

Aligning Provider Team Members With Polyvalent Community Health Workers

Beth A. Brooks, PhD, RN, FACHE;
Sheila Davis, DNP, ANP-BC, FAAN;
Pamela Kulbok, RN, PHCNS-BC, FAAN;
Loraine Frank-Lightfoot, DNP, MBA, RN;
Lisa Sgarlata, DNP, RN, FACHE;
Shawanda Poree, MBA, BSN, RN

In light of the fragmentation of health care services and the need for health promotion and disease prevention, it is time to consider the important role community health workers (CHWs) could play as part of the health care team. Globally, CHWs tend to focus on a single patient condition, resulting in fragmented, uncoordinated health care services. Polyvalent (or multimodal) CHWs can provide a comprehensive, patient-centric range of care coordination services with other members of the health care team, ultimately improving patient outcomes and decreasing the cost of care. The potential benefits of the polyvalent CHW to the health care team are not widely understood in the United States. To fill this knowledge gap, a toolkit for nurse leaders in mainstream health care settings was created. The toolkit outlines the key elements essential to a successful CHW program and offers strategies for navigating the various challenges involved when integrating this new role into existing models of care. **Key words:** *acute care, care delivery team, community-based care, community health worker*

THE US HEALTH CARE SYSTEM is in the throes of a crisis. Although the current trend in health care is to be patient-centric, existing models of health care delivery are still based upon patients entering a complicated, often intimidating health system that

can present myriad barriers to receiving truly comprehensive, community-based care.

Given projected health care professional shortages, broadening the view on who can be part of a health care team can be an important step toward enhancing the services health care facilities provide to their local communities. Community members trained in a specific scope of services can greatly extend the potential reach of existing health care teams. Community health workers (CHWs), although common outside the United States, have not been a traditional part of the US healthcare system.

Many health care leaders may not be familiar with CHWs or the role they could play as part of the health care team. To streamline the vast amount of information related to this approach, a toolkit for nurse leaders was developed to describe key elements

Author Affiliations: *Resurrection University (Dr Brooks), Chicago, Illinois; Partners in Health (Dr Davis), Boston, Massachusetts; College of Nursing (Dr Kulbok), University of Virginia Charlottesville, Virginia; Parkview Health System (Dr Frank-Lightfoot), Fort Wayne, Indiana; Lee Memorial Health System (Dr Sgarlata), Fort Myers, Florida; and Department of Veterans Affairs (Ms Poree), New Orleans, Louisiana.*

The authors declare no conflict of interest.

Correspondence: *Beth A. Brooks, PhD, Resurrection University, President, Administration, 1431 N. Claremont Ave, UNITED STATES, Chicago, IL 60622 (beth.brooks@resu.edu).*

DOI: 10.1097/NAQ.000000000000110

essential to a successful CHW program. Created for leaders in mainstream health care settings, the toolkit¹ provides information about the resources and strategies needed to improve access to health care. Included in the toolkit are a review of best-practice evidence; definitions of key terms; lists of key stakeholders and talking points; program implementation considerations; sample job tools and templates that CHWs use; suggested outcome measures; case studies of successful CHW programs; and lists of resources and references (Table 1). The purpose of this article is to introduce and define polyvalent CHWs, along with highlighting information from the toolkit.

A BRIEF HISTORY OF THE CHW ROLE

The CHW role is not new in the United States or globally.^{2,6,16} In the United States, the use of lay health workers to expand access to health care for the poor and for ethnic minorities began in the early 1960s.⁶ Often used in public health programs, these workers had a variety of job titles, served different populations, and provided a diverse range of health and social services.

Community health workers can be found in settings such as community organizations,

health departments, churches, schools, clinics, and hospitals. Globally, there is evidence of the successful use of CHWs in developed and developing countries for a variety of chronic conditions, including asthma, diabetes, HIV/AIDS, and hypertension.^{5,11-13} Similarly, in the United States, reports indicate that CHWs have been successful in unimodal roles for a variety of chronic conditions such as asthma, congestive heart failure, and diabetes, as well as mother-child health and sexually transmitted diseases.²

A CASE FOR THE POLYVALENT CHW

The term *community health worker* is associated with many different job titles and roles, including lay health worker, patient navigator, peer advisor, community health advocate, and *promotor(a) de salud*.⁷ Responsibilities vary and may include assisting community members in obtaining health insurance benefits, client advocacy, health education, outreach, system navigation, and other enabling services. Despite the variations in title and role, there is consensus around these main functions: advocate, case manager, health educator, navigator, community outreach, program facilitator, and team member.^{2,5,10,14} The common thread is a cultural, ethnic, experiential, or linguistic connection with the population served. This bond allows CHWs to support medically disadvantaged community members in ways that mainstream health care providers and systems have not.

