

Health Care Poor Underserved. Author manuscript; available in PMC 2015 February 01.

Published in final edited form as:

J Health Care Poor Underserved. 2014 February; 25(1): 17–24. doi:10.1353/hpu.2014.0019.

# Community Health Workers and the Patient Protection and Affordable Care Act: An opportunity for a research, advocacy, and policy agenda

Megha Shah, Michele Heisler, and Matthew Davis

NCRC, 2800 Plymouth Rd, Ann Arbor, MI 48109

Megha Shah: meghads@umich.edu

### **Abstract**

Community health workers (CHWs) have the potential to be important members of an interdisciplinary health care team. CHWs have been shown to be effective in multiple roles in the provision of culturally appropriate healthcare in a variety of settings. Recent efforts have started to explore how best to integrate CHWs into the health system. However, to date, there has been limited policy guidance, support, or evidence on how to best achieve this on a larger scale. The Patient Protection and Affordable Care Act (ACA), through several provisions, provides a unique opportunity to create a unified framework for workforce integration and wider utilization of CHWs. This review identifies four major opportunities to further the research, policy, and advocacy agenda for CHWs.

#### **Keywords**

Community health worker; health reform; interdisciplinary health care team; community health

### Introduction

Compared with coverage expansions, cost controls, and quality improvement as initiatives of the 2010 Patient Protection and Affordable Care Act (ACA), community health worker (CHW) programs receive little media attention. Yet, CHWs are as much a focus of the ACA as many better-known provisions and are highlighted as potential strategies within medical homes and accountable care organizations. This is a remarkable feature of the ACA in light of the at-times disconnected literature demonstrating the effectiveness of CHW interventions dispersed across many disciplines such as public health, medicine, nursing, social work and community development.

In short, the ACA provides the CHW field with an extraordinary--perhaps unprecedented-research, policy and advocacy agenda. With the emphasis in the ACA on CHWs comes a golden opportunity for program designers, CHW leaders, CHW researchers and CHWs themselves to build on the best available evidence about CHW interventions—and also to use the ACA framework as a way to measure, improve, and better integrate CHW programs into health care. Below, we examine major opportunities for the CHW agenda in the ACA (including specific sections of the legislation for readers' reference) and key recent evidence for each of these opportunities.

### Opportunity 1: Focus on evaluating the efficiency and cost effectiveness of CHW interventions with CHWs as members of interdisciplinary teams

The language of the ACA strongly echoes discussions regarding the importance of testing interdisciplinary care team models, which have been well described in the CHW literature. Section 3024 specifically provides funding for interdisciplinary home demonstration programs among high-need populations that can show improvement on several metrics. These metrics include decreased hospital readmissions, emergency room utilization, and cost of health care services; and improved chronic disease health outcomes, efficiency, and patient/family satisfaction.<sup>2</sup> In addition, the Center for Medicaid and Medicare Innovation (CMI), under Section 3021, encourages testing of innovative service delivery models to improve quality, efficiency, and lower costs.<sup>3</sup> Models include community-based health care teams and home health care providers offering chronic care management through interdisciplinary teams.

Several recent studies demonstrate the value of incorporating CHWs into interdisciplinary health teams. 4–7 For example, the Community Outreach and Cardiovascular Health Program (COACH) was a 12-month nurse practitioner (NP)-CHW comprehensive intervention for patients with cardiovascular disease in Baltimore. In this randomized controlled trial (RCT), participants in the intervention arm received tailored lifestyle and diet coaching, home-based exercise programs, home visits, and telephone reminders of appointments, compared with participants in the control arm who received enhanced usual care consisting of care from their providers, including feedback on their cardiovascular risk also given by the provider. The intervention led to significantly better systolic blood pressure, LDL-cholesterol, hemoglobin A1C, and patients' own perceptions of their chronic illness. NPs, with physician consultation when needed, oversaw the CHW-delivered intervention, an effective example of an interdisciplinary team approach. 8

However, like many CHW program evaluations, cost-effectiveness data is lacking for the COACH intervention. Although there are examples of cost-effective interventions, such as Fedder et al, who found savings of over \$2000 per Medicaid patient with a CHW-delivered intervention among African American patients with diabetes in Baltimore, evidence regarding cost-effectiveness of CHW programs is limited and has been missing from most evaluations of CHW programs. 10,11

