Issue Brief
July 2016

Minnesota's Health Care Homes and Chronic Disease Management: Understanding the Integration of Community Health Workers

Health reform provides the opportunity to address health disparities in chronic disease management through the redesign of primary care teams, called Patient-Centered Medical Homes or Health Care Homes (HCHs) in Minnesota. Although evidence supports the value of community health workers (CHWs), it is estimated that less than 10 percent of Minnesota HCHs utilize CHWs.

In a first-ever study of HCH team composition, the Minnesota Community Health Worker Alliance and University of Minnesota joined in a community-university research partnership to identify barriers and facilitators to CHW integration. This research fills a gap in understanding drivers of HCH team structure and composition. In view of Minnesota's head-start in primary care transformation based on 2008 health reform legislation, lessons learned from this state's experience can help inform implementation of team-based models elsewhere in the U.S. Building on study findings and other key factors, recommended action steps offer pathways to bring the benefits of CHW integration to more HCH patients and teams.

INTRODUCTION

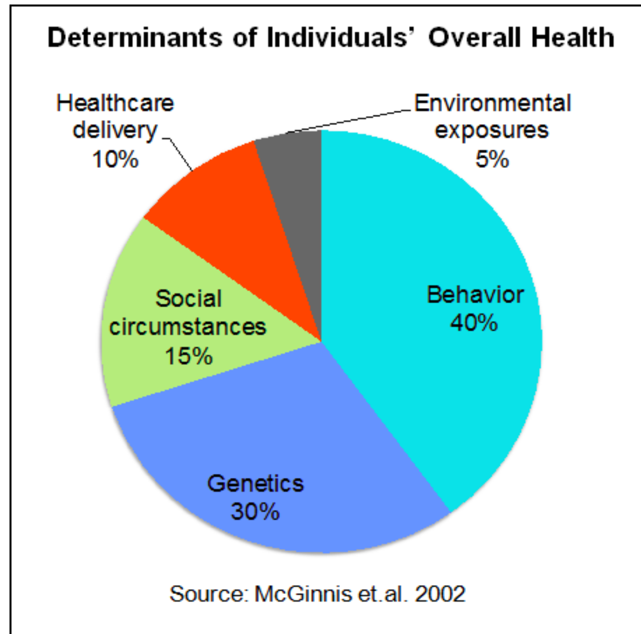
Health Reform: Challenges and Opportunities for Primary Care

The 2010 passage of the nation's landmark Patient Protection and Affordable Care Act (ACA) has accelerated the trend in population health management with innovative models in primary care that promote the Triple Aim—better health and better outcomes at lower costs. Primary care transformation calls for addressing such major challenges as:

- **Improving care and reducing costs related to chronic illness.** According to the Kaiser Family Foundation, the top 5 percent of Medicaid enrollees account for more than 50 percent of spending.[i]
- **Recognizing the profound influence of social, behavioral and environmental determinants of health.** Meeting medical needs alone is often not enough. In

underserved populations, health concerns are too often eclipsed by unmet basic needs, such as access to healthy food, affordable housing and transportation.[ii]

- **Advancing health equity.** In Minnesota and other states, confronting health inequalities related to income, culture, race, language, literacy, geography, trust and other factors has become a major focus. Clinical indicators reported by race and ethnicity uncover disparities and provide benchmarks for improvement.[iii] According to the Robert Wood Johnson Foundation, "Four in five physicians surveyed are not confident in their capacity to address their patients' social needs," and four in five also say that "unmet social needs are directly leading to worse health."[iv]



"Minnesota has some of the greatest health disparities in the country between whites and people of color and American Indians.
--Minnesota Department of Health, Center for Health Equity[v]

- **Overcoming siloed health and social services.** Patients with ongoing health needs due to multiple chronic conditions are particularly affected by the complexity and fragmentation of the health care system. Moreover, addressing cultural and linguistic differences, low literacy, psychosocial issues and basic needs related to poverty call for services that many primary care clinics may not offer. Service gaps and lack of coordination lead to poorer outcomes and higher costs for patients and state programs.

Promoted by the ACA and implemented in Minnesota in 2010, the Patient-Centered Medical Home (known as Health Care Homes in Minnesota) is an innovative primary care delivery model that presents the opportunity to effectively address these and other challenges, using standards and best practices to improve care, outcomes and affordability. Team-based care coordination is a key feature of HCHs. (See sidebar: "Health Care Homes Overview."[vi])

Community Health Workers: Emerging Health Profession

In Minnesota and across the United States, community health workers (CHWs) constitute an emerging health profession with deep community roots. They apply their personal attributes,

training and shared life experience with the communities they serve to carry out a variety of roles to advance health equity and the Triple Aim.

