

Potential Health and Saving Impacts of Community Health Workers (CHWs):  
A Policy Brief

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## Abstract

Unequal health outcomes disproportionately affect minorities and other low-socioeconomic populations. The usage and reimbursement of Community Health Workers (CHWs) throughout the Commonwealth of Pennsylvania could potentially preserve resources. Medicaid, the public insurer for many of these individuals, expenditures totaled \$20,393,353,134 for FY 2012 in Pennsylvania. Early research concerning return on investment indicated that for a Community Connector Program in Arkansas created an estimated savings of \$2.619 million dollars for the Medicaid program, based on a \$2.92 per dollar invested in the program. In Pennsylvania, four strategies to promote policy change for CHWs include obtaining sustainable financing; promoting workforce development; creating occupational regulations; and continue research and evaluation of programs that are achievable strategies for Pennsylvania to accomplish in the coming years. This brief identifies examples of best-practices from other states who have had success in implementing a statewide program.

Keywords: *community health, PSE change, critical opportunity, public health*

## **I. Executive Summary**

Emerging strategies to combat health care workforce shortages in states, hospitals, health systems, and community-based organizations require evidence-based initiatives to improve population health. This policy brief, titled “Potential Health and Savings Impacts of Community Health Workers (CHWs)” recommends a new policy to establish the CHW profession in Pennsylvania. The information is based on the research completed on community based health outcomes, return on investment, and community satisfaction with services. Unequal health outcomes disproportionately affect minorities and other low-socioeconomic populations. Medicaid, the public insurer for many of these individuals, expenditures totaled \$20,393,353,134 for FY 2012 in Pennsylvania (Kaiser, 2013). Policy changes are needed to ensure these people are receiving quality health care, while finding a way to reduce costs.

Regardless of partisanship, the implementation of the Patient Protection and Affordable Care Act of 2010 will result in an increase in the number of individuals entering the mainstream health care system, who, in the past, have had no insurance or have been underinsured (Cooper, 2013). New challenges concerning patient access to primary care, reducing health care costs, minimizing hospital readmissions, and locating alternative ways to address the unique health of disparate populations are emerging. Also, recurring goals such as improving chronic care management and preventing new diseases will be a continuous focus for programs. Increasing the utilization of Community Health Workers is an emerging strategy to combat these challenges (Gibbons and Tyrus, 2007).

Frequent core activities cited by consumers indicate CHWs are responsible for: health education; patient advocacy; risk assessment that might lead to a referral for services; community outreach; social support. (Rosenthal, Wiggins, & Borbon, 1998) However, the scope of practice could expand further in an effort to make CHWs part of a Community Health Team, which includes physicians, physician assistants, nurses, social workers, and other medical assistants. Efforts will focus on improving quality of life for individuals with chronic conditions such as diabetes, asthma, and cardiovascular disease (CVD).

## **II. Background**

The Community Health Worker project is a state-wide initiative to improve health outcomes for individuals while reducing costs to the system. This will be done through:

- Identifying best-practices throughout the state.
- Developing partnerships with Pennsylvania academic institutions, insurers (private and public), government agencies, managed care organizations, community health clinics, community health workers, hospitals and health systems that have active CHW training curricula or are actively interested in integrating CHWs within their workforces.
- Promoting CHW workforce to the legislation.

The aforementioned recommendations should guide the process for achieving health equity in Pennsylvania. Assisting members of disparate populations through the use of CHWs can reduce health care costs throughout the Commonwealth (e.g. reduce emergency room visits and hospitalizations).

## **III. Context and Importance of the Problem**

### **Return on Investment**

Evidence illustrates how CHWs can help improve health care access and outcomes; strengthen health care teams, and enhance the quality of life for people in poor, underserved, and diverse communities (Health Affairs, Community health workers: part of the solution). Health workforce shortages limit general access to health services, while poor distribution and migration of workers limit access to those living in rural and other underserved locations (WHO, 2011).