### Opportunity 2: Call for CHW programs and research focused on early childhood interventions

In the ACA, Section 2951 of Title II specifically outlines state requirements for publicly sponsored home visiting programs for infants, young children, and mothers. <sup>12</sup> Several benchmarks for performance of home visiting programs have been identified, ranging from prevention of child injuries to school readiness. Internationally, there is a large body of literature supporting CHW maternal/infant home interventions that have led to improvements such as higher breastfeeding rates, reduced perinatal maternal depressive symptoms and decreased infant mortality rates. <sup>13–18</sup> In addition, a pooled analysis of 22 recent international community-based RCT interventions found a >30% reduction of risk of neonatal mortality through CHW home visitation programs. <sup>19</sup>

Meanwhile, a growing body of literature supports the use of home visiting programs for infant care in the US, though most of these studies incorporate a nurse-visit model. <sup>20,21</sup> Although there have been some documented interventions in the United States using CHWs, their evidence base in U.S. literature is limited. <sup>22</sup> REACH-Futures is an example of successful implementation of a nurse-CHW model, based on the World Health Organization (WHO) primary health model, to address infant outcomes in inner-city Chicago. This program developed from an initial nurse-only model that, though showing improved outcomes for infants in the first year of life, was found to be too costly. However, for children visited by CHWs in this study, outcomes of infant mortality, reported health problems in first year of life, and vaccination rates were all better than the more costly nurse-only model. <sup>23</sup> International examples of incorporating CHWs into home visiting models for early childhood programs could be explored further and evaluated for implementation in the United States.

### Opportunity 3: Further research, evaluation, and implementation of CHW-led programs to reduce hospital readmissions and improve care transitions

An important area of reform and cost control in the legislation focuses on hospital readmissions, with the ACA decreasing Medicare reimbursements for readmissions by 1% in 2012 and incrementally decreasing reimbursements yearly through October 2015.<sup>24</sup> Developing innovative models that can lead to decreased rates of hospital readmissions and improved care transitions from the inpatient to outpatient settings is a national priority. There have been successful CHW interventions among pediatric asthma patients that decreased hospital readmissions and adult chronic illness interventions that have seen reduced hospital admissions, but studies involving CHWs for adults in this arena have lacked rigorous study design and specific targeting of hospital readmissions. <sup>10,25</sup>

The Care Transition Intervention, developed by Eric Coleman and colleagues, is a 4-week intervention that utilizes a trained "Health Transition Coach", which can be a community health worker, to provide a 4 week patient support and empowerment program. The model is based on the four core areas: medication self-management, patient-centered personal health record, outpatient follow –up, and understanding of red flag symptoms. This curriculum is delivered by the "Health Transition Coach" through 1 hospital visit, 1 home visit, and follow-up phone calls. This program has not only been shown to re-hospitalizations in a randomized-controlled trial, but has also been successfully implemented in a statewide demonstration project in California. <sup>26</sup>

One of the strengths of this program that is cited is the flexibility of background of the "Health Transition Coach", who, in this California demonstration project included student nurses, social workers and community health workers.<sup>27</sup>

The ongoing Individualized Management towards Patient-Centered Targets (IMPaCT) study in Philadelphia is an RCT that involves CHWs that meet high-risk patients in the hospital on the day of admission and follow up at discharge to partner with patients to identify barriers to care. They subsequently follow up with patients after discharge and accompany patients to their first outpatient visit to help address clinical barriers with their primary care providers. This novel study of a CHW intervention could be a generalizable, potentially

cost-effective strategy to reduce hospital readmissions among high-risk patients, and further research to evaluate CHW interventions to assist specifically with reducing readmission and assisting with transitions from inpatient to outpatient care is needed.

## Opportunity 4: Advocate for an interdisciplinary team approach in medical/nursing education that includes education on ways to effectively work with community team members

In its seminal study of racial and ethnic disparities in health outcomes, the Institute of Medicine set forth a list of recommendations "to eliminate racial and ethnic disparities in healthcare." Among these recommendations are support of CHWs and implementation of multidisciplinary care teams. In order for CHW programs to reach their full potential in team-based care, recognition of their potential from the larger medical community is important. Team-based approaches have not only been embraced in the medical literature, but in the ACA as well through support of such models as the patient-centered medical home (PCMH) and priority funding for graduate medical education training programs that teach team-based chronic disease management. 3,30,31

In the past, education regarding team-based approaches was generally limited to very specific scenarios—for example, a particular surgical treatment or a critical care setting. Recently, there has been a shift to recognize the importance of team-based approached in primary care.<sup>32</sup> However, education regarding team-based approaches can be broadened to consider the community perspective that would include medical and nursing education about the role of CHWs as part of a multidisciplinary team and how to effectively integrate CHWs into health teams.

Current literature on the topic of multidisciplinary team based approaches that incorporate CHWs is limited to the interventions in which they were designed. Changing policy to require health professional education on the role of community team members, including CHWs, would help in the recognition of CHWs as health team members.