According to the American Public Health Association (APHA), "A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy."

Health Care Homes Overview

- A collaboration between the Minnesota Department of Health and Minnesota Department of Human Services and cornerstone of the state's 2008 health reform legislation.
- Minnesota's version of the Patient-Centered Medical Home model combines primary care redesign and payment reform with a focus on patients with chronic health conditions.
- Patient-centered teams emphasize care coordination including patient goal-setting, tracking and information-exchange across care settings.
- According to a 2016 University of Minnesota evaluation, health care homes (HCH) saved $1 billion over five years and outperformed other clinics on quality measures.
- More than 360 clinics are now HCH-certified, representing 54% of the state's primary care clinics.

It should be noted that CHWs do not typically provide clinical care and do not hold a license in another health-related profession such as nursing, social work or community paramedicine.

Minnesota is a leader in CHW field-building, including education and payment. First in the nation to develop and implement a statewide, standardized competency-based curriculum in higher education, Minnesota now has over 650 CHWs who have earned a post-secondary certificate in the nationally-recognized model program. Minnesota Health Care Programs (the state's Medicaid program) covers diagnostic-related patient education and self-management services provided by clinically-supervised CHW certificate holders.

CHWs and HCHs: Addressing Health Disparities

Health authorities such as the APHA, the Centers for Disease Control, the Health Resources and Services Administration and the Institute of Medicine recognize CHWs as integral to a comprehensive approach to addressing persistent and preventable health inequalities. A growing body of research and experience points to CHW effectiveness in improving outcomes related to asthma, cancer, diabetes, heart disease and other conditions.[vii]

As trusted and knowledgeable members of the communities they serve, CHW team members are uniquely equipped to build relationships that inform and empower patients with chronic

illness who face barriers to good health and good care related to culture, language, literacy and socioeconomic factors. CHWs can help create *supportive environments*, increase *community action*, promote *patient self-management and skill-development*, and participate in *health care delivery design,* with a focus on low income, underserved populations. These activities are important and widely-adopted components of high quality chronic disease management.[viii] Yet, it is estimated that fewer than 10% of Minnesota's HCHs have incorporated CHWs on their teams. Until the on-the-ground issues that influence clinic team composition and care approaches are better understood, roadblocks to mitigating health disparities in chronic disease outcomes through primary care redesign will likely remain.

RESEARCH SUMMARY

Current Research Focus and Findings

Within this context, the Minnesota Community Health Worker Alliance and the University of Minnesota Medical School partnered on a community-university research project aimed at understanding: 1) How HCH clinic leaders make decisions about the composition of their health care teams, and 2) barriers and facilitators to the adoption and integration of CHWs into these teams. The research team studied nine certified HCHs serving patients with chronic illness and low socioeconomic status, including communities of color and refugee and immigrant populations in the Twin Cities and in Greater Minnesota. Five employed CHWs and four did not. Clinics included those that are part of large integrated health systems as well as independent community health centers. Through a set of 51 semi-structured key informant interviews of administrators, clinicians, CHWs and other staff, the researchers identified drivers of HCH team composition and structure, CHW roles, and facilitators and barriers to CHW integration among HCHs, using general inductive qualitative methods.

To obtain feedback, the research team previewed findings with CHWs, employers and other stakeholders at the August 5, 2015, meeting of the Minnesota Community Health Worker Alliance. Research findings were shared with the Minnesota Department of Health in early 2016 as a springboard for collaboration. Follow-up also included presentation at the statewide HCH Learning Days program on April 27, 2016, and summary reports to participating clinics.

CHW Voices: Patient-centered Teamwork and Passion

"CHWs we interviewed often spoke of their passion for helping patients and providers. One described how a physician appreciated and trusted the CHW role when patients had concerns: 'Thank God you are here. Here is my problem, help me.' Another CHW spoke of her commitment to her work: 'I've had jobs where I make more money … it's not about the money, it's about the passion …. I'm the luckiest person in the world because I get to do what I love to do.' " **– Elizabeth Rogers, MD, MAS, Research Study Co-Principal Investigator, University of Minnesota Medical School**

Research findings centered on:

1. **Drivers of team structure and composition**. The make-up of HCH teams and decisions related to creating new team structures are influenced by:
   a. *Leadership structure and style*. Presence of an influential champion who advocates for a change in team structure, such as adding a CHW, and helps garner resources and support to introduce and test this model of team-based care was found to be essential.
   b. *Perceived need for innovation.* According to one HCH clinician, "… the Health Care Home gives us an anatomy of [an HCH model]. … it's up to us to define the physiology." State certification guidelines require every HCH to provide patient-centered, team-based care including care coordination, but team composition and the specific discipline of the care coordinator are at the clinic's discretion. This flexibility leads to variety in team compositions, although adding a workforce innovation, such as the CHW role, has not been the norm. Clinics that integrate CHWs recognize the benefits of this innovation and commit to its successful implementation.
   c. *Readiness for implementation.* How clinics perceive the complexity of structuring new roles influences staffing decisions. For example, HCHs that did not employ CHWs expressed preference for hiring a care coordinator from within the existing clinic staff. They shared concerns about their ability to manage perceived complications and expanded responsibilities involved with adding new CHW staff.
   d. *Perceived patient needs.* While all HCHs address medical complexity and tier their patients based on severity and other factors, they vary in the emphasis they place on psychosocial issues, cultural and linguistic barriers, social determinants of health, community linkages and need for home visits. Clinics that adopted the CHW role tended to talk more frequently about psychosocial conditions affecting patient health.
   e. *Sustainability.* HCH clinic leaders factored financial considerations into their hiring decisions. Clinics that employ CHWs pointed to their value as a dedicated, trusted and sustainable resource for strengthening culturally-appropriate care coordination and health coaching.

Examples of CHW Team Structures

- RN Care Coordinator with CHW referral
- LPN Care Coordinator with CHW as cultural bridge
- CHW as Care Coordinator, Clinic Representative, Community Organizer
- Care Coordinator Teams: CHWs, MSWs, RNs
- CHW Care Coordinator with RNs and MSWs as consultant referrals

2. **CHW Roles**. Across the clinics that employ CHWs, the research team found *universal CHW roles* including patient outreach, health education, community resource linkage, health coaching, and health-systems navigation. In addition, the team identified *clinic-specific CHW roles* encompassing HCH care coordination, home-based support, community health promotion, cultural liaison and language-specific coordination.

3. **Barriers and Facilitators to CHW Integration.** Internal champions with innovation know-how, leadership and a comprehensive approach to HCH team-based care were found to be essential to successful introduction of CHWs. Clinics that incorporated CHWs on their teams explicitly recognized the impact of social and cultural factors on the health of their patient populations and how CHWs can effectively address these important non-medical needs in ways that complement the clinical expertise of other team members. Grant-supported introduction and evaluation of CHW services was critical for piloting the new model in almost all CHW clinics.

   HCHs that did not include CHWs exhibited low awareness of the unique strengths and potential value of the CHW profession and high preference for staffing HCH teams with familiar disciplines. They also often highlighted medical complexity as an important contributor to poor health rather than psychosocial factors.

Barriers
Lack of knowledge and awareness of CHW role; no prior experience with CHWs
More traditional medicalized view of patient population needs
Perception that status quo staffing model is effective; haven't connected potentials for CHWs to fill identified gaps; favor familiarity of "known" disciplines for team roles
Questions and uncertainty about CHW scope, sustainability and supervision

Facilitators
Internal champions – clinician and administrator
Comprehensive view of patient population needs and diversity which in turn influences staffing model for care coordination; wider lens encompassing psychosocial and cultural considerations vs. primarily medical model
Grant funding to pilot and support CHW integration; need to test innovation, prove value, and experience CHW services
Openness and support for CHW model; enthusiasm for role and results once CHWs established on teams

Study Limitations

The sample of certified HCHs does not represent all primary care clinics, particularly outside of Minnesota. Biases may exist among practices that seek certification early, but the direction of these potential biases is not clear. The research team attempted to minimize personal biases by acknowledging them and by using consensus among all team members and interpretation of findings by key stakeholders to identify key themes.

LOOKING AHEAD

Bringing Benefits of CHWs to More HCH Teams

CHWs are useful members of HCH teams. Participating HCH clinics that conducted internal evaluations of their CHW pilots reported positive outcomes, such as reduction in unnecessary health-care utilization and improved chronic disease measures. Some clinics, in turn, hired more CHWs.

A trial period was found to be critical to embracing innovation and successfully embedding the role in HCH teams. Previous exposure to CHW benefits and strong champions were key success factors in building support for CHW integration.

Feedback from HCHs with CHWs

"[Patients] would try to get into care coordination just for the benefit of the Community Health Worker services."
– HCH Care Coordination Manager

"I honestly think the addition of CHWs has been all benefit …."
– HCH Clinic Medical Director

Leadership, partnership and policy efforts are needed to promote greater adoption of effective, evidence-based, culturally-competent CHW strategies by Minnesota HCH teams. Strategic communications, clinic capacity-building, technical assistance, pilot grants, interprofessional education and policy changes all hold potential for increasing CHW integration, carrying the promise of sustainable, high-performing team models that effectively link clinic, home and community, and reduce health inequities.

