# Community Health Worker Integration in Health Care, Public Health, and Policy A Partnership Model

Geoffrey W. Wilkinson, MSW; Terry Mason, MA, PbD; Gail Hirsch, MEd; Joanne L. Calista, MS, LICSW; Lorenza Holt, MPH, BDT (DONA); Jacquelyn Toledo, BS, MS; Jean Zotter, JD

**Abstract:** Health care systems and public health agencies are focusing increased attention on the capacity of community health workers (CHWs) to improve health outcomes for vulnerable populations and to support integration of clinical and community prevention services. This article describes 3 initiatives in Massachusetts in which the state public health department has collaborated with CHW leaders, health providers, and community-based partners to develop innovative policy and services, including state certification of CHWs, integrated chronic disease programs, and a state-funded pilot program to demonstrate return on investment for community-based prevention. Concluding lessons are relevant for implementation of health care reform nation-wide. **Key words:** *certification, chronic disease, clinical community linkage, community-based services, community bealtb workers, bealtb care reform, bealtb equity, prevention, public healtb, triple aim* 

A growing body of literature is highlighting the contributions community health workers (CHWs) are making to help achieve the Triple Aim objectives of health care reform (Pittman et al, 2015). As members of interdisciplinary care teams, CHWs have been shown to help improve utilization of preventive services, manage chronic disease, strengthen community-based long-term care, and reduce use of emergency services and hospital re-admissions, often with demonstrated return on investment (Institute for

DOI: 10.1097/JAC.000000000000124

Author Affiliations: Boston University School of Social Work, Boston, Massachusetts (Mr Wilkinson); Massachusetts Department of Public Health, Boston, Massachusetts Department of Public Health, Boston, Massachusetts (Mr Wilkinson, Dr Mason, Ms Hirsch, and Dr Zotter); Massachusetts Board of Certification of Community Health Workers, Boston, Massachusetts (Mr Wilkinson, Ms Calista, and Dr Zotter); Massachusetts Association of Community Health Worker, Boston, Massachusetts (Ms Hirsch, Ms Holt, and Ms Toledo); Center for Health Impact, Worcester, Massachusetts (Ms Calista); and Boston Association for Childbirth Education, Boston, Massachusetts (Ms Holt).

G.W. Wilkinson is a former employee of the Massachusetts Department of Public Health and consulted in the past to Justice Resource Institute and to the Center for Health Impact. T. Mason is a consultant to the Massachusetts Department of Public Health. G. Hirsch is an employee of the Massachusetts Department of Public Health. J.L. Calista is an employee of Center for Health Impact, has grants pending with the Massachusetts Department of Public Health, and is paid for lectures by related public health entities. J. Toledo is an employee of Center for Health Impact. J. Zotter is an employee of the Massachusetts Department of Public Health.

The authors have disclosed that they have no significant relationships with, or financial interest in, any commercial companies pertaining to this article.

**Correspondence:** Geoffrey W. Wilkinson, MSW, Clinical Associate Professor, Boston University School of Social Work, 264 Bay State Rd, Boston, MA 02215 (gww@bu.edu).

Clinical and Economic Review, 2013). Because CHWs are particularly effective with high-risk, high-cost patients, much of the emerging literature focuses on CHW roles in supporting licensed clinicians through home- and community-based services and work within hospitals, community health centers, and other provider settings.

Research described in this article supports improved integration of CHWs into health care delivery and financing systems and emphasizes the importance of involving CHWs in policy development and the design, as well as the delivery, of health services. The authors recognize CHWs as part of a broader public health workforce with the capacity to promote health equity, improve health quality and outcomes, and support health system transformation through community-based prevention and direct work with vulnerable populations. The article describes major initiatives in which the Massachusetts Department of Public Health (MDPH) has played a leadership role in convening diverse stakeholders to promote CHW workforce development, engage and support CHWs in innovative work to prevent and manage chronic disease, and demonstrate return on investment of community-based prevention services.

Community health workers reflect the racial and ethnic, cultural, and socioeconomic characteristics of communities they serve and possess unique understanding of the experiences of and challenges faced by community members. As "front-line" public health workers, they are particularly effective in promoting health equity (American Public Health Association, 2001). As members of interdisciplinary health care teams, CHWs can help mediate the impacts of poverty, substandard housing, and other "social determinants" of health inequities that may compromise the efficacy of services provided by licensed clinicians (Institute of Medicine, 2003). Community health workers expand services beyond the walls of health care institutions by building trusting relationships with community members and linking clinical and communitybased service providers. In addition, they provide critical information to service delivery systems about community conditions, needs, and assets.