### **Discussion**

CHWs serve as an important bridge between the community and the health system in various capacities in the United States. For years, advocates for CHW programs have worked to integrate CHWs into the health system, yet this has happened to a very limited extent.<sup>33</sup> More recently, Balcazar et al set out to define "actions for a new paradigm" for CHW integration, one of which is a national research and policy agenda.<sup>34</sup> However, priorities for this agenda are not clear from the call to action.

Several challenges currently exist in moving this agenda forward. First, sustainable funding is an important step for wider utilization of CHWs, thus making Opportunity 1, efficacy and cost-effectiveness evaluation, an important first step. In addition, there continues to be national debate regarding standardization of CHW training. Although the exact credentialing that should be required is debated, there is consensus that state-level certification would help provide for reimbursement, and regardless of standard training, CHWs will continue to need tailored training for the particular program or function they serve. <sup>35</sup> Thus policies regarding

credentialing standards are important to elucidate sustainable approaches to CHW-led programs. However, allowing for tailored roles will continue to maintain the unique flexibility of community health worker models to best fit specific community needs.

The ACA not only serves as the most comprehensive healthcare law enacted since the advent of Medicare and Medicaid, but as an evidence-based sequence of opportunities for CHWs to fill broad gaps in the US healthcare system. A focused agenda for CHWs will provide a vision for highlighting the strengths and potential of these community-oriented individuals working on behalf of patients and neighborhoods. The areas described in this review highlight areas in which CHWs can play key roles that connect to some of the most salient parts of health reform. By demonstrating the value of CHW-led initiatives in these areas, proponents of CHW approaches can advance the agenda of sustainable integration of CHWs in the healthcare team.

### References

- 1. Martinez J, Ro M, William Villa N, Powell W, Knickman JR. Transforming the Delivery of Care in the Post–Health Reform Era: What Role Will Community Health Workers Play? American Journal of Public Health. 2011; 101:e1–e5. [PubMed: 22021289]
- Patient Protection and Affordable Care Act. Public Law 111–148, 42 USC 256a-1, § 3024. 2010 Mar 31. In.
- Patient Protection and Affordable Care Act. Public Law 111–148, 42 USC 256a-1, § 3021. 2010 Mar 31. In.
- Otero-Sabogal R, Arretz D, Siebold S, et al. Physician-community health worker partnering to support diabetes self-management in primary care. Qual Prim Care. 2010; 18:363–372. [PubMed: 21294977]
- 5. Gary TL, Batts-Turner M, Yeh H-C, et al. The effects of a nurse case manager and a community health worker team on diabetic control, emergency department visits, and hospitalizations among urban African Americans with type 2 diabetes mellitus: a randomized controlled trial. Arch Intern Med. 2009; 169:1788–1794. [PubMed: 19858437]
- Roman LA, Lindsay JK, Moore JS, et al. Addressing mental health and stress in Medicaid-insured pregnant women using a nurse-community health worker home visiting team. Public Health Nurs. 2007; 24:239–248. [PubMed: 17456125]
- Adair R, Christianson J, Wholey DR, et al. Care guides: employing nonclinical laypersons to help primary care teams manage chronic disease. The Journal of Ambulatory Care Management. 2012; 35:27–37. [PubMed: 22156953]
- 8. Allen JK, Dennison-Himmelfarb CR, Szanton SL, et al. Community Outreach and Cardiovascular Health (COACH) Trial: a randomized, controlled trial of nurse practitioner/community health worker cardiovascular disease risk reduction in urban community health centers. Circ Cardiovasc Qual Outcomes. 2011; 4:595–602. [PubMed: 21953407]
- 9. Norris SL, Chowdhury FM, Van Le K, et al. Effectiveness of community health workers in the care of persons with diabetes. Diabet Med. 2006; 23:544–556. [PubMed: 16681564]
- 10. 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. Ethn Dis. 2003; 13:22–27. [PubMed: 12723008]
- 11. Viswanathan M, Kraschnewski J, Nishikawa B, et al. Outcomes of community health worker interventions. Evid Rep Technol Assess (Full Rep). 2009:1–144. A1–2, B1–14, passim. [PubMed: 20804230]
- Patient Protection and Affordable Care Act. Public Law 111–148, 42 USC 256a-1, § 2951. 2010 Mar 31. In.

