



**Integrating Community Health Workers into State  
and Local Chronic Disease Prevention Efforts:**  
Program and Financing Considerations



# Integrating Community Health Workers into State and Local Chronic Disease Prevention Efforts: Program and Financing Considerations

By: Anna Spencer, MPH, Center for Health Care Strategies

February 2018

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>Introduction</b>   | <b>2</b>  |
| <b>Background on Washington’s Medicaid Transformation Project Demonstration</b> | <b>3</b>  |
| <b>Community Health Workers</b>   | <b>4</b>  |
| <b>The Evidence Supporting Community Health Workers</b>                         | <b>7</b>  |
| <b>Managed Care and Other Financing Models for Community Health Workers</b>     | <b>7</b>  |
| <b>Conclusion</b>   | <b>10</b> |

## INTRODUCTION

Chronic disease is the leading cause of poor health, disability and death in the U.S., as well as the greatest contributor to overall health care expenditures.<sup>1</sup> Despite the enormous health and cost burdens posed by preventable chronic health conditions such as type 2 diabetes, heart disease and obesity the U.S. invests very little in prevention compared to other types of health care expenditures. In 2015, of the more than \$3 trillion spent nationally on health care, less than four percent was dedicated to prevention and public health.<sup>2,3</sup>

Evidence-based prevention interventions, however, have the potential to reduce long-term health care costs.<sup>4</sup> A 2013 Centers for Disease Control and Prevention (CDC) report found that the average health expenditures for adults without chronic conditions was \$2,367, compared with \$8,478 for adults with two or three chronic conditions, and \$16,257 for adults with four or more chronic conditions.<sup>5</sup> These trends are also evident in the Medicaid population. In 2009, Medicaid programs spent \$13,490 per capita for nonelderly adult enrollees with diabetes, compared with \$5,130 for enrollees without diabetes.<sup>6</sup> The benefits associated with investing in chronic disease prevention include improved quality of life, lower health care spending, less school and workplace absenteeism and increased economic productivity.

Investing in prevention, however, is not always a priority. One reason why policymakers are reluctant to invest in prevention is because the benefits from these prevention programs are often deferred to the future, while costs incurred to implement interventions are immediate. Additionally, chronic diseases are often caused by multiple factors, such as personal behaviors, and social and environmental issues. Indeed, a growing body of evidence affirms that social determinants such as housing, food security and transportation have a significant impact on health outcomes and health care spending. As a result, Medicaid and other payers are increasingly trying to address these social determinants alongside clinical factors to improve health outcomes and drive down health care costs, particularly in an environment that values outcomes.

As states, localities and cross-sector efforts like Accountable Communities of Health (ACHs) develop upstream prevention programs, identifying where community health workers (CHWs) can be most effective – with what population, condition and intervention – will help to inform intervention design. This brief explores the unique role CHWs can play in addressing the social needs that have tremendous impact on the burden of chronic disease, particularly among low-income populations. While the brief draws upon information gathered to help Washington State and its ACHs, it also outlines lessons for any state seeking to integrate CHWs into their chronic disease prevention and control interventions.

This brief: (1) outlines a common definition and roles for CHWs; (2) examines the evidence behind incorporating CHWs into upstream prevention efforts; and (3) discusses financing options available to support CHWs. The brief starts by providing context on Washington's reform effort and its interest in utilizing CHWs to further these efforts.

Nemours Children's Health System was awarded a one-year grant to help three state Medicaid programs test approaches to financing upstream prevention and population health through AcademyHealth's Payment Reform for Population Health Initiative, with funding from the Robert Wood Johnson Foundation. While almost all states have begun Medicaid delivery system reform, initiatives and programs geared toward upstream prevention and population health are in varying stages of development. Nemours provided technical assistance to three states – Maryland, Oregon and Washington – as they developed or implemented upstream prevention strategies using Medicaid funds. This brief is one in a series of six "how-to" briefs illustrating how states can use existing Medicaid authority to finance innovative upstream prevention and population health initiatives. The entire series of briefs can be found at <http://movinghealthcareupstream.org/innovations/medicaid-payment-strategies-for-financing-upstream-prevention>. To learn more about AcademyHealth's Payment Reform for Population Health initiative, visit [www.academyhealth.org/p4ph](http://www.academyhealth.org/p4ph).



