brigham and Women's Hospital. Telephone interview; June, 2008.
- ⁶⁸ Smedley et al., 2002.
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- ⁷¹ Capitman J, Bhalotra SM, Calderon-Rosado V, et al. *Cancer Prevention and Treatment Demonstration for Ethnic and Racial Minorities*. Prepared for U.S. Department of Health and Human Services by Schneider Institute for Health Policy; 2003. Available at: http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/CPTD_Brandeis_Report.pdf. Accessed August 27, 2008.
- ⁷² Crump SR, Shipp MPL, McCray GG, et al. Abnormal mammogram follow-up: do community lay health advocates make a difference? *Health Promotion Practice*. 2008;9(2):140-148. This study was conducted at a large public hospital in Atlanta. The three CHWs were selected for their experience with health education and for their connection to and activities in their communities. All were African American women, as were most of the patients. In two earlier pilot studies, data demonstrated that CHWs succeeded in significantly increasing the proportion of mostly minority women with abnormal breast exams or mammograms to complete follow-up interventions, including appointments and biopsies (Freeman HP, Muth BJ, Kerner JF. Expanding access to cancer screening and clinical follow-up among the medically underserved. *Cancer Practice*. 1995;3:19-30.; Ell K, Padgett D, Vourlekis B, et al. Abnormal mammogram follow-up: a pilot study of women with low income. *Cancer Practice*. 2002;10(3):130-8).
- ⁷³ Mock J, McPhee SJ, Nguyen T, et al. Effective lay health worker outreach and media-based education for promoting cervical cancer screening among Vietnamese American women. *Am J of Pub Health*. 2007;97(9):1693-1700.
- ⁷⁴ In a similar study of Chinese American women, who have higher rates of invasive cervical cancer and lower pap smear screening rates than the general population, women receiving home visits from CHWs completed pap smear tests at significantly higher rates than those in the control group (Taylor VM, Hislop TG, Jackson JC, et al. A randomized controlled trial of interventions to promote cervical cancer screening among Chinese women in North America. *J Natl Cancer Inst* 2002 May1; 94 (9): 670-7). CHWs in this intervention provided support for women, acting as role models and serving as cultural mediators, and were able to provide personalized information and services to overcome individual barriers.
- ⁷⁵ Chen LA, Santos S, Jandorf L, et al. A program to enhance completion of screening colonoscopy among minority populations. *Clin Gastroenterol Hepatol*. 2008;6:443-450. The CHWs achieved this success through intensive patient navigation services, such as explaining the procedure to patients, scheduling appointments, placing reminder calls, and arranging transportation.
- ⁷⁶ Baltimore City Health Department. *Reducing Suffering and Death from Cardiovascular Disease and Diabetes*. Available at: <http://www.baltimorehealth.org/disparities.html>. Accessed May 16, 2008.
- ⁷⁷ Koutoujian, Wilkinson, 2007, p. 10-15.
- ⁷⁸ U.S. Department of Health and Human Services (USDHHS). *Healthy people 2010: Understanding and Improving Health*. November, 2000. Available at: <http://www.healthypeople.gov/Document/pdf/uih/2010uih.pdf>. Accessed August 27, 2008.
- ⁷⁹ “*Healthy People 2010* defines social capital as ‘the process and conditions among people and organizations that lead to accomplishing a goal of mutual social benefit, usually characterized by four interrelated constructs: trust, cooperation, civic engagement, and reciprocity’” (Wallack L. *Research Plan*. Proposal documents submitted to the Centers for Disease Control and Prevention for Poder es Salud/Power for Health program in Multnomah County, Oregon. Available at: http://depts.washington.edu/ccph/pdf_files/Sections_a-d.doc.pdf. Accessed August 28, 2008.p. 31).
- ⁸⁰ Farquhar SA, Michael YL, Wiggins N. Building on leadership and social capital to create change in 2 urban communities. *Am J of Pub Health*. 2005;95(4):596-601.
- ⁸¹ A number of projects around the country have involved community health workers as key to community capacity building and empowerment strategies. For example, the National Institutes of Health funded a community cardiovascular health improvement program in Baltimore public housing. Community health workers targeted risk factors by organizing educational events, engaging community leaders, and raising community awareness of and screenings for cardiovascular health. Residents showed improvements in knowledge and understanding of risks for the disease, and their actions resulted in a new walking trail in one community, as well as new weight management programs (C. Payne, Operations Officer, Housing and Urban Development, Baltimore, MD. Telephone interview; June 3, 2008).
- ⁸² J. Scavron, M.D., Medical Director, Baystate Brightwood Health Center, Springfield, MA. Telephone interview and personal written communications; June and August, 2008.
- ⁸³ J. Scavron, June, 2008. During the 2003-2006 period the work was funded by the Waite Family Foundation with help from the Massachusetts DPH. The NEON project currently (2008) is supported in good part by Community Benefits funds from Baystate Health.

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- ⁸⁶ These changes were attributed to “CHWs assisting clients with establishing a medical home, selecting a primary care provider, system navigation, and case management” (Whitley, EM, Everhart RM, & Wright RA. Measuring return on investment of outreach by community health workers. *J Health Care Poor Underserved*. 2006;17(1):6-15.).
- ⁸⁷ National Community Voices Initiative, Northern Manhattan Community Voices, 2007.
- ⁸⁸ Dower et al. (a), 2006.
- ⁸⁹ Fedder DO, Chang RJ, Curry S, Nichols G. The effectiveness of a community health worker outreach program on healthcare utilization of west Baltimore City Medicaid patients with diabetes, with or without hypertension. *Ethnicity and Disease*. 2003;13(1):22-7. CHWs made weekly contacts by phone or in-home visits, linked patients to care, monitored their self care, and provided social support to patients and their families.
- ⁹⁰ Behforouz HL, et al. Evaluation of Prevention and Access to Care and Treatment (PACT). [Unpublished]. Boston, MA: Brigham and Women’s Hospital.
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- ⁹² Dower et al. (a), 2006, p. iii.
- ⁹³ Dower et al. (a), 2006, p. iii.
- ⁹⁴ Long, 2008.
- ⁹⁵ MassHealth plans to reprocur its MMCO contracts starting in State Fiscal Year 2010, in which case the number and composition of the MMCOs may change.
- ⁹⁶ CMS Selects Sites For Demonstration Seeking Ways to Reduce Disparities in Cancer Health Care [Internet]. Baltimore (MD): U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services; 2006 [updated 2006 Mar 24/cited 2006 Nov 01]. Available from <http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1816>.
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- ¹⁰⁰ McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA*. 1993;270(18):2207–2212.

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Appendix A: Authorizing Legislation

Section 110, Chapter 58 of the Acts of 2006 (Health Care Reform)

SECTION 110. The department of public health shall make an investigation and study relative to (a) using and funding of community health workers by public and private entities in the commonwealth, (b) increasing access to health care, particularly Medicaid-funded health and public health services, and (c) eliminating health disparities among vulnerable populations. The department shall convene a statewide advisory council to assist in developing said investigation, interpreting its results, and developing recommendations for a sustainable community health worker program involving: public and private partnerships to improve access to health care, elimination of health disparities, increased use of primary care and a reduction in inappropriate use of hospital emergency rooms, and stronger workforce development in the commonwealth, including a training curriculum and community health worker certification program to insure high standards, cultural competency and quality of services. The advisory council shall be chaired by the commissioner of public health or his designee and shall include 14 additional members, including the chief executives or their designees of the following agencies or organizations:— office of Medicaid, department of labor, Massachusetts Community Health Workers Network, Outreach Worker Training Institute of Central Massachusetts Area Health Education Center, Community Partners' Health Access Network, the Massachusetts Public Health Association, Massachusetts Center for Nursing, Boston Public Health Commission, Massachusetts Association of Health Plans, Blue Cross Blue Shield of Massachusetts, Massachusetts Medical Society, Massachusetts Hospital Association, the Massachusetts League of Community Health Centers and the MassHealth Technical Forum.

The department shall report to the general court the results of its study and its recommendations by filing them with the clerks of the house and senate, who shall forward them to the joint committee on health care financing and to the house and senate committees on ways and means on or before January 1, 2007.

Appendix B: Advisory Council Membership

Members of the Massachusetts Department of Public Health Community Health Worker Advisory Council

Members Representing Agencies or Organizations Named in Statute:

Chair: John Auerbach, Commissioner
Massachusetts Department of Public Health

Ayesha Cammaerts, Chief of Staff
Massachusetts Office of Medicaid

Stephanie Noguera
Massachusetts Department of Labor and Workforce Development

Lisa Renee Holderby, Executive Director
Massachusetts Association of Community Health Workers

Joanne Calista, Executive Director
Outreach Worker Training Institute of Central Massachusetts Area Health Education Center

Meg Kroeplin, Acting Director
Community Partners Health Access Network

Terry Mason, Deputy Director for Program and Policy
Massachusetts Public Health Association

Maureen Sroczynski, Director
Massachusetts Center For Nursing
University of Massachusetts Boston College of Nursing and Health Sciences

Peggy Hogarty, Director, Community Health Education Center
Representing: Boston Public Health Commission

Eric Linzer (Replaced Thomas Nyzio)
Massachusetts Association of Health Plans

Helen Luce, Government Relations
Blue Cross Blue Shield of Massachusetts

Candace L. Savage, Manager, Public Health Outreach
Massachusetts Medical Society

Anuj K. Goel, Senior Director, Regulations and Staff Counsel
Massachusetts Hospital Association

Adam J. Delmolino, Manager, State Government Advocacy
Massachusetts Hospital Association

Mary Leary, Project Management & Development Consultant
Massachusetts League of Community Health Centers

Dorcas Grigg-Saito, Chief Executive Officer
Lowell Community Health Center

Joan Pernice, Clinical Health Affairs Director
Massachusetts League of Community Health Centers

Theresa Glenn, Program Manager
MassHealth Training Forum

Additional Members:

Stephanie Anthony, Principal Associate
Center for Health Law and Economics, University of Massachusetts Medical School