Excessive rates of ER readmissions have usurped many of the Nation's health care dollars in recent years. Traditional hospital personnel often lack the time, skills, and community linkages required to address socioeconomic and behavioral factors that reduce health outcomes (Kangovi et. al, 2014). Increased numbers of certified CHWs in other states, as well as new models for training being developed throughout Pennsylvania have provided up-to-date evidence about CHW effectiveness and return on investment. The main outcomes have been: increased access to primary care; improved quality of discharge from hospitals; and reductions in recurrent readmissions in high-risk populations.

Pilot studies are being conducted nationwide in efforts to reduce Medicaid spending. Early returns promote positive outcomes in health and savings, as Arkansas has developed a Community Connector Program which created an estimated savings of \$2.619 million dollars for the Medicaid program, based on a \$2.92 per dollar invested in the program (Felix, Mays, Stewart, Cottoms, and Olson, 2011).

The Centers for Disease Control and Prevention have developed recommendations based on substantial research into CHWs. In reviewing 18 studies of CHWs involved in the care of patients with diabetes, Norris and colleagues found improved knowledge and lifestyle and self-management behaviors among participants as well as decreases in the use of the emergency department (Norris, SL, Chowdhury, FM., Van le, K., et al., 2006 & CDC, 2014).

### **Political Implications**

The climate to promote the CHW workforce is optimal, with health care reform and increased costs of health care technologies and services being keystone topics of debate. Policy entrepreneurs must define a compelling problem to secure the attention of policymakers. They must offer a viable proposal to solve that problem, and they must take advantage of political dynamics to force action on their agenda (Kingdon, 1995). Health care reform provided an opening to bond the needs of an effective CHW workforce with overall health system needs; describing policy proposals that could concurrently address both presents a supplementary burden.

### **State and local differences throughout the United States**

#### **Best practices**

In 2005, Minnesota developed a Community Health Worker Alliance that has helped to strengthen the CHW workforce by developing a defined “scope of practice” and a standardized, statewide credit-based curriculum offered at colleges (Rosenthal, Brownstein, Rush, Hirsch, Willaert, Scott, Holderby, Fox, 2010). Once established, the goal of this alliance has been to identify research that supported CHW return on investment in an effort to convince their legislature to reimburse CHW services on an hourly basis. In 2008, the Centers for Medicare and Medicaid Services (CMS) approved reimbursement for Minnesotan CHWs, as long as they worked as part of a PCMH team with a Medicaid-approved physician and advanced-practice nurses (Rosenthal et al., 2010).

Massachusetts has been a leader in CHW promotion and policy change since 2006. Recently, the aftermath of the Affordable Care Act of 2010 has amplified their efforts to form statewide CHW associations which promote sustainability of the workforce and seeks to initiate policy change (Mason, Wilkinson, Nannini, Martin, Fox & Hirsch, 2011). In Massachusetts, advocates have formed a CHW Advisory Council, which represents diverse stakeholders. Policymakers in Pennsylvania need to be educated concerning the link between health reform and community health workers.

Two prestigious programs are already established in the Commonwealth. The first is Temple University. Temple defines the role of CHWs “The Community Health Worker, through home visits and phone contact, enhances communication between clinic patients and the health care team, with the goal of improving participation in the plan of care and ensuring positive health outcomes (2013).” Along with the established eight competencies, Temple’s training program lists five essential functions: supporting patient self-care; referring patients to providers; community outreach; evaluation & transformation of the health care system; and professional development.

The University of Pennsylvania is another key contributor to the current CHW workforce in PA. The University has established a model for CHW care. The Individualized Management for Patient-Centered Targets (IMPACT) model recruits CHWs from within the local community to help patients navigate the health care systems and address key health barriers (UPENN, 2014). The IMPACT model is another flagship CHW training program which should be adapted into one statewide model.

A third program that is gaining traction is an initiative WellSpan is developing based on a grant received from the Highmark Foundation. The WellSpan Health Community & Wellness provides health enrollment services to the community through scheduled appointments with CHWs (WellSpan, 2014). In addition to these services, CHWs plan cardiovascular disease prevention programs for African American and Latino women and men (ages 25-64) in York City (WellSpan, 2014). Research should focus on collecting data from such programs in order to create a more powerful evidence base.