## BACKGROUND ON WASHINGTON'S MEDICAID TRANSFORMATION PROJECT DEMONSTRATION

Under Washington's Medicaid Transformation Project Demonstration, nine ACHs are developing regional transformation projects designed to address local health priorities, transform the Medicaid delivery system, improve population health, and reduce health care disparities. ACHs are required to pursue at least four projects and, at their discretion, can select additional projects. Projects are designed to address systems capacity and infrastructure, the health care delivery system and chronic disease and prevention. All nine ACHs elected to implement projects focused on chronic disease prevention and control when they submitted their projects for assessment in November 2017.<sup>7</sup> (see Washington Medicaid Transformation Projects: Project Domains page 4). Over the past year, with support from AcademyHealth through their Payment Reform for Population Health initiative, Nemours has been working with Washington to promote upstream prevention within the Medicaid program, help make the case to the ACHs to pursue *Domain 3D* projects and provide technical assistance to select ACHs to facilitate design and implementation of their Medicaid transformation projects. (The brief about making the case for prevention is available at <http://movinghealthcareupstream.org/innovations/medicaid-payment-strategies-for-financing-upstream-prevention/making-the-case-for-prevention>.)

Recognizing the tremendous influence that social determinants of health (SDOH) (e.g., safe housing and local food markets) have on health outcomes and spending, ACHs and their partner organizations are eager to implement strategies that improve efficiency and care delivery and also align with Healthier Washington's value-based payment principles. (Healthier Washington is the state's strategy for a transformed health care delivery system focused on delivering better and more affordable health care.) Healthier Washington requires that the strategies ACHs are putting in place concurrently address systems capacity, specifically around workforce, the health care delivery system, and disease-specific projects. To that end, all ACHs have elected to use CHWs to achieve their project goals across all domains, including chronic disease-specific interventions.

## Washington's Medicaid Transformation Projects: Project Domains

Each of the state's nine ACHs have developed Medicaid transformation projects articulating plans to implement evidence-based strategies within three domains:

- **Domain 1: Health Systems and Community Capacity Building.** Must implement strategies across three focus areas: (1) Financial Sustainability Through Value-Based Payment; (2) Workforce; and (3) Systems for Population Health Management.
- **Domain 2: Care Delivery Redesign.** Must implement one required project (Directional Integration of Care and Primary Care Transformation) and one optional project from one of three categories: (1) Project 2B-Community-Based Care Coordination; (2) Project 2C-Transitional Care; or (3) Project 2D-Diversion Interventions.
- **Domain 3: Prevention and Health Promotion.** Must implement one required project (Addressing the Opioid Use Public Health Crisis) and one optional project from one of three categories: (1) Project 3B-Maternal and Child Health; (2) Project 3C-Access to Oral Health Services; and (3) Project 3D-Chronic Disease Prevention and Control.



## COMMUNITY HEALTH WORKERS

CHWs can play a key role helping providers and plans achieve their chronic disease prevention and health promotion goals. CHWs are known by a variety of names, including community health advisor, community health representative, promotora/promotores de salud, patient navigator, peer counselor and health advisor.<sup>8</sup> As trusted members of their communities, CHWs serve as liaisons or intermediaries for patients navigating between health and social services and help improve access to necessary care. Through outreach, community education, informal counseling, social support and advocacy, CHWs build individual and community capacity by increasing health knowledge and self-sufficiency.<sup>9</sup> CHWs can play an important role in identifying individual-level issues or health problems, such as food insecurity or inability to pay utilities, and effect change at a population level by identifying and/or mitigating the underlying causes of health problems. A study in Arizona found that CHWs were often aware of the structural and policy issues affecting individuals' health within their communities (e.g., senior access to transportation or availability of after-school programs) and were effective at voicing those issues to relevant policymakers, such as elected officials and school board trustees.<sup>10</sup>