Recommended Action Steps

In view of study findings, positive results reported by HCH clinics with CHWs, the central role of the HCH model in Minnesota's health reform and the clear need to close health gaps, the Minnesota Community Health Worker Alliance has identified the following opportunities:

- ✓ ***Expand awareness of the CHW role and its benefits among certified HCHs and clinics seeking certification.*** Examples include furnishing information about CHW models in HCH certification and recertification materials and processes and through Minnesota Department of Health HCH consulting services so that clinics can factor CHW integration into their team staffing decisions for the benefit of patients and teams. Share the State of Minnesota CHW Tool Kit (available in fall 2016) with HCHs via email and webinar.

- ✓ ***Begin to gather and report data on HCH team composition, including CHW integration***. Team structure is an important component of understanding HCH performance.

- ✓ ***Identify and support CHW champions within HCHs and share implementation success stories.*** Form and staff a CHW integration work group.

- ✓ ***Build CHW supervisor capacity through training and mentorship to increase confidence and know-how.*** Most HCH clinic managers are not familiar with the emerging CHW profession. Training and technical assistance can equip supervisors with skills to effectively oversee and support CHW services and help other team members understand the role, its scope and benefits.

- ✓ ***Help HCH clinics strengthen their cultural competence, community-clinic linkages and focus on social determinants of health***. CHW strategies align well with the vision of Minnesota's Accountable Health Model, which calls for expanding the number of HCHs and their reach into communities. As the HCH initiative continues to evolve, success indicators could include measures using CHW models that drive improvements in culturally-appropriate, patient-centered care and help broaden the focus to community conditions that impact health.

- ✓ ***Encourage HCH teams to adopt staffing models that reflect the diversity of the populations they serve to help address barriers related to culture, language and trust***. CHWs can help grow and diversify Minnesota's health workforce.

- ✓ ***Launch a learning collaborative comprised of HCHs employing CHWs who are interested in collecting, sharing and reporting program results.*** This effort will further strengthen CHW integration strategies by HCHs and also improve understanding of the impact of team-based approaches that include CHW services, leading to greater uptake of this health equity innovation. It offers synergies with the Common Indicators Project, a national initiative spearheaded by the Michigan Community Health Worker Alliance.[ix]

Is a CHW Needed on Your HCH Team?

- Is your clinic underperforming on clinical indicators among low-income patients, communities of color or immigrant and refugee populations?
- Are you finding that culture and language barriers are getting in the way of success?
- Are clinical staff members spending time on non-medical tasks, such as reminder calls, arrangements for transportation, paperwork, community resources for patients, missed appointments and unnecessary ER use?
- Are you finding that patient activation and trust are issues that need attention, especially among low-income patients?
- Are clinic-community linkages falling short due to lack of time and knowledge about cultural groups and community nonprofits?

"We do need to have individuals treated in the context of their culture, in the context of their community, in the context of their environment. CHWs as part of the team will help move us in that direction." **-- Dr. Ed Ehlinger, Minnesota Health Commissioner**

References and Resources

Addressing Chronic Disease Through Community Health Workers: A Policy and Systems-Level Approach. Centers for Disease Control and Prevention, Second Edition, April 2015. http://www.cdc.gov/dhdsp/docs/chw_brief.pdf

Allen, C. et al. Strategies to Improve the Integration of Community Health Workers in Medical Homes: "A Little Fish in a Big Pond." Preventing Chronic Disease 12: E154, 2015. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4576500/

American Public Health Association CHW Section. https://www.apha.org/apha-communities/member-sections/community-health-workers/

Findlay, S. et al. Community Health Worker Integration into the Health Care Team Accomplishes the Triple Aim: A Bronx Tale. Journal of Ambulatory Care Management 37: 1, 82-91, January-March 2014.

Fontaine, P. et al. Minnesota's Early Experience with Medical Home Implementation: Viewpoints from the Front Lines. Journal of General Internal Medicine 30:7, December 13, 2014.