The MDPH has been the largest single funder of CHW services in the state for more than 2 decades, primarily through grants and contracts with community-based providers. MDPH officials have recognized that CHWs are essential and invaluable partners in health policy and system development. Community health workers helped shape the state's 2006 health care reform law and led a successful legislative campaign to create one of the nation's first CHW certification programs (Mason et al., 2011). These achievements would not have been possible without the Massachusetts Association of Community Health Workers (MACHW), the state's voice of CHWs in workforce development and health policy change. The MDPH has played a major role in supporting the MACHW from its inception in 2000 until present.

The 3 initiatives described in this article offer lessons of value to public health officials, health care providers, payers, policy makers, and other stakeholders across the nation interested in how CHWs can strengthen community health outcomes and contribute to health system reform.

#### **METHODS**

This article describes a participatory case study (Reilly, 2010) involving 3 initiatives in which the authors have played active roles. Two of the authors are CHWs, and all coauthors have been involved with the MACHW for many years as board members, staff, consultants, and/or allies. Four authors have served in a combination of senior management, regulatory, program, and consulting positions at the MDPH. Another author oversees a highly regarded CHW training institute. As colleagues in and out of state government, the authors bring direct knowledge of and participation in the planning, design, development, or implementation of the initiatives explained here. Conceptualization, drafting, and editing were a collaborative process involving multiple phone conferences, e-mail correspondence, and a planning retreat in one of the author's homes. The writing process reflected a commitment to mutual respect, listening, and inclusion that characterize the approach to CHW engagement the authors endorse.

### STRATEGIES: OVERVIEW OF MASSACHUSETTS CHW INITIATIVES

The MDPH has led efforts to integrate CHWs into health care and public health services and to promote CHW workforce development since the early 1990s. Program staff at the time recognized the value of CHWs for improving maternal and child health and for developing effective HIV/AIDS prevention and treatment services. They pioneered community-based contracting partnerships that have since been sustained and expanded.

Under multiple public health commissioners serving Republican and Democratic state administrations, the MDPH has supported a full-time program manager for CHW workforce development since the mid-1990s and created an Office of Community Health Workers in 2007. The Office director has coordinated policy and program development and developed strong working partnerships with the US Centers for Disease Control and Prevention (CDC), health care and public health providers, and an array of community-based training and advocacy organizations.

A core principle of MDPH's work has been the importance of engaging CHW themselves in leading workforce development and service innovation. The MDPH assisted CHW leaders in founding the MACHW in 2000, and has since provided guidance and resources to support the organization's engagement in policy development and its networking with CHWs across the state. A key element of MDPH's support has been its facilitation of partnerships involving the MACHW and other organizations, notably the state's Blue Cross Blue Shield Foundation, which has generously supported the MACHW for over a decade. Two agencies, the Massachusetts Public Health Association (from 2002 to 2007) and more recently the Center for Health Impact (CHI, formerly called the Central Massachusetts Area Health Education Center), have provided financial management, board training, strategic planning, and support for MACHW's work.

The initiatives described in this article are interrelated and would not have been developed without MDPH's sustained leadership, direct engagement of CHWs, and support by allied organizations. The initiatives include (1) state certification of CHWs under a statute passed in 2010; (2) policy and infrastructure development to support chronic disease treatment, management, and prevention programs using CHWs, supported mostly by the US Centers for Disease Control and Prevention (CDC, 2015a); and (3) engagement of CHWs in clinical-community linkages through the Prevention and Wellness Trust Fund, a state-funded initiative to demonstrate the cost control value of community-based disease and injury prevention. Taken together, they demonstrate the power of sustained collaboration among diverse stakeholders to promote health system transformation and the integration of CHWs into health care delivery and public health treatment and prevention.

#### Massachusetts Certification of CHWs

Massachusetts is one of the first states in the nation to pass legislation authorizing certification of CHWs, and the first state to locate certification under the auspices of the state health department's Division of Health Professions Licensure. The law resulted from advocacy led by the MACHW, in cooperation with the MDPH and public health organizations. It was drafted to implement one of the major recommendations of a report produced for the Massachusetts legislature by a multisector advisory commission convened by the MDPH, as required by the state's 2006 health care reform law (Commonwealth of Massachusetts, 2006).