CHW programs in the United States and globally have typically focused on one condition (unimodal) (eg, diabetes, heart disease, or HIV/AIDS). However, patients and families rarely have isolated needs. As a result of this unimodal approach, several CHWs may visit the same patient and/or household, each attending to the services and tasks related to a single condition. Although the individual CHW's workload has fewer tasks and is seemingly more manageable, the care provided may be fragmented and uncoordinated—and frustrating to both the CHW and the patient.

Table 1. Table of Contents^a

Executive Summary
Chapter 1: Introduction and Background
Chapter 2: Defining the CHW Role
Chapter 3: Implementing a CHW Program
Chapter 4: Strategic Stakeholders
Chapter 5: Implementation Considerations and FAQs
Chapter 6: Case Studies
Chapter 7: Tools and Templates
Resources
References
Bibliography

^aA free copy of the toolkit can be obtained from the American Organization of Nurse Executives. <http://www.aone.org/resources/building-a-community-health-worker.shtml>.

Polyvalent (or multimodal) CHWs can provide health, wellness, and disease prevention services in coordination with mainstream health care services, positively impacting health outcomes and potentially decreasing the cost of care.

It is recommended to use a polyvalent, multimodel CHW role when providing services. Building on the definition of CHW offered by the American Public Health Association, the polyvalent CHW (who is integrated into the care team under the supervision of a registered nurse or licensed practical nurse) is able to link patients with health and/or social services and the community “to facilitate access to services and improve the quality and cultural competence of service delivery.”³ Polyvalent CHWs can assist patients and/or households with multiple conditions. For example, a patient who suffers from asthma, hypertension, and diabetes has one CHW with the requisite knowledge and training, who can perform tasks outlined in the CHW scope of practice. This multimodal approach increases the efficiency of a CHW.^{2,5,10,14} The patient’s care is better coordinated and less fragmented, and communication is streamlined.

THE AFFORDABLE CARE ACT: A NEW OPPORTUNITY FOR THE CHW

In the United States, the Patient Protection and Affordable Care Act (ACA) of 2010¹⁷ expanded health insurance coverage to an estimated 9.3 million people in 2014, lowering the uninsured rate from 20.5% to 15.8%.⁴ Nationwide, health exchanges again opened to new enrollees beginning in November 2014. Given the potential expansion of health insurance coverage to an additional 13 million uninsured individuals in 2015, there is a need for novel approaches to meet the increasing demand for primary health care. At the same time, hospitals and health systems are searching for new ways to decrease readmissions, increase patient adherence, improve health and wellness, reduce risk, prevent disease, and meet population needs identified by ACA-

mandated Community Health Needs Assessments. The ACA includes an important provision related to CHWs.

Adopting and funding a CHW program

Lack of funding has been a major challenge to implementing CHW programs on a large scale. In the United States, CHW programs have historically been developed to fill disease-specific or population-specific niches funded by time-limited grant dollars. The current melding of health-related challenges now gives the health care community the incentive to embrace the CHW model of outreach, health surveillance, and extension of primary care and maintenance care for the chronically ill. Furthermore, this incentive may lead to the implementation of new health care delivery models that have not been adopted on a widespread basis.

Funding concerns will diminish as hospitals and health systems look for mechanisms to meet the ACA government mandates. In some instances, health care providers have realized third-party reimbursement for innovative care models. For example, Medicaid and/or funding through Centers for Medicare and Medicaid Services Innovation Awards for CHWs have been “bundled” into health care charges. However, this is not the norm (Tables 2 and 3). As health care reform evolves, there will be new methods for reimbursement. Hospitals and health systems that are unfamiliar with polyvalent CHWs are in need of a blueprint to show them how to take advantage of this low-cost, high-yield, multimodal adjunct to the health care team.

A vital point of contact

There is a large, medically underserved group of people across the United States, with 20% of the population having inadequate or no access to primary care. There is a growing need for creative and innovative ways to transition-coordinated, patient- and family-focused care from the community to the hospital, and back to the community. The US public needs improved access and better care

Table 2. Grants to Promote the Community Health Workforce

“Section 5313, amends Part P of Title III of the Public Health Service Act (42 U.S.C. 280g et seq.) to authorize CDC in collaboration with the Secretary of Health and Human Services to award grants to ‘eligible entities to promote positive health behaviors and outcomes for populations in medically underserved communities through the use of community health workers’ using evidence-based interventions to educate, guide, and provide outreach in community settings regarding health problems prevalent in medically underserved communities; effective strategies to promote positive health behaviors and discourage risky health behaviors; enrollment in health insurance; enrollment and referral to appropriate healthcare agencies; and maternal health and prenatal care.”¹⁶

coordination to reduce health disparities. When focusing beyond hospital walls, health care systems will need diverse, culturally congruent health care workers at the point of contact in communities for primary care, health promotion, disease prevention, surveillance, and chronic disease management.