The goal of any future policy should be to unite the most successful aspects of each program, whether they are from other states programs or Pennsylvania specific, as in Temple University and the University of Pennsylvania.

#### **IV. Recommendations**

##### **CDC Guidance for Policy Development**

The Centers for Disease Control and Prevention recommend addressing four principles to promote policy change regarding Community health workers. Obtaining sustainable financing, promoting workforce development, creating occupational regulations, and continue research and evaluation of programs that are achievable strategies for Pennsylvania to accomplish in the coming years.

##### **Sustainable financing**

Sustainable funding for community health worker services remains a barrier to policy change. Currently, the workforce and training programs are sustained by federal grants, and in some special cases there are steady streams of funding. Health systems and hospitals are reluctant to spend resources on training, even when cost-effectiveness is established, unless they are going to be reimbursed for services. Short-term funding keeps CHWs in health care silos (CDC, 2014). Employers and hospitals become disinterested in investing CHW training and development programs if they are unable to retain them due to funding. Also, this limits commitments to training and career development by discouraging CHWs from remaining in the field (CDC, 2014). There are limitations in availability of funding opportunities; however, Medicare, Medicaid, the Children's Health Insurance Program, and managed care organizations are potential resources most states are attempting to utilize and bill certain codes (Johnson et al., 2012) based on creating standardized training and certification processes (i.e. Minnesota, Washington, Texas, and South Carolina)

##### **Workforce development**

Upon establishing a sustainable funding source, the workforce could truly flourish. Sustainable funding could equate to a lifelong career for some individuals based on a competitive salary, health benefits, and increased job satisfaction. Workforce development will require resources, including training, career development and certification.

### Occupational regulation

As members of a health team, CHWs should receive proper training. The state should make recommendations on what topics every training program should include, so CHWs have a common foundational skill and knowledge base. Once training standards are developed, the state should pursue certifications because this will give acknowledgement to CHWs as an effective workforce. Continuing education credits must be established and enforced; CHWs will assist in many aspects of health care, so current best-practices and evidence-based strategies need to be communicated on an annual basis.

### Continued research

The rationale for utilizing CHWs in health systems has been around for four decades. However, recent opportunities to make strides in promoting their use in the United States require continued research demonstrating return on investment, successful pilot programs, and best-practices. Current research has a focus on diabetes management, cardiovascular disease, asthma, and tobacco cessation. The following should be integrated into CHW trainings.

#### **Standardization of Training**

1. Expand access to preventive services (Source: Davis C, Somers, S. Public health provisions of the Patient Protection and Affordable Care Act. Public Health Law Network. Available at: <http://www.publichealthlawnetwork.org/wp-content/uploads/ACA-chart-formatted-FINAL2.pdf>)
2. Reduce the social and financial costs of chronic disease
3. Eliminate racial and ethnic disparities in health
4. Reimbursement (Sustainability)
5. Improve compensations
6. Recognition (Certification)

The National Community Health Advisor Study recommends eight skills to develop for CHW training programs. Curriculum should focus on patient advocacy, capacity building, cultural competency skills, communication, interpersonal skills, service coordination, teaching, and organizational skills (APHA, 2014). The use of CHWs who are trained in these eight competencies will successfully reduce hospital readmissions, increase adherence to medications



and follow-up appointments, decrease ER visits, and support healthy outcomes within the community they serve.

### **Limitations**

Research on Pittsburgh, Harrisburg, and rural areas were not included. However, once programs are established and evaluated in high-risk urban populations, they can be adapted for use in the omitted regions of the state. University of Pittsburgh Medical Center (UPMC) and Pinnacle Health Systems (Harrisburg area) may be targets for future adaptations. Research should focus on the external validity of implementations of CHW programs in order to reach *all* high-risk populations.

Funding is another limitation for integrating CHWs into hospitals and health systems. Minnesota allows CHWs to reimburse for services through its State Plan, and New Mexico is requiring managed care plans to provide CHW services (Burton, Chang, & Gratale, 2013). Health systems in Pennsylvania rely on grants, which often are unavailable after a few years of a program. This can create high turnover in the workforce, which disallows adequate evaluation.