Advisory commission members representing the MACHW, health care providers, payers, and other stakeholders strongly agreed about the need for certification. Community health workers saw it as an opportunity for workforce development; providers and payers wanted a state-sanctioned standard for assuring CHW competence; and both public and private payers agreed reimbursement for CHW services was a "non-starter" without a distinct scope of practice for the emerging profession.

The law provided that CHW certification in Massachusetts would be voluntary. The MACHW and its allies fought hard to protect that principle during the bill's legislative campaign, prevailing over a spirited effort to require mandatory licensing for anyone practicing as a CHW. Voluntary certification was considered essential for preserving access to employment for CHWs entering the workforce and for preventing unintentional restrictive consequences of occupational regulation.

The Massachusetts law outlined core competencies for CHWs and created a state board of certification, with authority over standards both for individual CHWs and CHW training programs (Commonwealth of Massachusetts, 2010). The board, with 4 of its 11 members required by law to be CHWs, created a multisector advisory workgroup to help develop regulations and made special efforts to engage CHWs in the process. The MDPH contracted with the MACHW to conduct CHW focus groups across the state to help refine the regulatory definition of core competencies (see Exhibit 1). CHW leaders participated throughout the advisory workgroup process and were invited—along with other stakeholders to contribute to official board meeting discussions.

State regulators were aware that CHW professionalization has been a controversial subject, even among CHW leaders nationally. As a practical matter, board members considered certification to be a prerequisite for financing of CHW services and for CHWs to realize their goals of improved compensation, employment stability, professional support, and career ladder opportunities. They also realized, however, that certification would, in effect, open a new market for training programs, some of whose operators might have limited understandings of the history and values of the field. Board members concurred it was neither possible nor productive to try to regulate who could be trained as a CHW, but training program application standards were designed to encourage continued community connection and commitment to health equity within the workforce. The board preserved flexibility for CHWs, employers, payers, and training programs to make appropriate choices and revisions to the certification program over time, given the rapid pace of health reform and relative uncertainty about how particular

#### Massachusetts CHW Core Competencies\*

#### 1. Outreach Methods and Strategies

- 2. Individual and Community Assessment
- 3. Effective Communication
- 4. Cultural Responsiveness and Mediation
- 5. Education for Healthy Behavior Change
- 6. Care Coordination and System Navigation
- 7. Use of Public Health Concepts and Approaches
- 8. Advocacy and Community Capacity-Building
- 9. Documentation
- 10. Professional Skills and Conduct

\* Defined by the Massachusetts Board of Certification of Community Health Workers (2014).

Note the national CHW Core Consensus Project (C3), supported by the Amgen Foundation and other sources, is engaging multiple stakeholders in an effort to update the 1998 National Community Health Advisor Study definition of CHW core competencies and to facilitate development of national consensus definitions to help clarify and distinguish the relationship among CHW core competencies, roles, and scope of practice. For more information: <u>info@c3porject.org</u>; <u>https://sph.uth.edu/research/centers/ihp/community-health-workers/</u>

Exhibit 1.

aspects of financing, system structure, and delivery innovation would unfold.

Given their long, productive relationship with MACHW leaders, MDPH officials were resolute in efforts to protect and preserve the essential value of CHWs as public health workers trusted by, connected with, and responsive to challenges faced by underserved communities when designing certification. Board of certification members strongly agreed that overregulation could inadvertently create the future need for a new, "CHW-like" workforce if restrictive measures compromised the connection to community that make current CHWs so valuable and effective in primary care, hospital, and other health care settings.

Board members also recognized that CHWs operate effectively *outside* of health care systems (eg, in public housing, public safety, faith-based organizations, and communitybased public health service agencies). In crafting regulations, they considered how certification may be valuable to CHWs in non-health care settings for various reasons, including advancing professional identity and enhancing compensation and workforce development opportunities.

The Massachusetts certification program is intended to eventually encourage all CHWsregardless of where they work-to complete core competency training. The voluntary program includes a "grand parenting" period to enable experienced CHWs with demonstrated competency to become certified. MACHW leaders consulted with the board of certification to assure the application process would be easily understandable and that requirements would not pose unintentional barriers to access. Massachusetts regulators agreed that certification requirements should respect the inherent instability of CHW employment because of categorical grant funding that often requires CHWs to work part time in positions of limited duration. They agreed, for instance, to allow CHWs to document work performed over the previous 10 years in applications for certification. They also allowed for certification of non-English speakers and new arrivals to the United States able to demonstrate proficient mastery of CHW core competencies.