Heidi Behforouz, Medical Director
Prevention and Access to Care and Treatment (PACT)

Sarita Bhalotra, Assistant Professor
Heller Graduate School, Brandeis University

Jennifer Chow, Outreach and Enrollment Manager
Health Care For All

Niki Conte, CommCare Outreach Director
Commonwealth Connector

Linda J. Cragin, Director
Massachusetts Area Health Education Center

Milta Franco, Program Director, North End Outreach Network
Representing Jeff Scavron, Medical Director, Brightwood Health Center

Durrell Fox, Project Director
New England HIV Education Consortium

Roma Goodlander, Project Manager
Community Health Worker Initiative of Boston

Phillip Gonzalez, Director of Health Access Programs
Blue Cross Blue Shield of Massachusetts Foundation

Lee Hargraves, Associate Professor
University of Massachusetts Medical School-Family Medicine and Community Health

Loh-Sze Leung, Director, SkillWorks, and Allison F. Bauer, Senior Program Officer

The Boston Foundation

Lisa Levine, Chief Operating Officer
Dorchester House Multi-Service Center

Cindy Marti, Policy Director
Massachusetts Association of Community Health Workers

Angela Nannini, Assistant Professor
University of Massachusetts at Lowell

Thankam I. Rangala, Vice President, Provider Network Management
Neighborhood Health Plan

Paulette Renault-Caragianes
Commonwealth Medicine, University of Massachusetts Medical School

Jean Sullivan, Associate Vice Chancellor
Director, Center for Health Law & Economics, UMass Medical School

Ann Withorn, Professor, College of Public and Community Service
University of Massachusetts Boston

DPH Staff:

Cynthia Boddie-Willis, Director, Health and Wellness Unit

Beth Buxton-Carter, Division of Perinatal, Early Childhood & Special Health Needs

Jennifer Cochran, Director, Refugee and Immigrant Health Program

Kevin Cranston, Director, HIV/AIDS Bureau

Andy Epstein, Senior Advisor, Commissioner's Office

Sally Fogerty, Director, Bureau of Family Health and Nutrition

Kristin Golden, Director of Policy and Planning, Commissioner's Office

Rebekah Gowler, Policy Intern, Commissioner's Office

Gail Hirsch, Coordinator of Workforce Initiatives, Division of Primary Care and Health Access

Donna E. Johnson, Director, Division of Primary Care and Health Access

Ruth Karacek, Director, Community-Based Primary Care Services

Stewart Landers, Acting Director, Bureau of Community Health Access and Promotion

Cathy O'Connor, Director, Office of Healthy Communities

Krina Patel, Student Intern, Division of Primary Care and Health Access

Brunilda Torres, Director, Office of Multicultural Health

Geoff Wilkinson, Senior Policy Advisor, Office of the Commissioner

Jean Zotter, Director, Asthma Prevention and Control Program

Appendix C: Updated Research Summary
The Impacts of Community Health Workers on Health Disparities,
Access, Cost, and Quality: An Updated Literature Review
Massachusetts Department of Public Health
June 5, 2009

Introduction

In its landmark 2006 health care reform law, the Massachusetts General Court recognized the importance of community health workers (CHWs) in helping to expand access to medical insurance coverage and eliminate health disparities. Section 110 of Chapter 58 of the Acts of 2006 required the Massachusetts Department of Public Health (DPH) to conduct a workforce investigation and to develop recommendations for a sustainable CHW program for the Commonwealth. In 2008, after more than a year of deliberation, a CHW Advisory Council organized by DPH completed work on a report that included a review of research findings about the impacts of CHWs on health access, disparities, cost, and quality.

Subsequently, in early 2009, during administrative review of the CHW Advisory Council report and recommendations, a team consisting of DPH staff and research partners from the Advisory Council updated the literature review and reorganized the presentation of findings to assist policy and program development at DPH and the Executive Office of Health and Human Services. This research update presents the results of that work.

The update includes three sections: 1) a narrative summary of findings, 2) a one page table that compares key elements from a set of twelve methodologically sound studies, including six that were not discussed in the CHW Advisory Council's report, plus two recent, unpublished studies of the cost effectiveness of CHW intervention models, and 3) one page descriptions of each of the fourteen studies.

This research update is intended to augment the findings of the CHW Advisory Council and to serve as a compendium to the Council's report.

Research Overview

Numerous community health worker (CHW) program evaluations have shown positive and promising results. Until recent years, however, few have utilized research methods that are routine for best practice evidence in the health care field. Studies selected for this research update come from the increasing body of published research using scientifically rigorous methods to assess CHW intervention impacts. Studies are categorized according to the primary health or service issues they addressed:

- 1) *Access*: health insurance enrollment and maintenance (1 study);
- 2) *Utilization*: increase primary care, reduce emergency care (3 studies);
- 3) *Prevention services*: increase and improve use of mammography, cervical cancer, routine chronic disease screening (5 studies);
- 4) *Chronic Disease*: improve diabetes management, reduce asthma triggers, improve caregiver mental health (5 studies).

The studies summarized here and others cited in the CHW Advisory Council report employ a diversity of titles for community health workers, including "lay health worker," "community health educator," and "promotora." Almost all of the studies—even those that do not use the term "community health worker"—share a definition of the CHW as someone living in the targeted community and sharing race, ethnicity, or other key experiences with intervention subjects as important to the role. In all but one of the studies, target populations were low income, uninsured, publicly insured via Medicaid, and/or using public health centers or hospitals.

All of the studies specified CHW selection criteria. All of them described the intervention settings and roles and activities of CHWs. All but two of the studies also describe what training CHWs received. Some studies measured outcomes with health system utilization data. Others reported clinical measures such as blood pressure or blood glucose levels, in addition to using questionnaires and self reports. These features provide the basis for helpful comparisons among studies and greater confidence about the efficacy of CHWs in contributing to significant outcomes reported.

The roles of CHWs in all of these studies were substantial. None of the interventions utilized CHWs only for outreach. All CHW interventions included outreach, education, and social/emotional support. In most studies, CHWs also assisted with system navigation, referrals, and client advocacy. In some studies, CHW roles included care coordination and even direct care, including monitoring blood pressure and blood glucose levels.

CHWs in these studies received on-the-job training specific to their interventions. Training time varied from as few as 16 hours to as much as 6 weeks, depending on the complexity of the interventions. There was no indication of formal, broad training in CHW core competencies in any of the studies. By definition, CHW hiring criteria did not require specialty degrees in health or other fields. Educational levels for CHWs tended to be below the post secondary level, although levels varied in the studies, as they generally do in research on the CHW workforce. Several studies make clear that CHWs received regular supervision and participated in case discussions.

Ten of the studies used randomized controlled trial (RCT) designs. All but one of the RCT studies reported statistically significant positive outcomes for participants randomized into CHW interventions.¹ Most compared CHW intervention outcomes to “usual care” control group outcomes. One study compared two types of CHW interventions; another compared a high intensity to a low intensity CHW intervention; and a third compared intervention outcomes for nurse practitioners and CHWs working alone to nurse practitioners and CHWs working together. Results of the latter three studies consistently reported significantly better outcomes for the more intensive interventions that include CHWs.

For example, in Gary et al (2003), a nurse case manager in an urban clinic working as a team with a CHW conducting home visits to help patients with type-2 diabetes risk management had statistically significant and greater overall effects improving blood glucose and lipids levels, as well as lowering blood pressure, compared to either controls or to the separate CHW or nurse practitioner interventions. In the combined intervention, the CHW met regularly with the nurse case manager to coordinate patient care. The nurse met the patient in the clinic and the CHW monitored the patient and their family’s behavior in the home, reinforced medical adherence and mobilized social support for the patient, while providing information helpful to the physician and nurse regarding the patient’s behavior and symptoms.

In another study (Weber, *et al*, 1997), women patients at primary care clinics in inner city Rochester who had not had a mammogram in two years or longer were randomized into a “case management” intervention with a CHW or to usual care. CHWs in this intervention contacted patients by phone, via home visits, office visits, and/or with mailed card reminders. They educated patients about the importance of prevention and screening, met patients at primary care or radiology offices to counsel and educate them, and assessed and helped address patients needs and barriers such as transportation, attaining Medicaid coverage, or financial assistance. Women in the CHW intervention were nearly three times as likely to receive a mammogram as those in the control standard care group.

In a third study (Fedder, *et al*, 2003), a sample of Medicaid covered diabetes patients discharged from the University of Maryland hospital received a minimum of five visits over a year from a CHW. The CHW

¹ Results in one study assessing the impact of a *promotora*’s home visit on participants’ return to a center for a routine chronic disease screening approached statistical significance. Authors note results suggest clinical significance.

linked patients with primary care providers, provided social support to patients and their caregivers, monitored patients' self-care, and helped patients keep appointments, monitor their own blood pressure and glucose, and sustain their Medicaid coverage. For patients who received five or more CHW visits, comparisons of their Medicaid claims data for one year prior to and one year after the CHW intervention showed that ER visits decreased by 38 percent and hospitalizations decreased by 30 percent. The number of ER admissions also decreased by 53 percent. All of these differences were statistically significant. For the study cohort, mean Medicaid expenditures one year after intervention were \$8,266, which represented a 27 percent decrease in mean expenditure from before the intervention. Estimated gross savings per CHW were \$80,000 to \$90,000 per year (direct costs only).

Four additional studies compared participants' health care utilization data to identify changes in patterns and related costs before and after CHW intervention. These four studies identified cost savings that were either related to reduced urgent and emergency care and increased use of primary care or—in the case of the Holyoke Health Center—to improved management of type 2 diabetes.