CHWs also can help individuals access preventive services, such as mammograms, cervical cancer screenings and immunizations, which can lower rates of serious illness and disease, and help individuals effectively manage chronic conditions. For example, they can help individuals follow treatment plans, helping to control blood sugar and monitor blood pressure.<sup>11</sup>

### Community Health Worker Roles

In addition to connecting individuals to medical care and social services, CHWs can: (1) manage care transitions; (2) ensure cultural competency among healthcare providers serving vulnerable populations; (3) educate providers and stakeholders about community health needs; (4) provide culturally appropriate health education on topics related to chronic disease prevention, physical activity and nutrition; (5) advocate for underserved individuals to receive appropriate services; (6) provide informal counseling, health screenings and referrals; (7) build capacity to address health issues; and (8) collect data to inform policy change and development.<sup>12</sup> See box below for more detail about CHW roles.<sup>13</sup>

### Community Health Worker

A community health worker is a frontline public health worker who is a trusted member of the community or has a close understanding of the community in which he or she serves. This trusting relationship enables the worker to serve as a liaison /link/intermediary between health and social services, and resources in the community and improve the quality and cultural competency of service delivery.

— Washington CHW Task Force

### Community Health Worker: Core Roles

#### 1. Bridge the gap between individuals and the health and social service systems

- educate the health and social service systems about community needs and perspectives
- establish better communication processes
- enhance care quality by aiding communication between provider and patient to clarify cultural practices
- educate the health and social service systems about community needs and perspectives

#### 2. Navigate the health and human services systems

- increase access to primary care through culturally competent outreach and enrollment strategies
- make referrals and coordinate clinical/social services
- facilitate continuity of care by providing follow-up
- enroll clients into programs such as health insurance and public assistance

#### 3. Advocate for individual and community needs

- articulate and advocate needs of community and individuals to local leaders/policymakers

- be a spokesperson for clients when they are unable to speak for themselves
- involve participants in self and community advocacy
- map communities to help locate and support needed services

#### 4. Provide direct services

- educate clients on disease prevention/conduct health related screenings
- assist clients in self-management of chronic illnesses and medication adherence
- provide individual social and health care support
- organize and/or facilitate support groups

#### 5. Build individual and community capacity

- build individual capacity to achieve wellness
- build community capacity address social determinants of health
- mentor other CHWs – capacity building
- seek professional development (continuing education)

Source: Adapted from the Minnesota Community Health Worker Alliance.



### Training and Certification

A wide variety of CHW trainings have been developed across the country by community-based organizations, health centers, colleges and universities, and local and state health agencies. Training and certification is intended to ensure safe and effective care delivery, and curricula are often centered on core competencies, which include care coordination, outreach methods, individual and community assessment, and effective communication. However, CHWs' unique connection to the vulnerable communities they serve mean they often face the same financial, education, language and other barriers, putting typical trainings out of reach. In 2015, 15 states had laws requiring CHW certification, with 10 of those requiring certain credentialing of CHWs in order to receive payment for publicly funded health care services.<sup>14</sup>

Under Washington's Medicaid Managed Care regulations, CHWs can be part of a comprehensive care team and provide services that facilitate the work of a care coordinator, including for health home beneficiaries. For example, the Apple Health Managed Care contract – Washington's Medicaid managed care program – stipulates that care coordination may be supported by an allied health professional, including a CHW.<sup>17</sup>

While Washington does not require state-level certification of CHWs for their services to be reimbursed or contracted out as a qualified provider, there is a statewide voluntary eight-week CHW training curricula. The training focuses on: (1) communication; (2) cultural competency; (3) organization; (4) care team documentation; (5) patient assessment; and (6) service coordination.<sup>18</sup> The Task Force also developed guidelines for organizations, such as community based organizations (CBOs), managed care organizations (MCOs) and ACHs, to develop CHW training and education programs to provide quality assurance while minimizing barriers that prevent CHWs from working in their communities.<sup>19</sup> This framework closely aligns with Department of Health (DOH) training curricula, and the education components recommended by the Task Force focus on: (1) adopting a core curriculum that decreases barriers to participation by communities of color, underserved and vulnerable communities; (2) teaching transferable skills that align with CHW roles and responsibilities; and (3) strategies for allocating funds for the implementation of a training and education system that will enhance and increase opportunities for authentic and responsive CHW training.