Health Care Homes, Five Year Program Evaluation: Key Findings from the University of Minnesota Evaluation, February 2016. http://www.health.umn.edu/sites/default/files/HCH%20Evaluation_summary.pdf

Hostetter, M and Klein, S. In Focus: Integrating Community Health Workers into Care Teams. Commonwealth Fund, December 17, 2015. http://www.commonwealthfund.org/publications/newsletters/transforming-care/2015/december/in-focus?omnicid=952575&mid=joanlcleary@gmail.com

Making the Connection: The Role of Community Health Workers in Health Homes. A Report by Health Management Associates funded by the W.K. Kellogg Foundation and New York State Health Foundation, September 2012. http://nyshealthfoundation.org/uploads/resources/making-the-connection-community-health-workers-sept-2012.pdf

Matiz, L. et al. The Impact of Integrating Community Health Workers into the Patient-Centered Medical Home. Journal of Primary Care and Community Health 5: 4, 271-274, 2014. http://www.ncbi.nlm.nih.gov/pubmed/24970881

Minnesota Accountable Health Model. http://mn.gov/health-reform/SIM/

Minnesota Department of Health Emerging Health Professions Initiative. http://www.health.state.mn.us/divs/orhpc/workforce/emerging/chw/index2.html

Minnesota Department of Health Health Care Home Initiative. http://www.health.state.mn.us/healthreform/homes/index.html

Valdovinos, E. et al. Community-Centered Health Homes: Bridging the Gap Between Health Services and Community Prevention. Prevention Institute, February 2011. http://www.preventioninstitute.org/component/jlibrary/article/id-298/127.html

Wennerstrom, A. et al. Integrating Community Health Workers into a Patient-Centered Medical Home to Support Disease Self-Management Among Vietnamese Americans: Lessons Learned. Health Promotion Practice 1: 72-83, January 2015. http://hpp.sagepub.com/content/16/1/72.long

---

Acknowledgements

The Minnesota Community Health Worker Alliance thanks our research partners at the University of Minnesota for their collaboration and expertise:

- Elizabeth Rogers, MD, MAS, Assistant Professor, Internal Medicine and Pediatrics, Applied Clinical Research Program, Medical School
- Sarah Manser, MA, Research Specialist, Applied Clinical Research Program, Medical School
- Kathleen Thiede Call, PhD, Professor, Health Policy & Management, School of Public Health
- Eileen Harwood, PhD, Associate Professor, Epidemiology and Community Health, School of Public Health

The Alliance appreciates the valuable time and insights given by the participating clinics, as well as the generous support of the Office of Community Engagement to Advance Research on Community Health (CEARCH) at the University of Minnesota Clinical and Translational Science Institute. Also, the Alliance acknowledges the major effort by the Minnesota Department of Health in implementing HCH certification. Research reported in this issue brief was funded by the National Center for Advancing Translational Sciences of the National Institutes of Health Award Number ULITR000114. The issue brief contents are the responsibility of the Minnesota Community Health Worker Alliance and do not necessarily represent the official views of the National Institutes of Health or the University of Minnesota.

About the Minnesota Community Health Worker Alliance

Committed to equitable and optimal health outcomes for all communities, the Alliance serves as a statewide catalyst, convener, leader and resource to build community and systems' capacity for better health through the integration of CHW models. For more information, visit: www.mnchwalliance.org.

For more information (such as scope, design or limitations) about the community-university research study summarized in this brief, please contact Elizabeth Rogers, MD, MAS, University of Minnesota Medical School, at 612-625-5474 or earogers@umn.edu.

[i] https://kaiserfamilyfoundation.files.wordpress.com/2015/03/7235-09-figure-9.png?w=735&h=551&crop=1

[ii] McGinnis JM, Russo PG, Knickman, JR. *Health Affairs,* April 2002.

[iii] Advancing Health Equity in Minnesota, Report to the Legislature, Minnesota Department of Health, February, 2014, http://www.health.state.mn.us/divs/chs/healthequity/ahe_leg_report_020414.pdf

[iv] Robert Wood Johnson Foundation, "Health Care's Blind Side: The Overlooked Connection between Social Needs and Good Health." December 2011.

[v] Minnesota Department of Health Center for Health Equity, http://www.health.state.mn.us/divs/che/HealthEquityBrochure.pdf

[vi] http://www.health.state.mn.us/healthreform/homes/

[vii] According to the Centers for Disease Control, 2014, engaging CHWs is an evidence-based public health practice supported by: 2011 National Prevention Strategy; 2010 Patient Protection and Affordable Care Act; 2010 Institute of Medicine Report: *A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension;* 2002 Institute of Medicine Report: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* http://www.cdc.gov/dhdsp/programs/spha/docs/chw_summary.pdf

[viii] Chronic Care Model. https://www.grouphealthresearch.org/news-and-events/recent-news/news-2009/chronic-care-model-helps-improve-peoples-health-and-care/

[ix] Common Indicators Project. http://www.michwa.org/common-indicators-project-2/