Research Lessons

As we address issues of cost and quality in the context of Massachusetts health care reform, improved CHW outcome research provides cause for confidence that we may help achieve strategic goals to improve the health of vulnerable populations, improve quality, and reduce costs by developing and testing pilot programs in several areas involving the use and support of CHWs including:

- 1) Assisting individuals and families to obtain and maintain health insurance;
- 2) Increasing access to and use of preventive education, screenings, and treatment services;
- 3) Encouraging the use of primary care and medical home models;
- 4) Reducing unnecessary use of urgent care;
- 5) Improving management of chronic diseases such as diabetes and asthma and related health conditions, including high blood pressure; and
- 6) Strengthening patient health literacy and culturally competent provider practices.

Research provides support for claims by practitioners and advocates that CHWs are effective in large measure due to the cultural, linguistic, ethnic, and/or other experiences they share with the populations they serve. These characteristics—combined with commitment to serving their communities—make CHWs uniquely qualified to work with vulnerable populations, including people with low incomes and racial, ethnic, and linguistic minorities.

CHWs can help significantly improve outcomes of care teams by performing a variety of activities that help patients reduce risks of complications from chronic diseases through compliance with prescribed treatment plans, including improved self-management. Effective training and supervision of CHWs, careful integration of CHWs into care teams, and learning about the nature and impacts of CHW skills and methods are important factors in enhancing CHW effectiveness. Health organizations that use CHWs effectively invest time and resources in these activities to achieve what they refer to as “organizational readiness.”

We can learn from promising CHW programs in Massachusetts, including the Holyoke Health Center diabetes self-management program, which utilizes CHWs as chronic disease care team members. This program demonstrates cost impacts and savings in addition to improved health outcomes (see Liebman, *et al*, 2007, in attached summary). DPH's “Integrated Chronic Disease Management Utilizing CHWs” program also stands out as a state model for implementing a CHW program in cooperation with community health centers that includes well defined guidelines for CHW training and supervision.

While the studies summarized below represent an advance in the quality of CHW intervention research, we still face challenges to basing policy and investment decisions directly on the literature. Four of the studies in the attached summary involve diabetes and three involve mammography, but additional studies concerning a variety of health issues would help to inform program development. Even well designed studies provide

limited utility for isolating positive impacts associated with multiple innovations that often characterize effective programs. As we consider investing in program pilots, it is important to establish clear concepts, guidance, and protocols concerning the nature of interventions and to define useful measures for outcome and process evaluations of the impacts of CHW interventions.

Similarly, there is a paucity of rigorous cost benefit and return-on-investment (ROI) research involving CHWs, though five of the studies covered in the attached summary document significant cost savings associated with CHW interventions. While these studies do not apparently figure the cost of CHW training into their calculations, neither do ROI methods in other health care research typically factor in costs of provider education. The emphasis on social justice in public health and the value we place on promoting processes that strengthen individual and community capacity add to the complexity of measuring effectiveness.

Experience with community health centers and other programs in Massachusetts underscores that community-based providers need special consideration in addressing financial, logistical, and ethical concerns involving methodologically sound research. The CHW Advisory Council did not address this issue, but it has emerged as a relevant concern over the past several months, and it has implications for EOHHS policy and program development.

National CHW Policy Developments

As we consider how strategic utilization of CHWs may help “bend the trends” challenging our health system in Massachusetts—including rising costs related to chronic disease and persistent health disparities—several recent national developments merit attention:

- In January, 2009, the U.S. Bureau of Labor Statistics approved a recommendation by its Standard Occupational Classification Policy Committee to include a unique job classification for Community Health Worker (SOC 21-1094) in the 2010 Standard Occupational Classifications listing in the Federal Register.
- The SCHIP reauthorization signed by President Obama on February 4 added a definition of Community Health Worker to the law and authorized use of Medicaid funds for CHWs in outreach activities.
- Minnesota health officials are awaiting a decision by the Centers for Medicare and Medicaid Services (CMS) on their request to authorize reimbursement for face-to-face services provided by qualified CHWs. Minnesota has established a new state educational curriculum for CHWs, supervision requirements for CHWs working within clinical teams, and a proposed billing code and rate structure. It is the first state seeking to classify CHWs who meet standard qualifications as providers for patient education, chronic disease management, and other services on such a broad basis.
- CMS has funded demonstration projects in twenty states to help divert emergency room visitors to primary care. Most of the sites include CHWs in their projects, and according to a recent interview with the CMS project manager by a member of our research team, CMS is encouraging grantees to pursue Medicaid reimbursement based on the Minnesota proposal as a strategy for sustaining CHW positions after demonstration funding ends.
- Medicare is piloting a diabetes health disparities initiative in four states plus the District of Columbia and the U.S. Virgin Islands that relies on CHWs to provide diabetes self-management education. Since Medicare is not currently authorized to reimburse for CHW services, CMS has reportedly agreed to help secure alternative support for paid positions in all six sites during the three year pilot

program and is reportedly open to considering evidence-based proposals for changes in Medicare policy.

- The HRSA bureau of Health Professions effectively defined CHWs as the preferred model of Patient Navigator projects in a \$2 million national grant program funded last year by requiring that any applicant proposing to use any other professional as a navigator was required to justify the alternative.
- On May 4, 2009, more than 20 national health and advocacy organizations sent a letter to President Obama and Congressional leaders highlighting a set of legislative priorities designed to eliminate health disparities for racial and ethnic minorities. The signers advocated improved utilization of CHWs among strategies designed to significantly increase the availability of primary care. Proponents included the American Hospital Association, Aetna, American Diabetes Association, American Heart Association, American Medical Association, American Nurses Association, and numerous other mainstream groups.

Conclusion

Massachusetts is recognized nationally for pioneering efforts to promote workforce development and utilization of community health workers. An improving body of research underscores the values that CHWs have in promoting access, improving quality of care, reducing disparities, and controlling costs in the health system. The following summary comparing twelve published and two unpublished studies of CHW impacts is intended to aid policy and program development as a complement to the DPH Community Health Worker Advisory Council Report.

Community Health Worker Research Summary

Study	Design	Health issue	Setting	CHW Training?	Significant results?	Cost Savings?
ACCESS						
Flores, (2005); p. 2	RCT	uninsurance	CB	Y	Y	NA
UTILIZATION						
Fedder, (2003); p. 3	Retrospective Comparison	diabetes	M	Y	Y	Y
May, (2007) & unpub. prog. data; p. 4	Pre/post program eval.	chronic disease	M	Y	NA*	Y
Whitley, (2006); p. 5	Pre/post	under-util. of primary care	M	Y	NA*	Y
PREVENTION						
Anderson, (2000); p. 6	RCT	mammography screening	CB	Y	Y	NA
Crump, (2008); p. 7	RCT	abnormal mammograms	M	Y	Y	NA
Hunter, (2004); p. 8	RCT	under-util. of prev. screens	M	Y	N°	NA
Mock, (2007); p. 9	RCT	cervical cancer screenings	CB	Y	Y	NA
Weber, (1997); p. 10	RCT	mammography screenings	M	No info	Y	NA
CHRONIC DISEASE						
Babamoto, (2009); p. 11	RCT	diabetes	CB	Y	Y	NA
Gary, (2003); p. 12	RCT	diabetes	M	No info	Y	NA
Ireys, (2001); p. 13	RCT	chronic diseases	CB	Y	Y	NA
Krieger, (2005); p. 14	RCT	asthma	CB	Y	Y	Y
Liebman, (2007) & unpub. prog. data; p. 15	Case study; pre/post	diabetes	M	Y	NA*	Y

* These are cost analysis studies, so statistically significant health outcome results are not relevant to the purpose of these studies. Some outcome results are included in the summaries below.

° The results of this study approach statistical significance (95% CI=0.95-1.92), but have clinical significance.

M = medical/clinical setting (e.g. hospital and/or primary care site, such as community health center)

CB = community-based settings

Access: Health Insurance Enrollment and Maintenance

Flores G, et al. A randomized, controlled trial of the effectiveness of community-based case management in insuring uninsured Latino children. *Pediatrics*. 2005; 116(6):1433-1441.

Health/Health Care Problem

Children's uninsurance

Target Population

Uninsured Latino children and parents in two Boston neighborhoods—Jamaica Plain and East Boston—with high rates of uninsured among target population

Setting (Medical vs. Community-based)

Community-based

Design & Methods

Randomized controlled trial. 275 participants (families) randomly assigned to intervention group with CHW (called community-based case managers); or control group of (then) standard Medicaid/SCHIP outreach & enrollment, which included: media outreach (mailings, press releases, newspaper inserts, health fairs, bilingual radio ads); mini-grants to orgs; and toll-free phone number.

Participating families were recruited in urban community sites, including: bodegas, supermarkets, self-service laundries, beauty salons and churches, notices in schools and consulates.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach; health system navigation; client advocacy

B. provide info on insurance programs, and eligibility; assist families with applications; act as liaisons and advocates with Medicaid/SCHIP; and assist with maintaining coverage

CHW Selection Criteria; Educational, Professional Background; and Training

Background

CHWs (community-based case managers): all bilingual, bicultural Latinas; 22-36 yrs old; high school grads; some with college degree, one with post grad training; none had prior experience as case manager in this field

Training

All CHWs received at least 3 weeks of training specific to the intervention, including: a) 1 day intensive training on barriers to enrollment for Latinos; b) 1 week training on Medicaid enrollment procedures and eligibility requirements; c) week-long supervised case manager training in the community, and d) monthly Division of Medical Assistance technical forums.

Outcome Measures

1) child obtaining health insurance coverage; 2) time to obtain coverage; 3) continuity of coverage; and 4) parental satisfaction with the process of obtaining insurance for children.

Data gathered through interviews with parents. Data supported, when possible, by inspection of coverage notification letter received by family.

Results

139 children were in intervention group and 136 were in control group. Intervention children were significantly more likely to receive health insurance (96% vs. 57%) and significantly more likely to receive insurance more quickly (mean: 87.5 days vs. 134.8 days). Also, 78% of intervention children were insured continuously, compared to 30% in control group.

Cost Information (Program Costs, Cost Savings)

No information

Health Care Utilization: Increase Primary Care, Reduce Emergency Care

Fedder DO, et al. The effectiveness of a community health worker outreach program on healthcare utilization of west Baltimore City Medicaid patients with diabetes, with or without hypertension. *Ethnicity and Disease*. 2003;13(1):22-7.