### Washington Community Health Worker Task Force

Workforce innovation is one of Healthier Washington's strategies to transform the health care delivery system, and the Community Health Worker Task Force was charged with developing policy and system change recommendations to align with the Healthier Washington initiative. In February 2016, the Task Force released a set of recommendations, which focused on CHW roles; required skills; education and training; and sustainability considerations.<sup>15</sup> Not unlike the roles outlined herein, the Task Force affirms that CHWs can provide: (1) cultural mediation between individuals and communities and health and social services systems; (2) culturally appropriate health education and information; (3) outreach; and (4) care coordination and system navigation. In January 2018, building off the Task Force recommendations, the state legislature introduced a bill to define CHWs and their roles within the health care workforce.<sup>16</sup>



## THE EVIDENCE SUPPORTING COMMUNITY HEALTH WORKERS

There is ample evidence demonstrating CHWs' impact and capacity to effectively and cost efficiently help improve outcomes for individuals with chronic conditions, including asthma, diabetes and heart disease. For example:

- A review of CHW-delivered, home-based environmental interventions for pediatric asthma among high utilizers of care found positive outcomes, including decreases in asthma symptoms, daytime activity limitations, and emergency and urgent care use.<sup>20</sup>
- A return-on-investment (ROI) analysis of a CHW-led outreach program for West Baltimore City Medicaid patients with diabetes resulted in an average savings of \$2,245 per patient per year, and a total savings of \$262,080 for 117 patients, with improved quality of life indicating cost effectiveness. Total emergency department (ED) visits declined by 40 percent; ED admissions to hospitals declined by 33 percent, as did total hospital admissions; and Medicaid reimbursements declined by 27 percent.<sup>21</sup>
- A longitudinal analysis of the Denver Health Community Voices Patient Navigator Program, which uses CHWs to connect individuals in underserved neighborhoods, showed increased use of primary care and significant decrease in urgent care, inpatient and outpatient behavioral health care utilization. Cost savings in monthly uncompensated care were estimated to be \$14,244.<sup>22</sup>
- CHW interventions targeting cardiovascular disease have led to improvements in blood pressure and cholesterol outcomes, particularly among minority and underserved communities. A review of the literature found that CHWs helped with appointment keeping and medication adherence, and contributed to significant improvements in self-management behaviors and health outcomes.<sup>23</sup>
- A New Mexico project integrated CHWs as part of its multidisciplinary clinic teams, and CHWs taught other team members about social determinants. As a result, family medicine residents gained skills from CHWs in the value of inter-professional teamwork, cultural proficiency in patient care, effective communication, provision of cost-conscious care, and advocating for both individual and community health.<sup>24</sup>

## MANAGED CARE AND OTHER FINANCING MODELS FOR COMMUNITY HEALTH WORKERS

In 2014, nearly 48,000 CHWs were employed in almost all 50 states.<sup>25</sup> Most states rely on public and private payment mechanisms to support CHWs, while some rely on a volunteer workforce. Historically, CHW programs have been operated by community-based organizations supported through their own operating funds or by grants. States are exploring more sustainable funding strategies to reimburse CHWs, including enabling legislation, coverage requirements in MCO contracts, and through §1115 waivers and/or Delivery System Reform Incentive Payment (DSRIP) programs. Nearly three-quarters of Medicaid beneficiaries across the U.S. are enrolled in managed care. Using managed care levers, states, as well as MCOs, have considerable flexibility to provide outreach and prevention services to address chronic conditions using non-clinical providers such as CHWs.<sup>26</sup>



## Managed Care

The Medicaid managed care regulations, released in 2016 by the Centers for Medicare & Medicaid Services, stipulate that managed care plans have the flexibility to cover: (1) care coordination services; and (2) value-added services. (These distinct services have implications for managed care capitation in terms of the medical loss ratio (MLR) and future rate setting. More detail is available in a Nemours companion piece titled: *Implementing Social Determinants of Health Interventions in Medicaid Managed Care: How to Leverage Existing Authorities and Shift to Value Based Purchasing*, available at <http://www.movinghealthcareupstream.org/innovations/mcicaid-payment-strategies-for-financing-upstream-prevention/implementing-social-determinants-of-health-interventions-in-mcicaid-managed-care>.<sup>27)</sup>