Massachusetts regulators drew on the experience of states including Texas, Oregon, New Mexico, Minnesota, and others in developing the certification program. They incorporated previous achievements by national CHW leaders, the CDC, and others in defining a CHW scope of practice and core competencies. The collaborative planning process used to develop the Massachusetts certification program drew on the strengths of diverse stakeholders, including CHWs organized through the MACHW, to identify challenges and shape an effective, sustainable program.

#### **Chronic Disease Initiatives**

One of the great challenges facing the US health care system is the high prevalence of chronic diseases and the related high cost of caring for patients who suffer from them (Harris & Wallace, 2012). Chronic diseases reflect and are part of the marked health inequities in our communities, as prevalence is disproportionately higher among those of low-income ethnic or racial minority populations (MDPH Bureau of Health Statistics, 2007). Public health approaches to preventing and improving care for such conditions as diabetes and cardiovascular disease are essential to reducing their prevalence and morbidity.

Public health brings a focus on the community and home contexts where people live and which shape their options for how to live. Local and state policies that support improved neighborhood environments, enhanced health system interventions, and increased community-clinical linkages are among the core current public health strategies to reduce chronic disease. A well-trained and qualified CHW workforce, supported by sustainable funding and effectively integrated into multidisciplinary teams, is another key public health strategy.

Recognizing that chronic disease risk factors are similar and that chronic diseases can co-occur, the CDC restructured its funding of states from disease-specific funding to combined funding that focused on addressing the 3 functional areas of shared risk factors, health systems changes, and linkage of clinics and community interventions. Starting in 2008 and culminating in the "State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health" Program (CDC, 2015b), the CDC has funded states to work in these functional areas to better coordinate chronic disease work and have a stronger population health impact.

CDC's coordinated chronic disease efforts have been supported in part from funds originating in the federal Affordable Care Act. Community health workers are promoted as one of the key strategies for improving health systems and linking clinic to community interventions. The CDC's Community Preventive Services Task Force finds, "There is strong evidence of effectiveness for interventions that engage community health workers in a teambased care model to improve blood pressure and cholesterol in patients at increased risk for cardio-vascular disease" (Community Prevention Services Task Force, 2015).

The MDPH was 1 of the 4 pilot states selected in 2008 by the CDC to participate in an Integration Demonstration Project. This process, along with funding from the CDC's Coordinated Chronic Disease and Health Promotion Program, eventually led to a reorganization of the Division of Prevention and Wellness based on functions rather than diseases. This new alignment focused on fostering a more collaborative and integrative approach to chronic disease work. At the same time, the MDPH combined multiple disease-specific partnerships into a single Massachusetts Partnership for Health Promotion and Chronic Disease Prevention, composed of a broad range of public and private organizations with shared interests in primary prevention, reducing the burden of chronic disease, and promoting health equity through policy, systems, and environmental change strategies. As part of that reorganization, the Office of Community Health Workers-the central communication node in the department's ongoing collaborations to promote the community health worker workforce-was brought into the Division of Prevention and Wellness to better link the Department's strong CHW workforce focus with its the chronic disease efforts.

Building on the department's long history of workforce support for CHWs, one result of the reorganization is that CHWs have become integral to all of the department's major chronic disease initiatives. Massachusetts now has a coordinated organizational strategy for implementing federal and state priorities to engage CHWs in integrated chronic disease efforts. Using CDC funding, the division has created a 3-pronged approach to strengthening the role of community health workers in health systems: (1) ensure a quality CHW workforce; (2) promote sustainable financing for CHW services; and (3) promote and provide technical assistance to facilitate integration of CHWs into health care teams. By marshalling CDC resources and taking a systems and policy approach to CHW chronic disease work, the division has been able to address multiple chronic diseases while also focusing on workforce promotion.

One example of the importance of CHWs to the division's work is the Community-Clinical Linkages Community of Practice component of the Massachusetts Partnership for Health Promotion and Chronic Disease Prevention. The Community of Practice (CoP) model has been used to form manageable work groups focused on priority areas identified as key to a chronic disease prevention strategy. A CoP is "a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise by interacting on an ongoing basis ...." (Wenger et al., 2002).