Health/Health Care Problem

Low compliance with treatment regimens for diabetes, with or without hypertension

Target Population

African-American Medicaid patients with diabetes, with or without hypertension, in Baltimore

Setting (Medical vs. Community-based)

University of Maryland Medical System (hospital)

Intervention with discharged hospital patients took place in community homes, telephone contact

Design & Methods

Retrospective comparison study. Cohort of 117 patients recruited from Medicaid records. Health utilization of cohort based on Medicaid claims data compared one year before and one year after CHW intervention. Total study time period was 3 years (1991-1994).

CHW caseload with no more than 10 patients, minimum 5 visits over 1 year, alternated weekly home visits or phone contact

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach, health education, system navigation, direct services (blood pressure, glucose monitoring)

B. linking patients with primary care providers; monitoring patients' self-care; helping patients keep appointments; monitoring blood pressure, glucose; sustaining Medicaid coverage; social support to caregivers & patients

CHW Selection Criteria; Educational, Professional Background; and Training

Background

38 active CHW, paid monthly stipend (\$45-\$75) + expenses.

Characteristics of CHWs: 1) 37 female, mean age 59; 2) recruited from target neighborhoods; 3) mean education just under 12 years; 4) extensive community experience & commitment to service

Training

Minimum 60 hours training over 6 months at UMB, including: 1) chronic illnesses, resource ID, 2) American Heart Association certificate in blood pressure; 3) outreach and case management

Supervision

Worked under close supervision, bi-weekly supervision meetings

Outcome Measures

Health resource utilization, including: ER visits, ER admissions, total hospital admissions, length of stay per hospitalization, and Medicaid reimbursement.

Results

117 patients had 5 or more CHW encounters and were included in analysis. ER visits decreased by 38% and hospitalizations decreased by 30% from one year before to one year after intervention. The number of ER admissions also decreased by 53%. All of these differences were statistically significant.

Cost Information (Program Costs, Cost Savings)

Mean Medicaid expenditures one year after intervention were \$8,266, which indicated a 27% decrease in mean expenditure from before the intervention. Estimated gross savings per CHW were \$80,000-90,000 per year. (direct costs only)

May M, Camp K, Gamm L. The training of community health workers as care managers in a hospital sponsored community chronic disease management program. *TPHA Journal*. 2007; 59(1): 19-21.
 Unpublished program data: CHRISTUS Health. Expanding health access for the uninsured: community health toolkit. CHRISTUS Health. Aug 2007. intranet.christushealth.org/services/toolkit.pdf
 CHRISTUS Community Health Care Management for the Uninsured: Quality Management Committee Annual Report September 2008 (for Return on Investment data).

Health/Health Care Problem

Under-utilization of primary care for people with chronic disease

Target Population

Low-income, largely uninsured population in rural south Texas Coastal Bend region—61% Latino, high rates chronic disease, frequent visitors to Emergency Dept & hospital

Setting (Clinical vs. Community-based)

Study led by CHRISTUS Spohn health system, collaborating with community-based organizations
 Intervention community-based

Design & Methods

Cost-benefit, Return on Investment (ROI), pre/post intervention measures.

(evaluation of health status outcomes ongoing)

For sample of 205 care management (CHW) clients in program for minimum of 90 days, compare pre-post enrollment visits to Emergency Department, hospitalization rates

ROI defined as net avoided costs divided by program costs

Total CHW on staff = 15

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach, health education, system navigation, advocacy

B. care management and navigation—provide linkages to a medical home, prescription assistance programs, social services, health education, and support self-management of chronic diseases

CHW Selection Criteria; Educational, Professional Background; and Training

Background

1) high school diploma required; 2) ethnically match with target population and/or culturally competent; 3) carefully screened for rapport with target population & dedication to the work; 4) educational backgrounds vary, previous professional training not required

Training

Seven core CHW competencies in the literature (bridge community and clinical perspectives); 2) CPR & crisis intervention

Supervision

Monthly conference calls with supervisors

Outcome Measures

CHW care management program participants' visits to Emergency Dept, & rates of hospitalization,

Results

Among 105 care management clients at least 90 days in program --Emergency Dept use decreased 50%, in-patient admissions declined 30%.

Cost Information (Program Costs, Cost Savings)

Average annual cost for care among program participants decreased by \$10,000 or 58%. Over a three year period (April 2006-March 2009), the ROI for each dollar invested in the program is \$3.84.

Whitley EM, et al. Measuring return on investment of outreach by community health workers. *J Health Care Poor Underserved*. 2006;17(1):6-15.

Health/Health Care Problem

Under-utilization of primary care among poor, underserved men

Target Population

participants of Men's Health Initiative of Denver Community Voices Program

Setting (Medical vs. Community-based)

Denver Health (DH), health care safety net provider. (medical)

DH Community Voices Outreach to underserved residents in Denver neighborhoods

Design & Methods

Longitudinal repeated measures design for return on investment. pre-/post- method used to examine medical records of 590 patients in DH system who began working with a CHW. Baseline data gathered from 9 months prior to work with CHW, and follow-up measures came from utilization data for same patients 9 months after initial CHW intervention.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach, education, and system navigation.

B. community-based screening and health education; insurance enrollment assistance; service referrals; system navigation; and care mgmt.

CHWs subsequently paid via health system's general fund, due to cost benefits (see Cost Information Column)

CHW Selection Criteria; Educational, Professional Background; and Training

(information from personal communication with EM Whitley)

Background

12 CHWs employed by DH Community Voices, including 1 certified substance abuse counselor, 1 physician trained in Mexico but unable to practice in the US who was replaced during intervention by lay person

1) all ethnically matched to population; and

2) CHWs required to have high school education

Training

Denver Health System collaborated with competency based CHW training program for CHW training (e.g. not on-the-job training)

Outcome Measures

1) Type of visits during the intervention (e.g. primary care, urgent care, med specialty, dental, or inpatient);

2) Charges and reimbursements for these services

Results

590 patients were eligible for analysis. Relative to total visits, primary care and med specialty care increased from pre- to post-intervention timeframe; and urgent care, behavioral health, and inpatient visits decreased between pre- and post-intervention timeframe.

Cost Information (Program Costs, Cost Savings)

Care shifted from costly inpatient and urgent care services (\$16,872/visit and \$934/visit, respectively) to less costly primary care services (\$237/visit)—resulted in total decrease in charges of \$300,000 over study period (even with increase of visits during intervention timeframe). Average service cost savings per month for DH: \$14,224. ROI (monthly savings/monthly costs): \$2.28 saved per \$1 spent, which equals \$95,941 saved/year.

Increase and Improve Use of Prevention Services

Anderson MR, et al. The effectiveness of mammography promotion by volunteers in rural communities. *Am J Prev Med* 2000;18(3): 199-207.

Health/Health Care Problem

Low mammography screening rates in rural communities

Target Population

Women aged 50-80 in rural communities in Washington state

Setting (Medical vs. Community-based)

Community-based

Design & Methods

Randomized controlled trial. Forty rural communities were randomized into one of **four study groups**: 1) individual counseling intervention; 2) community activities intervention; 3) combined individual counseling and community activities intervention; and 4) no intervention control group. CHWs delivered the activities in the three intervention groups. A cohort of 352 women was randomly selected from each community to evaluate the effectiveness of the interventions. Telephone interviews were conducted before randomization and 3 years after randomization.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach; health education

B. individual counseling: telephone calls to identify and address barriers to obtaining a mammogram; *community activities:* various strategies to develop supportive social norms for mammography screening within the communities, including video showings, mammography-themed bingo nights, beauty shop promotions, community newsletter, and distribution of study materials throughout the community

CHW Selection Criteria; Educational, Professional Background; and Training

Background

Volunteer CHWs recruited from the target communities via mailings

Training

Received training from research coordinators who also served as supervisors. CHWs were trained in the activities specific to the research group they were assigned to

Outcome Measures

Personal and community characteristics hypothesized to influence mammography use or intervention effectiveness; month and year of two most recent mammograms

Participants were categorized as either “regular” (more than 1 mammogram with most recent within 2 years of baseline interview), “under” (anyone who was not a “regular” user), “new” (someone who had been an under user at baseline but had had a mammogram within 2 years of follow-up interview), or “relapsed” (someone who had been a regular user at baseline but reported no mammogram within 2 years of follow-up interview) users.

Results

6592 women included in final analyses. Most statistically significant differences were seen between the community activities intervention and the control group. This intervention significantly reduced rates of relapse at follow-up of regular users at baseline. This intervention also significantly increased mammography use among certain groups of women who were not regular users at baseline, including women with no health insurance (10% to 23%).

All three interventions appear to have increased the use of mammography at follow-up by under-users at baseline. These effects were not statistically significant, but are consistent with other findings in the literature of low-intensity interventions.

Cost Information (Program Costs, Cost Savings)

Not available.

Crump, SR et al. Abnormal mammogram follow-up: do community lay health advocates make a difference? *Health Promotion Practice*. 2008;9(2):140-148.

Health/Health Care Problem

Low follow-up screening for women receiving abnormal mammograms

Target Population

African-American women patients at public hospital who received level 3 & 4 abnormal mammograms during intervention period

Setting (Medical vs. Community-based)

Large public hospital in Atlanta, Grady Memorial

Design & Methods

Randomized controlled trial. The study period was divided into **weeks**, which were **randomized into two groups**: 27 weeks were assigned CHW intervention weeks, and 27 weeks were assigned as usual care weeks. All women who had abnormal mammograms during the intervention weeks received CHW services, and women with abnormal mammograms during the usual care weeks received routine care from the hospital. Routine care included a reminder call the day before the scheduled biopsy.

CHW Activities: A. 4 key functions; B. Specific Activities

A. health system navigation, health education, outreach.

B. phone reminders for appointments; explaining importance of follow-up; ID and address any barriers through referrals; and accompany women to appointments.