Under the *Coordination and Continuity of Care* provision of Medicaid managed care regulations, MCOs must coordinate the medical services delivered under managed care with services that enrollees receive in the community and through social support providers. This provision enables MCOs to use capitation payments to cover community coordination services, including non-clinical chronic disease control and prevention activities, such as medication adherence and appointment keeping. One perceived barrier to covering these services is how these expenditures will be categorized – as administrative or medical expenses. As outlined in the Medicaid managed care regulations, such coordination expenditures may be included in the numerator of the medical loss ratio (MLR). This means that such expenditures “count” towards MCOs’ MLR requirements as an allowable expense in the numerator and helps the MCO meet the requirement that 85 percent of capitation expenditures must cover certain non-administrative expenditures. The MCO may otherwise be at risk for financial penalties if it invests in services that are intended to improve health, but incurred expenses do not meet the MLR requirements as a result.

Further, community care coordination expenditures must be included in MCO capitation rate setting. When states set future capitation rates, these expenditures may be included in that calculation, even if they were not explicitly part of the capitation payment previously. This partially mitigates the future financial downside of an MCO providing such services, which may result in lower utilization of medical services and subsequently lower capitation rates.

*Value-added services* are “additional services that are outside of the Medicaid benefit package but that seek to improve quality and health outcomes, and/or reduce costs by reducing the need for more expensive care.”<sup>28</sup> A value-added service may be considered as an expense toward the numerator of the MLR; however, because value-added services are excluded from Medicaid state plan services and required benefits, they are not included in MCO capitation rate setting. MCOs may choose to provide products and/or services beyond what is included in the benefits package under their contracts, although states may not require plans to do so. Examples of value-added services CHWs could provide include assessing the home for asthma triggers or helping enrollees with medication compliance.

As outlined above, there is considerable flexibility in managed care regulations for MCOs to cover community care coordination by CHWs and, at their discretion, provide value-added services. States and localities might consider “making a case” to their partnering MCOs to cover certain CHW services or CHW-led interventions using available health outcomes and ROI evidence. ACHs and MCOs can also work together to pilot CHW-led interventions, starting with specific populations and/or disease conditions, to identify the value and specific role CHWs can play in the care delivery process.

States can potentially leverage the staff capacity already available within MCOs to provide CHW services. MCOs often already have staff who serve in care coordination or in outreach roles. While not full-fledged CHWs, these intermediaries can be trained to perform traditional CHW roles or desired services that align with chronic disease prevention and control projects. For example, some MCOs within Washington have staff who serve as community connectors. These individuals are members of their communities, and their primary function is to connect clients to MCO care managers and available social services. These intermediaries are not certified or trained to perform clinical functions, such as screenings or health education, or serve as advocates for individuals and the community. ACHs could work with MCOs and their staff members to expand the intermediaries’ role and capacity to better meet the needs of the chronic disease intervention projects.