The Community-Clinical Linkages CoP identified CHWs as a key workforce strategy for building stronger relationships among clinical and community-based services in the care of people who are at risk for or live with chronic conditions. With the support of MDPH staff and contractors, the Clinical and Community Linkages CoP has prioritized strategies for achieving sustainable funding for community health workers, as well as strengthening the infrastructure necessary for a well-prepared workforce. An educational campaign targeting health provider decision makers—including CEOs, CFOs, and Medical Directors—is a major focus of this work. A contractor, working with DPH staff, has prepared a White Paper to help make the case for CHW value as part of health care teams.

Participation by the MACHW is essential to all of MDPH's and the Partnership's work to bring CHWs into better sustained positions that help build connections among clinical health care entities and the diverse community organizations involved with preventing illness. The MACHW has continued to receive technical assistance and funding from the MDPH, and the strength of this association is a priority for the Office of Community Health Workers and MDPH leadership.

Through coordinated efforts and with CDC support, the department is aligning evaluation efforts of CHW programming in such areas as asthma, childhood obesity, and care coordination with broader policy initiatives, including certification, to understand how coordinated policy and programming efforts are contributing to the sustainability and integration of CHWs into health care and public health.

## Massachusetts Prevention and Wellness Trust Fund

The 2006 Massachusetts health care reform law that served as a model for the US Affordable Care Act was followed in 2008 and 2012 by additional state health care reform laws, each of which was designed to help contain costs and improve quality of care. The 2012 law, known as Chapter 224, included a groundbreaking program to address health disparities, reduce the prevalence of preventable chronic diseases, increase healthy behaviors, promote worksite wellness, and develop a stronger evidence base of effective prevention programming. Known as the Prevention and Wellness Trust Fund (PWTF), the program was conceived by public health advocates in partnership with MDPH officials and legislative champions. Legislators committed \$60 million over 4 years to the PWTF, invested the MDPH with responsibility for designing and managing the initiative, and imposed specific requirements for evaluating health outcomes and impact on health care costs as conditions for considering extension or expansion of the program.

Mindful of the ambitious schedule required for meeting the legislation's health care cost growth benchmarks, the Prevention and Wellness Advisory Board conducted a rigorous review of prevalent conditions and available treatment and prevention models and settled on 4 areas for focus: hypertension, tobacco, pediatric asthma, and falls among older adults. Consistent with statutory requirements, the MDPH established a competitive grant program to encourage partnerships among health providers, community-based organizations, and municipal authorities to implement the PWTF. Applicants responded to a state Request for Responses (RFR) that provided community choice about which of the 4 target health conditions to address. Applicants were required to address at least 2 conditions. The MDPH encouraged innovation in program design, within the context of specific guidance about collaborative structure and intervention strategies. For instance, the MDPH required municipal governments to participate in applicant groups, to ensure city and town "buy-in." The MDPH also favored the involvement of schools, local housing authorities, employers, higher education institutions, health plans, Accountable Care Organizations, regional planning agencies, and other nontraditional partners to help strengthen local public health capacity.

The MDPH, along with the Prevention and Wellness Advisory Board, took advantage of its experience with CHWs and CDCfunded chronic disease programs in designing the PWTF. The MACHW and the MPHA supported statutory language that assigned a position on the PWTF Advisory Board to be filled by a CHW. The Department also included language in the RFR that (1) encouraged the inclusion of CHWs as partners in local efforts, and (2) required applicants to describe not only what clinical services they would use in addressing targeted health conditions, but also what community-clinical linkages they would develop and what community-based services would be engaged. The MDPH used an extensive literature review to identify CHWs as an evidence-based workforce intervention for addressing hypertension and pediatric asthma, and as a promising workforce for tobacco cessation and falls prevention.

In 2014, the Department selected 9 public/private community partnerships-called "collaboratives"-across the state to implement the PWTF, with funding for each ranging from about \$4 million to \$5 million over 3 years. Community health workers are playing significant and varied roles in all 9 of the funded partnerships, including providing community-based prevention education, support for patients receiving clinical care for chronic diseases, and effective linkages among patients, health care providers, and community-based organizations. Preliminary experience with the collaboratives suggests CHWs may be particularly valuable in their roles as "bridges" across divides involving race, ethnicity, and class. This is consistent with research documenting how CHWs may help improve the cultural effectiveness of provider organizations and address barriers to equitable care that contribute to health disparities (Institute of Medicine, 2003).