CHW Selection Criteria; Educational, Professional Background; and Training

Background

All 3 CHWs (aged 68, 69,70) were African-American with some post-secondary education. Two previously worked as health educators. 2) hired for experience in health education and activities in community (all active volunteers, one breast cancer survivor)

Training

As part of study, they all received 2-day 16 hour training on breast cancer diagnosis and treatment; barriers to follow-up; CHW roles and activities; hospital procedures and policy.

Outcome Measures

1. compliance with 1st follow-up appointment after abnormal mammogram; 2. compliance with follow-up appointment for biopsy or fine needle aspiration; 3. compliance with all scheduled follow-up appointments

Results

83 women were included in study: 48 in CHW intervention group; 35 in usual care group. Women in the CHW group had significantly higher rates of compliance with follow-up appointments on all three outcome measures than those in the control group.

Cost Information (Program Costs, Cost Savings)

Not available

Hunter JB, et al. The impact of a *promotora* on increasing routine chronic disease prevention among women aged 40 and older at the U.S.-Mexico border. *Health Education & Behavior*. 2004; 31(4 Suppl): 18S-28S.

Health/Health Care Problem

Low compliance with annual preventive exams among uninsured Hispanic women

Target Population

Uninsured Hispanic women living in rural US-Mexico border area in Arizona who were not receiving routine comprehensive preventive care

Setting (Medical vs. Community-based)

Community health centers and in homes (medical)

Design & Methods

Randomized controlled trial. 103 women from randomly selected households who qualified & received baseline free comprehensive clinical exam & screenings randomized into one of **two study groups**: 1) Postcard reminder only (control), or 2) CHW intervention, which included: Postcard reminder + home visit, assistance with reschedule, discussion of barriers, follow-up for missed appointments.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach, system navigation, education

B. promotora visited intervention participants in homes 2 weeks after postcard sent, discussed barriers to appointment keeping, assist w appointment scheduling, made follow-up calls to those who missed appointment

CHW Selection Criteria; Educational, Professional Background; and Training

One promotora

Background

bilingual woman from the community with experience working in community-based women's health programs

Training

Promotora was already familiar with national guidelines for preventive exams. Trained in intervention implementation procedures and logistics.

Outcome Measures

Percent of women who received 2nd annual exam. Clinic documentation and tracking of participants' appointment keeping

Results

Final sample 98. Receiving the promotora intervention was associated with 35% increase in rescreening over the postcard-only reminder. The 95% confidence interval approaches statistical significance (0.95-1.92). Results suggest clinical significance. CHWs appear more and more convincingly to be highly effective bridge between those who give and those who receive health care.

Cost Information (Program Costs, Cost Savings)

Not available

Mock J, et al. Effective lay health worker outreach and media-based education for promoting cervical cancer screening among Vietnamese American women. *Am J of Pub Health*. 2007; 97(9):1693- 1700.

Health/Health Care Problem

Low cervical cancer screening

Target Population

Vietnamese-American women in Santa Clara Co., CA

Setting (Medical vs. Community-based)

5 community-based orgs (CBOs)

Design & Methods

Randomized controlled trial. 1005 patients randomized into **2 groups**: lay health worker (CHW) outreach, plus media-based education; or media-based education only. Study conducted over 4 years in 5 community-based settings, each of which delivered services for 12 months (staggered intervention over the length of the study). CHWs recruited participants from their social networks, then participants were randomized into the two study groups.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach & health education.

B. recruit women for the program, conduct group education sessions, follow-up with women to help with access to services

CHW Selection Criteria; Educational, Professional Background; and Training

Background

10 volunteer CHWs (all Vietnamese women) recruited at each of the 5 CBOs. (CHWs received \$1500 for services over the study period)

Training

CHWs trained in core CHW skills and program specific cervical cancer info, in two sessions of 3 hours each

Outcome Measures

Primary outcomes: having ever obtained a Pap test; and being up-to-date for Pap tests. *Secondary outcomes*: related to knowledge, attitudes, and beliefs.

Results

Final sample included 491 women in combined group and 477 in media-only group. *Primary outcomes*: Of women who had never had a Pap test, 46% of these in combined group received one during study period, while 27.1% of women in media-only group did (statistically significant difference). *Secondary outcomes*: significantly more women in combined group learned correct info about causes of cervical cancer; also, increase in women who knew about Pap testing was significantly greater in combined group compared to media-only group.

Cost Information (Program Costs, Cost Savings)

Not available

Weber BE, Reilly BM. Enhancing mammography use in the inner city: randomized trial of intensive case management” *Arch Intern Med*, 1997; 157(20): 2345-2349.

Health/Health Care Problem

Low mammography completion rates among urban women

Target Population

Women, ages 52 to 77, in the inner city of Rochester, NY, who had not had a screening mammogram in 2 years.

Setting (Medical vs. Community-based)

Study conducted by the community outreach division of St. Mary’s hospital, 250 bed urban community teaching hospital- Six primary care practices in inner city Rochester, owned and operated by St. Mary’s Hospital, were sites for the interventions. (medical)

Design & Methods

Randomized controlled trial. 376 patients were randomly assigned to one of **two study groups**: 1) case management intervention by culturally sensitive community health educators; or 2) usual care from their primary care physician. Both groups received an initial letter from the primary care physician reminding them to get a mammogram before receiving either the CHW intervention or usual care. Intervention took place in 6 primary care practices supported by a computerized clinical information system. All CHWs were assigned to a specific primary care practice; 50% time connected to primary care centers following standardized intervention protocol

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach; patient education; and system navigation

B. 1) reminders and education re: preventive care and screenings via phone calls, home visits, office visits and/or mailed cards; 2) assessed patients needs and barriers; and 3) helped arrange transportation, obtain Medicaid or financial assistance; 4) met at primary care or radiology offices to counsel and educate patients.

CHW Selection Criteria; Educational, Professional Background; and Training

Six women Community Health Educators.

Background

Selection criteria: 1) literacy; 2) communication skills; 3) charisma; 4) concern about community health; and 5) ethnicity was similar to those served.

Training

No information provided on training or certification of CHWs.

Outcome Measures

The primary outcome was mammography completion, as documented by a review of mammography reports in the patients’ medical records. Secondary outcome measures included mammography results and incremental cost-effectiveness of the case management intervention.

Results

Women in the intervention group were nearly 3 times as likely to receive a mammogram, a significant difference (relative risk, 2.87; 95% confidence interval, 1.75-4.73). The benefit persisted when analyzed by age, race, and prior screening behavior. This intervention was practice based, not dependent on visits, and enhanced the efficacy of an already successful computerized preventive care information system.

Authors conclude: This intervention, when combined with a preventive care information system, has the potential to achieve Healthy People 2000 objectives for breast cancer screening.

Cost Information (Program Costs, Cost Savings)

No cost savings data available.

Improve Chronic Disease Management

Babamoto K, et al. Improving diabetes care and health measures among Hispanics using community health workers: results from a randomized, controlled trial. *Health Educ Behav.* 2009; 36 (113):113-126.

Health/Health Care Problem

Need for improved self-management of type-2 diabetes among Hispanics

Target Population

Hispanic adults newly diagnosed with type-2 diabetes in Los Angeles

Setting (Medical vs. Community-based)

Recruited at 3 inner city family health centers during routine visits

Intervention conducted in accessible community locations, clinic or home.

Design & Methods

Randomized controlled trial. 318 patients randomized into one of **three study groups**: 1) CHW intervention, 2) nurse case management, or 3) standard provider care. Measurements taken at baseline and at the end of the 6 mo intervention timeframe Each CHW patient case load was 35; mean of number CHW sessions: 11.3 during 6 mo

CHW Activities: A. 4 key functions; B. Specific Activities

A. health education

B. individual education sessions in community settings, homes, or clinic based on ADA standards and stages of change theory

CHW Selection Criteria; Educational, Professional Background; and Training

Background

3 full-time paid staff:

1) bilingual Hispanic CHWs; 2) with diabetes themselves or w diabetic family member; 3) recruited from surrounding community, clinic or local org; 4) high school diploma or GED required

Training

6 week training on:

1) clinic policies & procedures; 2) CHW roles & responsibilities; 3) diabetes; 4) self management, including cultural beliefs and stages of change

Outcome Measures

Medication adherence, diabetes knowledge, ED visits, self-reported health status, daily fruits and vegetable intake, weekly exercise, & clinical endpoints: A1c & BMI measures

Results

189 patients completed the program. At follow-up: 57% of participants in CHW group reported at least "very good" health, up from 5% at baseline, and significant difference (no significant changes in other two groups); no significant change in ER visits or medication adherence in CHW group, but both of these significantly worsened in control group; self-report of eating fruits and vegetables significantly increased in CHW group, and reports of eating fatty foods significantly decreased; all groups saw significant decreases in A1c; patients in the CHW group have 2.9 times greater odds of decreasing their BMI. Conclusion: "These findings suggest that a culturally tailored outreach and education program, based in the transtheoretical model and delivered by trained CHWs, can significantly improve self-care behaviors and decrease BMI."

Cost Information (Program Costs, Cost Savings)

Not available

Gary TL, et al. Randomized controlled trial of the effects of nurse case manager and community health worker interventions on risk factors for diabetes related complications in urban African Americans. *Prev Med.* 2003; 37(1):23-32.

Health/Health Care Problem

Disparities in diabetes complications among African Americans due to poor control of major risk factors

Target Population

urban African-Americans with type-2 diabetes

Setting (Medical vs. Community-based)

primary care settings at Johns Hopkins Outpatient Center or East Baltimore Medical Center (medical)

Design & Methods

Randomized controlled trial. 186 patients randomized into one of **4 study groups**: 1) usual care only (control); 2) usual care, plus nurse case manager; 3) usual care, plus CHW; 4) usual care, plus nurse case manager/CHW team. Usual care was the care patients regularly received from their health care provider. Nurse case manager intervention consisted of 45 minute face-to-face clinic visits and/or phone calls, with goal of 3 visits per year. CHW intervention included 45-60 minute home visits and/or phone calls, with goal of 3 visits per year. The combined intervention included activities from the two other study groups as well as biweekly meetings to coordinate care, with goal of 6 visits per year (3 with nurse case manager and 3 with CHW).