### **V. Discussion**

CHWs could be a premier, high caliber, public health force in Pennsylvania. Based on the ability of CHWs to address chronic health disparities, new health policy should aim to provide consistent funding in order to sustain that workforce. Once established, ongoing evaluation of programs will provide evidence based data to inform and promote the best strategies to decrease health burden of all diseases, acute and chronic, under the guidance of a health system or hospital.

## Works Cited

1. Burton A, Chang D, Gratale D. (2013). Medicaid Funding of Community-Based Prevention: Myths, State Successes Overcoming Barriers and the Promise of Integrated Payment Models. Nemours [cite April 10, 2014]. Available from [http://www.nemours.org/content/dam/nemours/wwwv2/filebox/about/Medicaid\\_Funding\\_of\\_Community-Based\\_Prevention\\_Final.pdf](http://www.nemours.org/content/dam/nemours/wwwv2/filebox/about/Medicaid_Funding_of_Community-Based_Prevention_Final.pdf)
2. CDC. CDC Database Projects Web Site: Community Health Workers/Promotores de Salud: Critical Connections in Communities. Available at: [www.cdc.gov/gov/diabetes/projects/comm.htm](http://www.cdc.gov/gov/diabetes/projects/comm.htm).
3. Community Health Workers Section, American Public Health Association [APHA]. (2014) Available from: <http://www.apha.org/membergroups/sections/aphasections/chw/>.
4. Cooper RA. (2013). Unraveling the Physician Supply Dilemma. *The Journal of the American Medical Association*; 310(18): 1931-1932.
5. Felix HC, Mays GP, Stewart MK, Cottoms N, and Olson M. (2011). The Care Span: Medicaid Savings Resulted When Community Health Workers Matched Those With Needs To Home And Community Care. *Health Affairs*; 30(7):1366-1374.
6. Gibbons M, Tyrus NC. (2007). Systematic review of U.S.-based randomized controlled trials using community health workers. *Progress in Community Health Partnerships: Research, Education, and Action*; 1(4):371-381.
7. Johnson D, Saavedra P, Sun E, Stageman A, Grovet D, Alfero C, Maynes C, Skipper B, Powell W, and Kaufman A. (2012). *Journal of Community Health*; 37:563-571.
8. Kangovi S, Mitra N, Grande D, White M, McCollum S, Sellman J, Shannon R, Long J. (2014). Patient-Centered Community Health Worker Intervention to Improve Posthospital Outcomes: A Randomized Clinical Trial. *Journal of the American Medical Association*; 174(4):535-543.
9. Kingdon, JW. (1995). *Agendas, Alternatives, and Public Policies* (2<sup>nd</sup> ed.). New York: Harpers Collins College Publisher
10. Mason T, Wilkinson G, Nannini A, Martin C, Fox D, and 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.
11. Norris SL, Chowdhury FM, Van Le K, Horsley T, Brownstein JN, Zhang X, Jack L Jr, and Satterfield DW. (2006) Effectiveness of community health workers in the care of persons with diabetes. *Diabetic Medicine*; 23(5):544-556.
12. Rosenthal EL, Brownstein J, Rush CH, Hirsch GR, Willaert AM, Scott JR, Holderby LR, Fox DJ. (2010). Community Health Workers: Part of the Solution. *Health Affairs*; 29(7): 1138-1342.
13. Temple University. (2013). Position Description of Community Health Worker.
14. Rosenthal L, Wiggins N, & Borbon A. (1998). Summary of the National Community Health Advisor Study, 1998. [Cited March 3, 2014]. Available from [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0013/152203/e95774.pdf](http://www.euro.who.int/__data/assets/pdf_file/0013/152203/e95774.pdf)
15. World Health Organization. (2011). Attracting and retaining health workers in the Member States of the South-eastern Europe Health Network. [cited April 9, 2014]. Available from [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0013/152203/e95774.pdf](http://www.euro.who.int/__data/assets/pdf_file/0013/152203/e95774.pdf)