Inclusion of CHWs in the PWTF offers a highly visible opportunity to demonstrate what CHWs can contribute to improving quality of care, controlling costs, addressing disparities, and strengthening relationships among health care and community-based service providers to improve primary and secondary prevention efforts. The MDPH is confident that CHWs help strengthen the relationship between the patient and providers by helping the voice of the patient to be heard as he or she navigates the health care system and available community services. The legislation requires an evaluation of the trust effectiveness. This independent evaluation is being conducted by Harvard Medical School. Program managers anticipate this evaluation will include a focus on CHW roles and activities in relation to improvement of health outcomes.

#### FINDINGS

The MDPH is hardly alone in promoting CHW workforce development and integration of CHWs into health and public health systems. Massachusetts regulators drew heavily on the experience of other states in developing its voluntary CHW certification program, and other states, in turn, are learning from the approach Massachusetts is taking.

The CDC and other federal agency partners are developing new policies and providing invaluable funding, research support, and technical assistance to support state innovations involving CHWs in efforts to prevent and manage chronic disease. States governments are also allocating new resources to prevention and community-clinical partnerships, with an interest in how CHWs can help improve quality of care and contain the growth of health care spending.

The Massachusetts experience is firmly grounded in a public health approach to CHW integration. The state's certification program is relevant for CHWs working in nonhealth settings, as well as directly in health care. Massachusetts regulations were developed with full recognition of the potential value for certification to influence the complex and changing relationship between clinical care and public health systems. The PWTF is demonstrating the value of CHWs working in multifaceted roles to support communityclinical linkages. Community health workers are integrated into primary and secondary prevention, as well as tertiary support, for a range of chronic diseases. They may, for instance, be employed by local health departments to screen for health risks related to the home environment in housing inspections. For health care reform to succeed, public health and health care systems must be better coordinated. In Massachusetts, the CHWs workforce is at the heart of innovative efforts to meet this challenge.

#### DISCUSSION

In the context of health reform, there is increasing attention to the paradox that the United States spends far more per capita than other developed countries for health care, while experiencing inferior outcomes on a variety of health measures (Bradley & Taylor, 2013). Comparatively low life expectancy and high rates of infant and maternal mortality, low birth weight birth, heart disease, cancer, and other preventable diseases and health conditions are persistently concentrated in low-income communities of color, whereas health disparities cost the economy an estimated \$390 billion per year (Institute of Medicine, 2012, p. 22). Because CHWs are effective in promoting health equity, improving quality of care, and helping contain costs as members of health provider teams, interest is growing across the political spectrum about how to promote CHW integration into health care and public health systems.

The policy and advocacy work that established a state certification board for CHWs in Massachusetts most clearly exemplifies the model of collaboration the authors recommend as a best practice for promoting CHW integration and supporting the CHW workforce. Success requires respectful cooperation among CHW leaders, policy makers, health providers, public health officials, payers, and other stakeholders. Sustained progress depends on participatory leadership, structured cooperation among partners, investment of multiple resources, and vigilance and creativity to take advantage of emerging policy "windows" (Kingdon, 1995, pp. 165-179). Attention is constantly required to the challenging process of developing, refining, and implementing a common vision and shared commitment to CHW leadership.

Public health departments have powerful tools available for promoting improved integration of CHWs into health care systems. Prime among these is the ability to convene relevant stakeholders in developing collaborative visions, plans, and programs. Similarly, public health agencies have the framing power to emphasize the value of prevention in achieving equity, quality, and cost containment objectives. Health departments may also use surveillance systems, data reports, and program evaluations to build and test the evidence base for CHW interventions, especially as both regulatory and market forces drive progress toward coordinating large public health and health care data sets.

Community health workers are indispensable in policy and program development, whether they are interacting with federal or state agency officials, legislators, or health care executives. Community health workers are effective collaborators not only because of their empathy and relational skills with individuals, but also because of their unique understanding of community needs and assets, their knowledge of community and institutional resources, and their skills as "navigators" who are trusted and appreciated by patients and providers alike. CHW engagement is particularly important given the demonstrated positive impacts CHWs can have in strengthening provider practices with diverse, vulnerable populations and in addressing the needs of patients with costly, complex conditions that are often associated with racial and ethnic health disparities.