CHW Activities: A. 4 key functions; B. Specific Activities

A. health education, outreach, and client advocacy.

B. monitor participant and family behavior; reinforce med adherence; mobilize social support; provide physician feedback, which included reporting on identifiable problems such as high blood pressure or dietary habits.

CHW Selection Criteria; Educational, Professional Background; and Training

Background

HS graduate with no formal health care training before the study.

Training

No information available.

Outcome Measures

Diabetic control: HbA1c levels, cholesterol levels, and triglycerides; *Dietary practices*: measure of dietary risk assessment score based on food frequency and food preparation questionnaire; *Physical activity*: score of habitual physical activity

Results

Diabetic control: NCM/CHW combined group showed biggest decline in HbA1c compared to control group, and also had positive effects on lipids and blood pressure. After controlling for baseline parameters of diabetic control and follow-up, the combined group had a statistically significant decline in triglycerides and diastolic blood pressure.

Dietary practices: CHW intervention group had largest effect on dietary risk scores, but no significant differences.

Physical activity: both CHW and NCM/CHW groups had larger within group increases in physical activity than control group. These within group differences were statistically significant. Overall, combined group had greater effects than either NCM or CHW alone.

Cost Information (Program Costs, Cost Savings)

Not available

Ireys HT, et al. Maternal outcomes of a randomized controlled trial of community-based support program for families of children with chronic illnesses. *Arch Pediatr Adolesc Med.* 2001; 155:771-777.

Health/Health Care Problem

Maternal mental health of mothers of children with chronic illnesses

Target Population

Mothers of children with chronic illnesses in the Baltimore area

Setting (Medical vs. Community-based)

Community-based

Design & Methods

Randomized controlled trial. 161 families (mother/child pairs) were randomly assigned to one of **two study groups**: 1) 15 month Family-to-Family Network intervention with CHWs; or 2) control group. Potential participants were identified by 11 specialty clinics and 5 general pediatric clinics in Baltimore area. Data were gathered at baseline, and 4, 8, 12, and 16 month follow-ups. The Baseline and 12 month follow-up interviews were face-to-face for 45-90 minutes; the other follow-up interviews were conducted on the phone for 15-20 minutes. CHWs (or Network Mothers) worked on a two-person team with child life specialist and had a case load of 1-7 families.

CHW Activities: A. 4 key functions; B. Specific Activities

A. outreach

B. seven 60-90 minute visits with mother in home or community setting; biweekly telephone contacts of at least 5 minutes; participation in 3 special events, such as bowling parties or small-group lunches

CHW Selection Criteria; Educational, Professional Background; and Training

Recruited by asking directors and staff at the clinics for referrals of suitable mothers for program

18 women worked as NMs and received hourly wage for all program-related work

Background

Mothers of older children (18 yrs or older) with chronic illnesses; called Network Mothers (NMs)

Training

30-hr training program to enhance listening, reflecting, and “story swapping” skills; included role plays, videotaped interviews, and in-class practices.

20-hr training with child life specialist to reinforce team aspect of program and review intervention procedures

Supervision

CHW and child life specialist met weekly with pediatrician and social worker

Outcome Measures

Maternal physical health, maternal anxiety, maternal depression, and stressful life events; all using previously tested standardized measures

Results

139 mothers included in evaluation analysis. Participants in the intervention group had lower levels of anxiety post-intervention compared to baseline, whereas the control group reported higher levels of anxiety at the follow-up interview compared to baseline. This difference was significant ($p=.03$), indicating the intervention had an effect on maternal anxiety. The intervention’s effect was especially pronounced for mothers with high levels of anxiety at baseline; these women had the biggest decrease in anxiety score, compared to women in the intervention group who had low levels of anxiety at baseline. No effect was detected on maternal depression and stressful life events did not seem to impact the outcome.

Cost Information (Program Costs, Cost Savings)

Not available.

Krieger, JW et al. The Seattle-King County Healthy Homes Project: a randomized, controlled trial of a community health worker intervention to decrease exposure to indoor asthma triggers. *Am J of Pub Hlth.* 2005;95 (4):652- 659.

Health/Health Care Problem

Exposure to indoor asthma triggers among low-income children

Target Population

low-income households with child 4-12 years old with persistent asthma in King Co., WA

Setting (Medical vs. Community-based)

Participants recruited from community and public health clinics, local hospitals and emergency departments, and community referrals. Community participatory research principles followed. Intervention took place in community setting (participants' homes)

Design & Methods

Randomized, controlled trial. 274 low-income households randomized into **two intervention groups**: high-intensity (comprehensive CHW services) of at least 7 visits; and low-intensity (minimal CHW intervention). Eligible households had a child 4-12 years old with persistent asthma. One year follow up. Cost analysis based on number of urgent care services used multiplied by the cost per service. These cost data were gathered 2 months prior to baseline and 2 months prior to exit.

CHW Activities: A. 4 key functions; B. Specific Activities

A. education, outreach, advocacy.

B. environmental assessment; helped participants develop action plan to reduce triggers; ongoing visits to support progress on action plan, provide resources, education and support, and advocate for improved housing conditions.

CHW Selection Criteria; Educational, Professional Background; and Training

Background

6 CHWs worked for the project over 4 yrs. Diverse ethnic backgrounds, mostly female, lived in target communities

Training

- 1) 40 hr program-specific training that included didactic sessions, in-class exercises, role playing, and field practice
- 2) 10-20 hrs of continuing education every year

Supervision

- 1) Met with PI every 2 weeks; 2) Met with steering committee every 2-3 months

Outcome Measures

Pediatric Asthma Caregiver Quality of Life Scale score; asthma symptoms days; self-reported asthma-related urgent health care services use in past 2 months; self-reported trigger exposure and control behaviors; medication use; and school/work absences. Interviewer observation.

Results

110 participants in the high-intensity group and 104 in the low-intensity group completed the study. *Primary outcomes*: high-intensity group had significantly greater increase in caregiver quality of life score, and significantly greater decrease in urgent care use compared to low-intensity group. *Secondary outcomes*: only high-intensity group saw significant decrease in days controller medications used and days missed school in past 2 weeks. *Behavior changes*: high-intensity group had higher frequency of actions to reduce dust exposure and use bedding encasements. No significant differences in between-group comparisons on behavior measures.

Cost Information (Program Costs, Cost Savings)

Two months prior to exit interviews, urgent care costs were \$6,301-\$8,856 less in the high-intensity group than low-intensity group. Within the high-intensity group, estimated decrease in costs over 2-mo period was \$22,084-\$36,700 (\$201-\$334 per child); compared to decrease in costs of low-intensity group of \$19,246 to \$32,756 (\$185-\$315 per child).

WA state has funded 1 million dollar cost effectiveness study of this intervention. Study is ongoing, by Dr. Krieger.

Liebman J, Heffernan D, Sarvela P. Establishing diabetes self-management in a community health center serving low-income Latinos. *The Diabetes Educator*. June, 2007;33(Supplement 6):132s-138s.

Liebman J, Heffernan D. Quality improvement in diabetes care using community health workers. *Clinical Diabetes* 2008, 26: 75-76.

Unpublished program data: Holyoke Health Center internal cost benefit analysis (2008-2009).

Health/Health Care Problem

Diabetes self-management

Target Population

Low-income Latino patients with diabetes at HHC

Setting (Medical vs. Community-based)

Study by Holyoke Health Center clinical staff, with intervention at center and in community settings, such as patient's homes (medical)

Design & Methods

Case study of quality improvement in diabetes care, **pre-post health indicator measures, cost-benefit analysis** in clinical setting. Compared mean pre-post biological measure of glycemic control & attendance for 275 sample of patients in diabetes program who participated in self management activities, including CHW contact.

Cost benefit calculation based on Wagner, 2005, study of cost savings which says each 1 pt drop in HbA1c translates into annual cost savings of \$850/patient.

CHW Activities: A. 4 key functions; B. Specific Activities

CHWs integrated into primary care team to support ongoing medical care & asst patients to overcome barriers to adhering to medical plan

A. outreach, health education, system navigation, referrals

B. home visiting, assess barriers to treatment adherence, assist w linkage to community services, help set goals & link w HHC team

CHW Selection Criteria; Educational, Professional Background; and Training

Background

1) live in Holyoke community, share background with patients; 2) are patients who became good self managers of diabetes; 3) no previous training as medical personnel

Training (total more than 1 week)

1) 3 days Latino Diabetes Ed & Empowerment curriculum; 2) 4 days Stanford self management; 3) several hrs w diabetes educator

Supervision

Nurse supervisor reviews caseload & interventions 2 CHWs weekly

Outcome Measures

Glycemic control—changes in HbA1c levels; cost savings and return on investment

Results

Among sample of 275 self management patients, after mean 20.6 months participation, mean HbA1c levels decreased significantly 8.6 to 8.0. Reduction of patients not seen for over 1 year from 28.2% to 6.5%.

Cost Information (Program Costs, Cost Savings)

Annual self management program cost: \$398,870; annual cost per patient: \$532;

Annual program return on investment per patient = \$318 or 60%.

For 165 clients in program, \$140,250 reduced costs in 1 year.

Appendix D: Research Methods

CHW Advisory Council Research Methods

The Research and Survey Workgroups, which were charged to carry out the investigation, employed a number of methods to gather quantitative and qualitative data on CHWs in Massachusetts and across the country. Information from the following investigative methods is used throughout this report to describe the CHW workforce and present evidence of the impact and effectiveness of CHWs in health care and public health.

Literature Review

A review of literature was conducted to gather information on CHW impacts, particularly increasing access to care, reducing health disparities, improving the quality of care and reducing costs. The research workgroup reviewed the following sources to identify relevant research studies: 1) individual articles; 2) literature reviews; 3) summary of literature reviews; and, 4) national reports on the CHW workforce.