In 2003, the Institute of Medicine recommended that CHWs be included on health care teams to improve the health of underserved populations.⁹ Today, the ACA recognizes CHWs as important members of the health care workforce who can help to build capacity in primary care.¹⁴ The estimated number of CHWs in the United States rose from 10 000 in 1998¹⁴ to 120 000 in 2010^{14,15} because CHWs improve health care access and outcomes, strengthen health care teams, and enhance quality of life for people in poor, underserved communities. Likewise, stakeholders recognize that new financial reimbursement models exist, are becoming more available, and can include reimbursement for CHW services.

Skepticism, barriers, and facilitators

Health system leaders, including chief nursing officers and chief medical officers, may be

unaware of or uninformed about the potential value realized when integrating CHWs in care delivery models. Leaders may be skeptical of CHWs, their roles, and competencies, as well as how to integrate them into the health care system and how to attain a smooth transition of care. There is often a clash between acute care and community-based care approaches, as well as a lack of consistency in CHW selection criteria, training, scope of practice, roles, responsibilities, workload, reimbursement, and outcome measures. Other barriers to implementing the CHW role include insufficient financial reimbursement, nonexistent referral networks, lack of community support, lack of leadership or medical staff support, fragmentation of care (provider-CHW interactions within the health care system), electronic documentation, and professional silos.

The meaningful engagement of community and other key stakeholders is vital to a program’s success. Critical from the beginning phases of CHW program planning are community and stakeholder champions to ensure that the integration of CHW services is appropriate and sensitive to community needs and values. Integration of CHW services

Table 3. Changes in Federal Medicaid Rules

Effective January 2014—“Allow Payment for Preventive Services by Non-licensed Individuals including CHWs.” (*Federal Register*, July 15, 2013 [78 FR 135 p. 42306])
Preventive services “recommended by a physician or other licensed practitioner . . . :
1) prevent disease, disability, and other health conditions;
2) prolong life; and, 3) promote physical and mental health efficiency.”

Table 4. Triple Aim Outcome Measures

Experience of Care			
Process of Care and Utilization	Behavior Change	Satisfaction	Health of a Population
CHW program referrals: # from ED # from PCP # from community	Changes in knowledge Client reminders Risk reduction Physical activity Diet changes	Client satisfaction with CHW Likelihood to recommend Why patient uses CHW services	Health risk appraisal Health/functional status Reduced morbidity Reduced mortality
Access to services: # patients served # appointments made # of CHW visits # of clients enrolled	Self-management of: Medication compliance Lifestyle changes		Healthy life expectancy of the population served
Education programs taught by CHWs: # of education sessions offered # enrolled in education sessions # of clients completing program # and type of materials disseminated			Reduction in health disparities Specific measures consistent with population: Glucose Hypertension Cholesterol Lipids HbA1c Weight Smoking
Number of clients enrolled in wellness and/or education programs: diet, exercise, and smoking			Decreased ED visits Decreased admissions Total cost per member

Abbreviations: CHW, community health worker; ED, emergency department; PCP, primary care provider.

into existing community programs and health care resources whenever possible will leverage current program success. Scheduled and periodic monitoring of CHW services with feedback from all stakeholders will ensure the best chance to address problems quickly and revise programs and plans on an ongoing basis.

A wise investment in enhanced patient care

Ultimately, the goal of implementing a CHW program is to achieve the Triple Aim.⁸ The “Triple Aim” includes (1) quality, as measured by improved overall health (population health), improved patient experience, and decreased readmissions; (2) access, defined as decreased utilization of the emergency department for primary care services and an increase in compliance with “medical home,” community-based health care navigation; and (3) reliability (reduction of health care costs), including decreased cost of care and alternative financing, payment, and reimbursement models (Table 4).

Viswanathan et al¹⁸ described mixed evidence on CHW effectiveness on a number of outcomes (cost, behavior change, health outcomes). However, the mixed evidence is a result of research method disparities, inconsistent definition of terms and variables, and insufficient data. Return on investment and cost-effectiveness analysis is limited in the literature. However, anecdotal information can be found. In June 2012, Wilder Research Center found that every dollar invested in CHW cancer outreach and prevention saves society \$2.30. Likewise, Whitley et al¹⁹ maintain that the system saves \$2.28 for every \$1.00 it invests in a CHW program.