## Summary of CHW Financing Models

- **Grants and contracts** are the most common CHW funding arrangement in the U.S. Government philanthropic funds are allocated to CHW employers (e.g., community-based organizations, community clinics) to pay salaries or administer CHW programs.
  - **Federal, state and local general funds** can be used to employ or reimburse CHW services directly. Government general funds are often used to provide support for a variety of programs that may not be supported by other funding mechanisms. States may provide dedicated line item budgets for programs that include CHW salaries or services.
  - **Medicaid** supports CHWs in a variety of ways. The Centers for Medicare & Medicaid Services published a final rule on July 15, 2013 that revised the definition of preventive services to allow non-licensed practitioners, such as CHWs, to provide and get reimbursed for preventive services as long as these services are recommended by a physician or other licensed practitioner. States are required to have a State Plan Amendment (SPA) to take advantage of this change in reimbursement, although none has submitted a SPA to date. A number of states have used State Innovation Model and Delivery System Reform Incentive Payment (DSRIP) funds to support CHW programs (e.g., Maine, Texas). Some states have also used MCO contracting requirements to promote CHWs.
- New MMCO regulations allow non-licensed providers such as CHWs to support care coordination activities (e.g., Michigan, New Mexico).
  - **Commercial/private insurance** can include services in employee benefits packages. This could be attractive to employers and unions with significant numbers of employees with limited English proficiency (e.g., hospitality, meat processing and home health services).
  - **Managed care organizations** can finance CHWs through direct-hire, or contract with groups that hire CHWs as part of a care team, covering the costs via a flat-fee or per-member, per-month payment. Under new Medicaid managed care regulations released in 2016 by CMS, plans have the flexibility to cover care coordination.
  - **Private sector organizations**, including health plans or hospitals, can employ CHWs directly or indirectly through a contract with clinics or community-based organizations. In Minnesota, health plans have used administrative funds to implement this model and several health systems have opted to build CHW services into their general operating budgets, while some hospitals are directing their community benefit funds to support CHW programs.

Below are examples of state efforts to fund CHW-led interventions and services.

### *Minnesota*

Minnesota was one of the first states to establish a sustainable funding stream to support CHWs. As early as 2000, the Blue Cross and Blue Shield of Minnesota Foundation was funding initiatives to better define the CHW role and build partnerships with communities, CHWs, and their employers and educators. In 2004, the Minnesota State Colleges and Universities system received funding to develop and implement a standardized training curriculum for CHWs through the state's community colleges. This long-term and sustained effort to support the development of the CHW field and define educational requirements was important groundwork for securing Medicaid financing. As part of its Healthcare Education-Industry Partnership, a statewide coalition, Minnesota was able to demonstrate ROI for funds spent on training and employment. In 2008, Minnesota secured a State Plan Amendment to allow CHWs to provide health education and care coordination services, although uptake among CHWs to receive reimbursement has been low, due in part to cumbersome reimbursement processes.<sup>29,30</sup>

### *New Mexico*

New Mexico's Medicaid program, known as Centennial Care, has made CHW care coordination services a requirement for all MCOs. These activities include interpretation and translation, health education, informal counseling on health behaviors, and assisting beneficiaries in obtaining health care services and community resources. The contracts establish the minimum that MCOs must meet, but the MCOs have flexibility in how they employ CHWs. Some MCOs directly employ CHWs or contract with organizations that employ CHWs, while others cover the costs of CHWs as part of the care team or patient-centered medical home in the form of either a flat fee or per-member, per-month payments. New Mexico's Medicaid MCO program, for example, incorporates the cost of CHWs into its MCO capitation payment and requires MCOs to not only use CHWs to work with enrollees, but to increase CHW contacts with clients by 20 percent in 2017.<sup>31</sup>

### *Texas*

Texas is also using its Delivery System Reform Incentive Payment (DSRIP), under its §1115 waiver, to provide CHW services. CHWs are involved in a number of DSRIP projects, such as integration into care teams to: (1) support behavioral health services and patient navigation; (2) divert non-emergent ED use; (3) provide prevention and education for asthma and diabetes; (4) improve compliance with appointments and follow-up care. CHWs are reimbursed under §1115 waiver authority through DRSIP projects throughout the state. In addition, the state's MCO contract was modified to incorporate a definition of CHWs and clarify the services CHWs could provide, including health education, referral services and system navigation.<sup>32</sup>

## **CONCLUSION**

Recognizing the considerable impact that social determinants, such as housing, transportation and food security, have on health outcomes and spending, states, communities and cross-sector partnerships such as ACHs will need to develop programs that address both the clinical aspects of chronic disease as well as the social factors that contribute heavily to chronic disease outcomes. Given the positive evidence about the impact of CHWs on health outcomes, integrating CHWs into upstream prevention interventions holds significant promise. Particularly in states with a high concentration of managed care plans, such as Washington, there are considerable opportunities to cover CHW services and CHW-led interventions.