Nine published literature reviews were examined and relevant quality studies were read. The Research Workgroup reviewed all articles included in HRSA's Annotated Bibliography of 40 of the most rigorous studies evaluating effectiveness of CHWs. Each of these studies was read and assessed for strengths and weaknesses and contributions to understanding the field. The workgroup searched medical and public health databases for research published since 2006. The workgroup conducted interviews with CHW leaders, experts, and program staff around the country to identify unpublished evaluation material. The workgroup consulted with staff of the Massachusetts Department of Public Health and other members of the CHW Advisory Council's Research Workgroup to identify potential sources of information in Massachusetts. Finally, the workgroup identified best practice CHW programs in the Commonwealth through consultation with the Massachusetts Association of Community Health Workers (MACHW) and the Massachusetts League of Community Health Centers (MLCHC) and conducted interviews with 12 programs to identify available data.

Key Informant Interviews

Research Workgroup consulted with CHW Advisory Council members—including DPH and MACHW staff—to identify CHW leaders, experts, researchers, and program staff around the country. Key informant interviews were conducted with 41 individuals to inquire about the development, operations, workforce policies and outcomes of CHW interventions. The interviews followed an interview guide developed by Dr. Terry Mason of MPHA, co-chair with Gail Hirsch of DPH, of the Advisory Council's Research Workgroup.

CHW Employer Survey

The Survey Workgroup of the Advisory Council developed a questionnaire for agencies employing CHWs. The goal was to obtain information about the CHW workforce in the following areas: staffing; salary and benefits; current activities; clients served; recruitment and retention; training; funding sources; and impact. DPH contracted with the University of Massachusetts/Commonwealth Medicine's Center for Health Policy and Research (CHPR) to administer the survey using an internet-based, self-administered questionnaire and to analyze the results. The Survey Workgroup used POS and EIM lists of DPH vendors and contact lists from other organizations that work with CHW employers to create the distribution list of CEOs or Executive Directors. The sample included a total of 494 known or possible employers of CHWs.

DPH sent the link to the survey via an email from the Commissioner to all 494 agencies and organizations. Of the 494 organizations and agencies that received an invitation to complete the survey, a total of 269 responses were received. The overall response rate was 54.5%. The initial sample included some potentially non-eligible agencies because they did not employ CHWs. Of the 269 responses to the CHW survey, 82 were non-eligible. The revised response rate among agencies that were most likely to hire CHWs was 45.4%.

Analysis of the survey data was conducted by CHPR staff based on plans created by the Survey Workgroup. Analyses included general frequencies for each question and comparisons across region, size of organization, agencies serving publicly insured clients and agencies serving rural populations.

DPH Program Data Review

The Survey Workgroup also solicited information from DPH programs through an electronic questionnaire that asked for the number of full and part-time CHWs either directly employed by DPH or funded through contracts with community-based organizations. It also requested the estimated amount of funding that supports CHW salaries through those contracts. A total of 44 programs responded with 17 indicating that they support CHWs.

Regional CHW Focus Groups

Recognizing the need to include CHW voices in the investigation of the workforce, from March 14 to April 2, 2008, DPH conducted five regional focus groups of CHWs to gather qualitative data on the experiences of the CHW workforce and how CHWs make impacts in increasing access to care and eliminating health disparities. DPH worked with Advisory Council members and local partners to coordinate and recruit participants for the CHW focus groups in the following regions of the state: Boston, Northeast (Lowell), Southeast (Hyannis), Central (Worcester), and Western (Springfield). (Host sites are listed in Appendix G.)

Each host site was asked to conduct targeted recruitment to ensure a broad representation of the workforce. A total of 52 CHWs participated in the focus groups, with each group ranging from nine to twelve participants. The Deputy Director of Program and Policy at the Massachusetts Public Health Association, who is experienced in conducting qualitative research, was contracted to facilitate all five focus groups. (The facilitator's guide is available in Appendix G.) Based on the notes and transcriptions from each group, DPH staff identified broad themes and subcategories that emerged.

Supplemental Information: MACHW regional meetings on training and certification

The Massachusetts Association of Community Health Workers (MACHW) is the statewide professional organization for community health workers (CHWs). In order to assist DPH in making recommendations to the legislature concerning a possible certificate program for CHWs, MACHW hosted a series of seven meetings with CHWs across seven regions of the state. The purpose of these meetings was to gather input from CHWs on the subject of a certificate program and to update CHWs on the progress of the DPH CHW Advisory Council.

The meetings were held in Boston, Great Barrington, Hyannis, Lowell, New Bedford, Springfield and Worcester. While the intent was to gather CHW input, supervisors of CHWs, many of whom are CHWs themselves, and other interested parties also attended some meetings. In total there were 132 participants, with 93 identified as CHWs. Information from the MACHW regional meetings is used to support information and recommendations for a statewide CHW training and certification program.

Appendix E: CHW Town Meetings

MACHW Regional Town Meetings to Discuss CHW Training and Certification

The Massachusetts Association of Community Health Workers (MACHW) is the statewide professional organization for community health workers (CHWs). In order to assist DPH in making recommendations to the legislature concerning a possible certificate program for CHWs, MACHW hosted a series of seven meetings with CHWs across the state. In total there were seven meetings held, in seven different regions of the state. The purpose of these meetings was to update CHWs on the progress of the DPH CHW advisory council and to gather input from CHWs on the subject of a certificate program.

The meetings were held in Boston, Great Barrington, Hyannis, Lowell, New Bedford, Springfield and Worcester. The meeting announcements were distributed to MACHW's distribution list as well as the distribution lists of our affiliates Community Outreach Workers Networking and Training (COWNT) coalition (Springfield) and the H.O.P.E. Project in Hyannis. Additionally, our partner organizations such as the Community Health Worker Initiative of Boston, the Community Health Education Center (CHEC), Boston and Northeast and DPH also assisted with recruitment. All were asked to distribute to as many CHWs as possible. While the intent was to gather CHW input, supervisors of CHWs (many are CHWs themselves) also attended some meetings. In addition to supervisors other interested parties attended as well. In total there were 132 participants, 93 identified as CHWs.

CHWs from all regions stressed the importance of ongoing training. CHWs specifically mentioned the benefits of gaining skills and knowledge to assist them in their work. Networking and sharing resources were also mentioned as benefits of attending training. Many CHWs expressed greater self-confidence and some added that agencies have greater confidence in CHWs after attending training. Although CHWs agreed on the importance of training/education, many stated that the additional training/education has not lead to increased wages. Unfortunately, in several regions CHWs are unable to attend trainings due to the locations or cost of current training opportunities and the amount of release time needed to attend.

In all regions of the state CHWs agreed on several points concerning a CHW certificate program. CHWs across the state agreed that they would be interested in a CHW certificate. CHWs were also in agreement that the certificate should be portable and valued across the state. In addition, the required training/education to obtain the CHW certificate should be accessible in all regions and affordable.

Additional areas of agreement for CHWs were as follows:

- The certificate should not be mandatory before hire (life experiences and connection to the community should be considered);
- CHWs from non-health specific organizations should also have the opportunities to obtain the certificate;
- Training/education for the certificate needs to view health holistically;
- Training/education should be based on core competencies;
- CHWs should be engaged to develop the curriculum;
- CHWs should co-facilitate the trainings;
- Training/education should be available locally and include local resources;

- Employers should assist CHWs to obtain the certificate and;
- College credit should be available to CHWs completing the certificate program.

Several additional recommendations for the possible structure of the CHW certificate program were offered. While there was not complete agreement, the following recommendations received mention at several meetings.

- College credit should be available for the training/education;
- Training/education should occur during work time;
- Grandfather/mother clause;
- Ability to receive credit for courses based on demonstrated competence
- Training/education should be based on core competencies;
- Mentorship component;
- Supervisors should have training/educational opportunities as well as CHWs and;
- Certificate should be recognized across state borders (of particular interest to CHWs working in boarder cities and towns. Many of the CHWs in Great Barrington also work with families on the NY boarder)

CHWs from all regions have expectations after obtaining the certificate. During each meeting CHWs voiced frustration over the lack of increased wages after completion of training/education although in many cases responsibility increased. Numerous CHWs voiced perceived benefits of the certificate would be:

- More sustainable funding;
- Higher compensation;
- Funders will have a better understating of the field;
- Increased value of the profession;
- Connection to a career ladder/lattice;
- Set standards for the field;
- Increased respect from other professionals and;
- Professional advancement.

While there is overwhelming support from CHWs in favor of a CHW certificate there was some concern voiced about the potential as well. During several meetings CHWs stated potential barriers to obtain the certificate could change the makeup of the field. Potential barriers included:

- No acknowledgement or credit given for past life/work experience;
- Language barriers (English is a second language for many CHWs);
- Affordability;
- Short grant cycles impede access to training (employers are hesitant to send “short term” employees to training and;
- Lack of agency coverage while CHW attends training/education opportunities.

Supervisors of CHWs and non-CHW attendees who attended the meetings also were in favor of a CHW certificate. Possible benefits of a CHW certificate from their perspectives included:

- Education will give CHWs portable power;
- Certification could mean a job offer or job security;
- Leads to career pathways;
- CHWs with the certificate would have a competitive edge;

- Creation of a CHW job description would be easier and;
- Training should be based on core competencies before specialized training and;
- Power to advocate for wage increases.

The recommendations for the possible structure from this group were also offered. The recommendations include:

- Grandfather/mother CHWs with numerous years on the job;
- Employers could pay for the certificate and;
- Certificate should be portable.

Lastly, CHW supervisors and non-CHWs expressed some concerns with moving to a certificate program for CHWs. The concerns include:

- Lack of funding to send CHWs to training;
- Difficulty in releasing CHWs for training/education opportunities due to staffing issues and;
- Smaller organizations have fewer resources for both training/education and staff. Smaller organizations may not be able to compete with larger organizations.