Inconsistent cost-benefit data lead to inconsistent support for the CHW role.¹⁹ However, recent analysis of cost data from 14 studies showed that, in a majority of them, CHW interventions produced cost savings (ie, cost avoidance from reduced health care utilization) (an average 12% decrease in urgent care visits¹⁹). Urgent care, inpatient, and outpatient behavioral health care utilization decreased, whereas primary and specialty care visits increased and resulting in a reduction of monthly uncompensated costs by \$14 244 for 509 underserved men. Program costs were \$6229 per month and the return on investment was 2.28:1.00, a savings of \$95 941 annually. These data provide evidence of economic contributions that CHWs make to a public safety net system.^{7,19}

CONCLUSION

Integrating the role of a polyvalent CHW into the treatment team can have a substantial and positive impact on the delivery, costs, and effectiveness of care at the community level. Senior health care leaders must become better informed about the responsibilities and benefits of this position, as well as how best to align the CHW with the existing health care team. Considering the growing complexities of the traditional health care delivery system, the importance of the CHW as a vital bridge between health care providers and the surrounding community cannot be underestimated. Forward-thinking health care leaders must be prepared to think innovatively—and openly—about the many advantages the polyvalent CHW can provide, both to the team and to the patients under their care.

REFERENCES

1. Brooks BA, Davis S, Frank-Lightfoot L, Kulbok PA, Poree S, Sgarlata L. *Building a Community Health Worker Program: The Key to Better Care, Better Outcomes, & Lower Costs*. Chicago, IL: Community Health Works; 2014.
2. Andrews JO, Felton G, Wewers ME, Heath J. Use of community health workers in research with ethnic minority women. *J Nurs Scholarsb*. 2004;36:358-365.
3. American Public Health Association. Definition of Community Health Worker. <http://www.apha.org/apha-communities/member-sections/community-health-workers>. Accessed December 17, 2014.

4. Carman KG, Eibner C. Survey Estimates Net Gain of 9.3 Million American Adults with Health Insurance. Commentary (The Rand Blog). <http://www.rand.org/blog/2014/04/survey-estimates-net-gain-of-9-3-million-american-adults.html>. Accessed December 17, 2014.
5. Cherrington A, Ayala GX, Amick H, Scarinci I, Allison J, Corbie-Smith G. Applying the community health worker model to diabetes management: using mixed methods to assess implementation effectiveness. *J Health Care Poor Underserved*. 2008;19:1044-1059. doi:10.1353/hpu.0.0077.
6. Heath AM. Health aides in health departments. *Public Health Reports*. 1967;82:608-614.
7. Institute for Clinical and Economic Review. *An Action Guide on Community Health Workers (CHWs): Guidance for Organizations Working with CHWs*. Boston, MA: The New England Comparative Effectiveness Public Advisory Council; 2013.
8. Institute for Healthcare Improvement. Triple Aim Concept Design. <http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/default.aspx>. Accessed December 17, 2014.
9. Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, DC: National Academies Press; 2003.
10. O'Brien MJ, Squires AP, Bixby RA, Larson SC. Role development of community health workers: An examination of selection and training processes in the intervention literature. *Am J Prev Med*. 2009;37(6 Suppl 1):S262-S269. doi:10.1016/j.amepre.2009.08.011.
11. Patel AR, Nowalk MP. Expanding immunization coverage in rural India: a review of evidence for the role of community health workers. *Vaccine*. 2010;28:604-613.
12. Postma J, Karr C, Kieckhefer G. Community health workers and environmental interventions for children with asthma: a systematic review. *J Asthma*. 2009;46:564-576. doi:10.1080/02770900902912638.
13. Rich ML, Miller AC, Niyigena P, et al. Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment program in rural Rwanda. *J Acquir Immune Defic Syndr*. 2012;59(3):e35-e42. doi:10.1097/QAI.0b013e31824476c4.
14. Rosenthal EL, Brownstein JN, Rush CH, et al. Community health workers: part of the solution. *Health Aff (Millwood)*. 2010;29(7):1338-1342. doi:10.1377/hlthaff.2010.0081.
15. Rosenthal EL, Wiggins N, Brownstein JN, et al. *Weaving the Future: The Final Report of the National Community Health Advisor Study*. Tucson, AZ: Mel and Enid Zuckerman College of Public Health, University of Arizona; 1998.
16. Swider SM. Outcome effectiveness of community health workers: an integrative literature review. *Public Health Nurs*. 2002;19(1):11-20.
17. U.S. House of Representatives. *Patient Protection and Affordable Care Act of 2010*. P.L. 111-148, 2010. <http://www.socialsecurity.gov/OP-Home/comp2/F111-148.html>. Accessed December 18, 2014.
18. Viswanathan M, Kraschnewski J, Nishikawa B, et al. *Outcomes of Community Health Worker Interventions. Evidence Report/Technology Assessment No. 181 (Prepared by the RTI International—University of North Carolina Evidence-Based Practice Center Under Contract No. 290 2007 10056 I.) AHRQ Publication No. 09-E014*. Rockville, MD: Agency for Healthcare Research and Quality; 2009.
19. Whitley EM, Everhart RM, Wright RA. Measuring return on investment of outreach by community health workers. *J Health Care Poor Underserved*. 2006;17(1 Suppl):6-15.