## REFERENCES

1. Bauer, Ursula E., et al. "Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA." *The Lancet* 2014; 384.9937: 45-52.
2. National Center for *Health Statistics. Health, United States, 2015: With Special Feature on Racial and Ethnic Health Disparities*. Hyattsville, MD. 2016.
3. Cohen, L., et al. "Reducing Health Care Costs Through Prevention: Working Document." *Oakland, CA: Prevention Institute* (2007). Available at: [https://www.preventioninstitute.org/sites/default/files/publications/HE\\_Health%20Care%20Reform%20Policy%20Draft\\_040511.pdf](https://www.preventioninstitute.org/sites/default/files/publications/HE_Health%20Care%20Reform%20Policy%20Draft_040511.pdf)
4. Crawford, M., Spencer, A. Making the Case for Prevention: Why Accountable Communities of Health should Pursue Domain 3D Chronic Disease Prevention Projects. Moving Health Care Upstream, February 2018. Available at: <http://www.movinghealthcareupstream.org/innovations/medicaid-payment-strategies-for-financing-upstream-prevention/making-the-case-for-prevention>
5. Machlin, S, and Soni, A. "Peer Reviewed: Health care Expenditures for Adults with Multiple Treated Chronic Conditions: Estimates From the Medical Expenditure Panel Survey, 2009." *Prevention Chronic Disease* 10: E63, 2013. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3652712/>
6. Kaiser Commission on Medicaid and the Uninsured. "The Role of Medicaid for People with Diabetes." Washington, DC: The Henry J. Kaiser Family Foundation, November, 2012. Available at: [https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8383\\_d.pdf](https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8383_d.pdf)
7. Washington Health Care Authority. Healthier Washington. Project Plan Assessment Review Tool, November 3, 2017. Available at: <https://www.hca.wa.gov/assets/program/Myers-and-Stauffer-Review-Tool-Info-For-Public-Comment.pdf>
8. Centers for Disease Control and Prevention. *Addressing Chronic Disease Through Community Health Workers: A Policy and Systems Level Approach*. April 2015. Available at: [https://www.cdc.gov/dhdsp/docs/chw\\_brief.pdf](https://www.cdc.gov/dhdsp/docs/chw_brief.pdf)
9. Sabo, S., Rother, A., Wennerstrom, J., et al. Community Health Workers and Community Advocacy: Addressing Health Disparities. *American Journal of Public Health*. Vol 33 (6): 417–424.
10. Sabo, S., Rother, A., Wennerstrom, J., et al. Community Health Workers and Community Advocacy: Addressing Health Disparities. *American Journal of Public Health*. Vol 33 (6): 417–424.
11. The Institute for Clinical and Economic Review. *Community Health Workers: A Review of Program Evolution, Evidence on Effectiveness and Value, and Status of Workforce Development in New England*. Boston, MA: The Institute for Clinical and Economic Review, June 2013. Available at: <http://cepac.icer-review.org/wp-content/uploads/2013/11/CHW-Final-Report-07-06-MASTER.pdf>
12. The Rural Health Information Hub. *Community Health Worker Roles*. Available at: <https://www.ruralhealthinfo.org/community-health/community-health-workers/1/roles>
13. Minnesota Community Health Worker Alliance. *Community Health Worker Roles*. Accessed October, 2017. Available at: <http://mnchwalliance.org/who-are-chws/roles/>
14. <https://www.cthealth.org/wp-content/uploads/2016/02/CHW-Certificaiton-by-State-Final-Final.pdf>
15. Washington State Department of Health and the Washington Health Care Authority. *Community Health Worker Task Force Recommendations*. February 25, 2016. Available at [https://www.hca.wa.gov/assets/program/chw\\_taskforce\\_report.pdf](https://www.hca.wa.gov/assets/program/chw_taskforce_report.pdf)
16. Washington State Legislature. House Bill 2436. Available At: <http://lawfilesext.leg.wa.gov/biennium/2017-18/Pdf/Bills/House%20Bills/2436.pdf>
17. Washington Health Care Authority. Washington Apple Health 2017 Managed Care Contract. Accessed October 2017. Available at: [https://www.hca.wa.gov/assets/billers-and-providers/model\\_contract\\_ahmc.pdf](https://www.hca.wa.gov/assets/billers-and-providers/model_contract_ahmc.pdf)
18. Washington State Department of Health. *Community Health Worker Training Program Objectives*. Accessed December 2017. Available at: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/140-066-CourseObjectives.pdf>