13. Agrawal PK, Agrawal S, Ahmed S, et al. Effect of knowledge of community health workers on essential newborn health care: a study from rural India. Health Policy Plan. 2012; 27:115–126. [PubMed: 21385799]

- 14. Bhandari N, Mazumder S, Taneja S, Sommerfelt H, Strand TA. Effect of implementation of Integrated Management of Neonatal and Childhood Illness (IMNCI) programme on neonatal and infant mortality: cluster randomised controlled trial. BMJ. 2012; 344
- Swart L, van Niekerk A, Seedat M, Jordaan E. Paraprofessional home visitation program to prevent childhood unintentional injuries in low-income communities: a cluster randomized controlled trial. Inj Prev. 2008; 14:164–169. [PubMed: 18523108]
- 16. Kronborg H, Vaeth M, Kristensen I. The effect of early postpartum home visits by health visitors: a natural experiment. Public Health Nurs. 2012; 29:289–301. [PubMed: 22765241]
- Baqui AH, El-Arifeen S, Darmstadt GL, et al. Effect of community-based newborn-care intervention package implemented through two service-delivery strategies in Sylhet district, Bangladesh: a cluster-randomised controlled trial. Lancet. 2008; 371:1936–1944. [PubMed: 18539225]
- 18. Manandhar DS, Osrin D, Shrestha BP, et al. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. Lancet. 2004; 364:970–979. [PubMed: 15364188]
- Lassi Z, Bhutta Z. Unfolding the universe of newborn health interventions: the role of innovative community-based strategies. BJOG: An International Journal of Obstetrics & Gynaecology. 2011; 118:18–21. [PubMed: 21951497]
- Kendrick D, Elkan R, Hewitt M, et al. Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis. Arch Dis Child. 2000; 82:443–451.
   [PubMed: 10833174]
- Olds DL, Henderson CR Jr, Kitzman HJ, Eckenrode JJ, Cole RE, Tatelbaum RC. Prenatal and infancy home visitation by nurses: recent findings. Future Child. 1999; 9:44–65. 190–191. [PubMed: 10414010]
- Black MM, Dubowitz H, Hutcheson J, Berenson-Howard J, Starr RH Jr. A randomized clinical trial of home intervention for children with failure to thrive. Pediatrics. 1995; 95:807–814.
   [PubMed: 7539121]
- Barnes-Boyd C, Fordham Norr K, Nacion KW. Promoting infant health through home visiting by a nurse-managed community worker team. Public Health Nurs. 2001; 18:225–235. [PubMed: 11468062]
- Patient Protection and Affordable Care Act. Public Law 111–148, 42 USC 256a-1, § 3025. 2010
  Mar 31. In.
- 25. Fisher EB, Strunk RC, Highstein GR, et al. A randomized controlled evaluation of the effect of community health workers on hospitalization for asthma: the asthma coach. Arch Pediatr Adolesc Med. 2009; 163:225–232. [PubMed: 19255389]
- 26. Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. Arch Intern Med. 2006; 166:1822–1828. [PubMed: 17000937]
- Parrish MM, O'Malley K, Adams RI, Adams SR, Coleman EA. Implementation of the care transitions intervention: sustainability and lessons learned. Professional case management. 2009; 14:282–293. quiz 94–5. [PubMed: 19935345]
- 28. Kangovi S, Long JA, Emanuel E. Community Health Workers Combat Readmission. Arch Intern Med. 2012:1–2. [PubMed: 22710831]
- 29. Brian, D.; Smedley, AYS.; Alan, R. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (full printed version). Washington, D.C.: The National Academies Press; 2003. Nelson ECoU, Eliminating R, Ethnic Disparities in Health C.
- 30. Schlotthauer AE, Badler A, Cook SC, Perez DJ, Chin MH. Evaluating interventions to reduce health care disparities: an RWJF program. Health Aff (Millwood). 2008; 27:568–573. [PubMed: 18332515]
- 31. Patient Protection and Affordable Care Act. Public Law 111–148, 42 USC 256a-1, § 5301. 2010 Mar 31. In.

32. Chesluk BJ, Holmboe ES. How Teams Work—Or Don't—In Primary Care: A Field Study On Internal Medicine Practices. Health Aff. 2010; 29:874–879.

- 33. Gilson L, Walt G, Heggenhougen K, et al. National community health worker programs: how can they be strengthened? J Public Health Policy. 1989; 10:518–532. [PubMed: 2621254]
- 34. Balcazar H, Rosenthal EL, Brownstein JN, Rush CH, Matos S, Hernandez L. Community health workers can be a public health force for change in the United States: three actions for a new paradigm. American journal of public health. 2011; 101:2199–203. [PubMed: 22021280]
- 35. Sprague L. Community Health Workers: A Frontline for Primary Care?: The George Washington University. 2012 Sep 17. 2012.