Massachusetts provides a cogent example of the value for a state public health department in collaborating with CHW leaders and private sector allies to develop and sustain a CHW-led membership association. As the organized "voice" for the CHW profession in Massachusetts, the MACHW has helped to conceive and achieve key policy and program innovations, and its role is expected to expand as implementation of health care reform accelerates. As other states develop CHW certification programs, resources should be allocated to assure sustained, organized engagement of CHWs in all phases of planning and implementation processes.

The authors recommend further research and analysis to support sustainable financing of CHW services. As providers and payers look "upstream" at opportunities to prevent injury and disease, the logic for preventive services becomes ever more compelling. Community health workers are a key workforce in mediating the impacts of social determinants of illhealth. Financing strategies are prioritized differently depending on stakeholder interests, but all agendas will be well served by ensuring CHWs are fully integrated and supported in our health care and public health systems.

#### REFERENCES

- American Public Health Association. (2001) APHA Governing Council Resolution 2001-15. *Recognition and support for community bealth workers' contributions to meeting our nation's bealth care needs.* Washington, DC: American Public Health Association.
- Bradley, E. H., & Taylor, L. A. (2013). *The American health care paradox: Why spending more is getting us less.* New York, NY: Public Affairs.
- Centers for Disease Control and Prevention. (2015a). *Cbronic disease prevention and bealth promotion*. Retrieved April 13, 2015, from http://www.cdc.gov/ chronicdisease/about/programs.htm.
- Centers for Disease Control and Prevention. (2015b). State public bealth actions to prevent and control diabetes, beart disease, obesity and associated risk factors and promote school health. Retrieved June 1, 2015, from http://www.cdc.gov/chronicdisease/ about/state-public-health-actions.htm
- Commonwealth of Massachusetts. (2006). An act providing access to affordable, quality, accountable bealth care, Chapter 58 of Acts of 2006. Retrieved April 13, 2015, from https://malegislature.gov/Laws/ SessionLaws/Acts/2006/Chapter58
- Commonwealth of Massachusetts. (2010). An act establisbing a Board of Certification of Community Health Workers. Retrieved April 13, 2015, from https://malegislature.gov/Laws/SessionLaws/Acts/ 2010/Chapter322
- Community Prevention Services Task Force. (2015). Guide to community preventive services. Cardiovascular disease prevention and control: interventions engaging community health workers. Retrieved April 2, 2015, from www.thecommunityguide. org/cvd/CHW.html
- Harris, J. R., & Wallace, R. B. (2012). The Institute of Medicine's new report on living well with chronic illness. *Preventing Chronic Disease*, 9, 120-126.

- Institute of Medicine. (2003). Unequal treatment: Confronting racial and ethnic disparities in health care. Washington, DC: The National Academies Press.
- Institute of Medicine. (2012). How far have we come in reducing bealth disparities? Progress since 2000. Retrieved June 12, 2015, from http://books.nap.edu/ openbook.php?record\_id=13383&page=22
- Kingdon, J. W. (1995). Agendas, alternatives, and public policies (2nd ed.). Boston, MA: Little Brown.
- Mason, T., Wilkinson, G. W., Nannini, A., Martin, C., Fox, D., & Hirsch, G. (2011) Winning policy change to promote community health workers: Lessons from Massachusetts in the health reform era. *American Journal* of *Public Health*, 101(12), 2211–2216.
- Massachusetts Department of Public Health; Bureau of Health Statistics, Research, and Evaluation; Division of Research and Epidemiology. (2007). *Racial and ethnic bealth disparities by EOHHS regions in Massachusetts, 2007.* Retrieved April 13, 2015, from http: //www.mass.gov/eohhs/
- Pittman, M., Sunderland, A., Broderick, A., & Barnett, K. (2015). *Bringing community health workers into the mainstream of U.S. healthcare*. Discussion Paper. Washington, DC: Institute of Medicine of the National Academies.
- Reilly, R. (2010). Participatory case study. In A., Mills, G., Durepos, & E., Wiebe (Eds.), *Encyclopedia of case study research* (pp. 659-662). Thousand Oaks, CA: SAGE Publications, Inc.
- The Institute for Clinical and Economic Review. (2013). Community bealth workers: a review of program evolution, evidence on effectiveness and value, and status of workforce development in New England. Boston, MA: The New England Comparative Effectiveness Advisory Council.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). Cultivating communities of practice. Boston, MA: Harvard Business School Press.