19. Washington State Department of Health and the Health Care Authority. *Community Health Worker Task Force Recommendations*. February 25, 2016. Available at [https://www.hca.wa.gov/assets/program/chw\\_taskforce\\_report.pdf](https://www.hca.wa.gov/assets/program/chw_taskforce_report.pdf)
20. Postma, J., Karr, C., Kieckhefer, G. Community health workers and environmental interventions for children with asthma: a systematic review. *Journal of Asthma*. August 2009. Vol;46(6):564-76. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/19657896>
21. Fedder, D., Chang, R., 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. *Ethnicity and Disease*. 2003; 13(1):22-7.
22. Whitley, E., Everhart R., Wright R. *Measuring return on investment of outreach by community health workers*. *Journal of Health Care for the Poor and Underserved*. 2006;17(1 Suppl):6-15. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/16520499>
23. Krantz, M., Effectiveness of a Community Health Worker Cardiovascular Risk Reduction Program in Public Health and Health Care Settings. *American Journal of Public Health*. January 2013; 103(1): e19-e27.
24. McCalmont, J., Freeman, J., et al. Community Health Workers and Family Medicine Resident Education: Addressing the Social Determinants of Health. *Family Medicine*. April 2016;48(4):257-9.
25. Bureau of Labor Statistics. Occupational Employment and Wages, May 2015: 21-1094 Community Health Workers (Washington, DC: Bureau of Labor Statistics, 2015).
26. Burton, A., Medicaid Funding of Community-Based Prevention: Myths, State Successes Overcoming Barriers and the Promise of Integrated Payment Models. (Washington, DC: MACPAC, 2014). Available at: <https://www.macpac.gov/publication/medicaid-funding-of-community-based-prevention-myths-state-successes-overcoming-barriers-and-the-promise-of-integrated-payment-models/>
27. McGinnis, T. *Implementing Social Determinants of Health Interventions in Medicaid Managed Care: How to Leverage Existing Authorities and Shift to Value Based Purchasing*. Moving Health are Upstream, February 2018. Available at: <http://www.movinghealthcareupstream.org/innovations/medicaid-payment-strategies-for-financing-upstream-prevention/implementing-social-determinants-of-health-interventions-in-medicaid-managed-care>
28. Bachrach, D., Guyer, J. and Levin, A. “Medicaid Coverage of Social Interventions: A Road Map for States.” Manatt Health, July 2016. Available at: [http://www.milbank.org/uploads/documents/medicaid\\_coverage\\_of\\_social\\_interventions\\_a\\_road\\_map\\_for\\_states.pdf](http://www.milbank.org/uploads/documents/medicaid_coverage_of_social_interventions_a_road_map_for_states.pdf)
29. Minnesota Department of Health. *Emerging Professions: Community Health Workers*: Accessed November, 2017. Available at: <http://www.health.state.mn.us/divs/orhpc/workforce/emerging/chw/index.html>
30. Minnesota Department of Health. *Medicaid Payment for CHWs in Minnesota*. Accessed November, 2017. Available at: [http://www.dialogue4health.org/uploads/resources/Wilson\\_021116.pdf](http://www.dialogue4health.org/uploads/resources/Wilson_021116.pdf)
31. University of New Mexico. *Community Health Worker Initiatives*. Accessed November 2017. Available at: <https://hsc.unm.edu/community/chwi/index.html>
32. University of Texas Medical Branch. DSRIP Projects: Developing Systems of Care. Accessed November 2017. Available at: <https://hhs.texas.gov/sites/default/files/documents/laws-regulations/policies-rules/1115-docs/082615/SystemsOfCare.pdf>





AcademyHealth



Robert Wood Johnson  
Foundation

Nemours<sup>®</sup>

Children's Health System

**Your child. Our promise.**