Appendix F: Core Competencies for CHWs

The Community
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of Boston

Core Competencies for Community Health Workers SUMMARY STATEMENTS

1) **Outreach Methods and Strategies**

CHWs must be involved in on-going outreach efforts by first and foremost “meeting people where they are.” Outreach is the provision of health-related information and services to a population that traditionally has not been served and/or been underserved. CHWs must use outreach strategies and methods to bring services to where a population (or group) resides and works, and at community sites such as street corners, grocery stores, community parks. They support community people in finding and using resources and assist in creating and supporting connections among community members and caregivers.

2) **Client and Community Assessment**

CHWs must make on-going efforts to identify community and individual needs, concerns and assets. They must draw upon standard knowledge of basic health and social indicators to define needs clearly. They must effectively engage clients and/or their families in on-going assessment efforts. As part of the outreach planning process, community assessment informs the development of an outreach plan and strategy for a target population or community.

3) **Effective Communication**

CHWs must communicate effectively with clients about individual needs, concerns and assets. They must convey knowledge of basic health and social indicators clearly and in culturally appropriate ways. They must also communicate with other community health workers and professionals in ways that use appropriate terms and concepts in accessible ways.

4) **Culturally Based Communication and Care**

CHWs must be able to use relevant languages, respectful attitudes and demonstrate deep cultural knowledge in all aspects of their work with individuals, their families, community members and colleagues. They must convey standard knowledge of basic health and social concerns in ways that are familiar to clients and their families. Especially when challenging what might be “traditional” patterns of behavior, CHWs must be able to discuss the reasons and options for change in culturally sensitive ways. Effective cross cultural communication is an ever deepening central aspect of CHW practice in all areas.

5) Health Education for Behavior Change

CHWs must make on-going efforts to assist individuals and their families in making desired behavioral changes. They must use standard knowledge of the effects of positive and negative behaviors in order to assist clients in adopting behaviors that are mutually acceptable and understood by families and community contacts. They must effectively engage clients and/or their families in following intervention protocols and in identifying barriers to change.

6) Support, Advocate and Coordinate Care for Clients

In addition to helping individuals, CHWs must advocate for and coordinate care for their clients. They must be familiar with and maintain contact with agencies and professionals in the community in order to secure needed care for their clients. They must effectively engage others in building a network of community and profession support for their clients. They should participate in community and agency planning and evaluation efforts that are aimed at improving care and bringing needed services into the community.

7) Apply Public Health Concepts and Approaches

CHWS must see their work as one part of the broader context of public health practice. An understanding the bigger picture of the basic principles of public health allows CHWs to assist individuals, families communities in understanding the basic role of prevention, education, advocacy and community participation in their care. Knowing the critical importance of effective community care allows community health workers to find pride and power in their roles and in advocating for their own needs, as well as those of others.

8) Community Capacity Building

CHWs play a critical role in increasing the abilities of their communities to care for themselves. They must work together with other community members, workers and professionals to develop collective plans to increase resources in their community and to expand broader public awareness of community needs.

9) Writing and Technical Communication Skills

CHWs are required to write and prepare clear reports on their clients, their own activities and their assessments of individual and community needs. Over time they are also expected to make statements and give presentations regarding the needs and concerns of their clients to other workers and agency professionals. Doing so depends upon the ability to read and write in English and to use technology effectively. Writing and technical communication skills are expected to increase with experience, so that on-going progress is an expected aspect of competence.

10) Special Topics in Community Health

In addition to the general competencies above, an effective CHW will also be able to demonstrate knowledge regarding a variety of special topics and appropriate models of practice applicable to such topics. There are many possible competencies possible under this category. Training regarding several of them may be available from a variety of providers, in addition to CHEC.

Appendix G: DPH Policy Statement on CHWs

Policy Statement on Community Health Workers Massachusetts Department of Public Health Community Health Worker Task Force April, 2002

I. DPH DEFINITION OF A COMMUNITY HEALTH WORKER

A Community Health Worker (CHW) is a public health outreach professional who applies his or her unique understanding of the experience, language and/or culture of the populations he or she serves in order to carry out at least one of the following roles:

- bridging/culturally mediating between individuals, communities and health and human services, including actively building individual and community capacity;
- providing culturally appropriate health education and information;
- assuring that people get the services they need;
- providing direct services, including informal counseling and social support; and
- advocating for individual and community needs.

(adapted from Rosenthal, E.L., The Final Report of the National Community Health Advisor Study. The University of Arizona. 1998)

A CHW is distinguished from other health professionals because he or she:

- is hired primarily for his or her understanding of the populations he or she serves, and
- conducts outreach at least 50% of the time in one or more of the categories above.

***Explanation of CHW Roles** *(adapted from National Community Health Advisor Study)*

- **Bridging/Cultural Mediation Between Communities and Health and Human Services, including Actively Building Individual and Community Capacity.** This includes: educating community members about how to use the health care and human services systems; educating health and human service providers about community needs and perspectives; collecting information from clients that is often inaccessible to other health and human service providers; translating literal and medical languages; building individual capacity by sharing information, building concrete skills, and helping clients to change their behavior; and building community capacity by bringing about community participation in health.
- **Providing Culturally Appropriate Health Education and Information.** This includes: teaching health promotion and disease prevention; and providing education and information to help individuals manage chronic illness.
- **Assuring That People Get the Services They Need.** This includes: case finding; making referrals and motivating people to seek care; taking people to services; and providing follow-up.
- **Providing Direct Services, including Informal Counseling and Social Support.** This includes: helping people meet basic needs such as food, housing, clothing, and employment; providing individual support and informal counseling, and leading support groups; and, less frequently, providing clinical services.
- **Advocating for Individual and Community Needs.** This includes: acting as a spokesperson for clients or intermediary between clients and systems; and advocating for community needs.

II. DPH POLICY GUIDELINES FOR COMMUNITY HEALTH WORKERS

DPH recognizes CHWs as professionals that are a critical component of the public health work force, and encourages the use of CHWs in the planning, implementation and evaluation of community-based programs.

EXPECTATIONS OF DPH-FUNDED AGENCIES WITH CHWs

ALL DPH FUNDED PROGRAMS WITH CHWs SHALL:

- **Develop an overall Outreach Plan:** An agency requesting DPH funding for programs that involve CHWs shall develop an overall outreach plan that includes: the program objectives; target populations; outcome/output measures; program content and strategies; internal and external linkages; consumer/community input; the roles and responsibilities of CHWs and orientation for other agency staff about the outreach program. Job descriptions shall be written for CHWs.

Note: If an agency plans on using CHWs who will be funded by more than one DPH Bureau or program within that Bureau (e.g., HIV/AIDS, breast and cervical cancer, pregnant and parenting support program, etc.) or by other, non-DPH sources, it is encouraged to develop an integrated, cross-categorical outreach program which ensures effective integration and utilization of resources.

- **Develop an Internal Agency Plan for the training, supervision and support of CHWs**

This plan shall include the following components:

Materials Development. The agency should develop and disseminate administrative guidelines to CHWs (including street and home safety procedures; mandated reporting; CHW accountability and work schedules; etc.). It shall also develop a code of ethics with CHWs regarding confidentiality and other professional standards necessary for working with clients and community groups (sample codes of ethics are available from the DPH AIDS Bureau and the Bureau of Communicable Disease Control). These policies and procedures should be linked to overall agency policies.

Training and continuing education for CHW staff. This training shall include (at a minimum): CHWs' roles and responsibilities; administrative guidelines and a code of ethics; skills building; public health topics; and information on community resources. Training should be provided as needed to ensure that CHWs have the knowledge and skills required to serve all members of targeted communities. Participation of CHWs in DPH-sponsored trainings and other trainings should be promoted.

On-going supervision and support to ensure integration of CHW staff into the agency.

On-going support and supervision of CHWs are crucial. Regular program and clinical supervision including individual and team support are necessary. CHW supervisors should have outreach experience and accompany CHWs in the field as they perform their outreach activities at least twice per year.

Networking opportunities. The agency shall assure that CHWs have structured networking time with other CHWs. CHWs should attend quarterly networking meetings with CHWs from other agencies as a function of their employment. The agency that receives DPH outreach funding from multiple Bureaus or programs shall provide quarterly internal CHW internal meetings. As appropriate, CHWs should have reasonable access to the Internet to support further networking.

Compensation and work environment. The agency's outreach plan should describe the consideration the agency gives to the fair compensation of CHWs including reasonable pay scales, access to employee benefits, job security and promotion of career opportunities. Attention should be paid to ensuring safe, secure, and to the degree possible, comfortable work environments, and accommodation for CHWs with disabilities or special needs.

Integration into health care delivery team. CHWs should participate in case meetings, program planning activities, and agency team meetings. CHWs should actively contribute to programmatic reporting and assessment documents and DPH site visit.

III. DPH OPERATIONAL MEASURES FOR DPH-FUNDED AGENCIES EMPLOYING CHWS

In addition to program performance measures, the following operational measures are designed to support the professional capacity of CHWs:

Operational Measure #1: Training

- 1) Each community health worker shall attend a minimum of 28, with a goal of 42, hours of relevant professional training per year per DPH-funded FTE and be paid while attending training.

For the purposes of documenting this operational measure,

- Training includes: formal in-service trainings, conferences, including the annual "Ounce of Prevention Conference," regional Community Health Worker Network meetings, and other trainings offered external to the agency.
- Training does not include agency staff meetings or on-the-job orientation.
- The agency must maintain a list of CHWs and the names, dates and lengths of the trainings they attended and must be prepared to produce this evidence on request.

Operational Measure #2: Supervision

- 2) Each community health worker shall receive a minimum of one hour of supervision during every two-week period.

For the purposes of documenting this operational measure,

- Supervision includes: face-to-face individual and/or group sessions, which may be clinical and/or administrative in nature.
- Supervision does not include written performance reviews or staff meetings.
- The agency must maintain a list of CHWs and who provides their supervision, as well as the length and dates of supervisory sessions and must be prepared to produce this evidence on request.

