Advancing and Sustaining the Community Health Worker Workforce in Baltimore City: A Call to Action for Key Stakeholders

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EXECUTIVE SUMMARY
In Baltimore City, the impact of deeply entrenched structural factors, including racism and classism, has shaped the landscape of health, civic, and economic inequities observed among the city's predominantly Black neighborhoods compared to its predominantly white neighborhoods. These same structural forces influence the distribution of negative social determinants of health, such that Baltimore's ethnic minority communities are more likely to experience poverty, food insecurity, housing instability, limited access to health care, and poor transportation. The extent and endurance of the city's health disparities require local solutions that are person- and family-centered, culturally relevant, and responsive to the needs of historically marginalized communities.

Community health worker programs are one such solution. Community health workers (CHWs) are frontline public health personnel who share common attributes with, and/or have a nuanced understanding of, the communities they serve. Their lived experiences are central to their ability to link members of underserved communities with needed health care and social services, and their interpersonal skills allow them to serve as a bridge between the communities they support and the medical, public health, and social service organizations they work for. Moreover, CHWs' efforts mitigate the impact of social determinants of health, by linking individuals and families to needed medical, public health, and social services, and providing instrumental, emotional, and social support. CHW programs improve health outcomes across a multiplicity of acute and chronic diseases and are cost effective.

CHWs are leaders within their communities, and the body of evidence demonstrating the utility of CHW programs is strong. However, sustainable funding poses a major barrier to the broader adoption of CHWs in community-based, medical, and public health settings. The patchwork nature of funding to support CHW-based initiatives threatens the health of those who need their efforts most, and it undermines community members' access to this unique workforce. Successfully addressing health disparities in Baltimore City requires a concerted effort to advance sustainable financing for CHWs. Thus, this report is a call to action that aims to galvanize CHWs and their allies, as well as funders, policymakers, and other key stakeholders, to commit to developing and implementing long-term funding mechanisms for CHW programs.

This report aims to achieve the following objectives:

A. Identify strategies for CHW compensation across the country that are particularly relevant for CHWs working in Baltimore City.
Among the prevailing financing models used around the United States to
support CHW programs, Medicaid reimbursement is the most promising strategy to achieve sustainable funding. States that provide Medicaid reimbursement for CHW services had a clear articulation of who CHWs are and their scope of practice. They have also established training and/or certification processes. Importantly, multistakeholder engagement between CHWs, employers, and payers was central to delineating which services are eligible for reimbursement.

B. Clarify how statewide policies impact the financial underpinnings of the CHW model and their implications for Baltimore City. Maryland has a unique all-payer hospital rate regulation system and global budget revenue structure. Its health system transformation efforts lend themselves to the incorporation of CHWs into a population health-based system underpinned by addressing social determinants of health. Further, propelled by recommendations from CHWs and other key stakeholders, the state of Maryland has enacted legislation that has standardized key facets of CHWs’ workforce development, including their scope of work and credentialing processes. This has important implications for laying the foundation to support the proliferation of CHW programs throughout Baltimore City.

C. Ascertain the contextual factors that influence the scale of the CHW workforce in Baltimore City, and their scope of practice. We conducted interviews with 14 key informants representing five state- and city-level stakeholder groups: (1) CHWs; (2) entities that train CHWs; (3) CHW employers; (4) members of the Maryland Department of Health; and (5) payors/financial administrators. These discussions revealed that the tasks assumed by CHWs in Baltimore City fall well within CHWs’ typical scope of practice and are contextually responsive to the common issues affecting the city’s residents. Most key informants were supportive of Medicaid reimbursement and the state’s certification process. Variability in the quality of supervision and low compensation (and its implications for limited career trajectories within the CHW profession) were cited as the most challenging issues confronting Baltimore’s CHWs. At the same time, these interviews illuminated the degree to which two major initiatives stand to increase the number and impact of the CHW workforce in the city: the Baltimore Population Health Workforce Collaborative, funded by the Population Health Workforce Support for Disadvantaged Areas Program and administered by the Health Services.

“The extent and endurance of the city’s health disparities require local solutions that are person- and family-centered, culturally relevant, and responsive to the needs of historically marginalized communities.”
Cost Review Commission; and the Baltimore Health Corps, funded by a combination of federal and philanthropic sources.

D. Propose a strategic roadmap that will prepare the state of Maryland and Baltimore City to support the long-term financial viability of the CHW model in the city and state.

The roadmap to generating sustainable funding for CHWs’ services is composed of four main recommendations, bearing in mind that CHWs must be at the helm of these efforts:

1. Conduct a comprehensive, systematic appraisal of Baltimore City’s CHW workforce, to address gaps in our understanding of the CHW workforce in Baltimore City.

2. Increase the city- and statewide organizational capacity to support the CHW workforce, through support from state-level and philanthropic funds, and the creation of a Baltimore City CHW task force.

3. Pursue long-term financing strategies through statewide payment reform, Medicaid reimbursement, and philanthropic endeavors.

4. Convene key stakeholders to engage in continual advocacy for the CHW workforce.

Baltimore City is well positioned to serve as a model of how best to support members of the CHW workforce who live and work in urban areas. Shoring up key aspects of CHWs’ professional development, and creating sustainable financing arrangements, are central to bolstering this impactful workforce. Doing so has important ramifications for reducing health disparities by ameliorating the adverse impact of social determinants of health, improving employment rates, and, ultimately, promoting equity for members of systematically marginalized communities.
COMMUNITY HEALTH WORKERS ARE ESSENTIAL FOR ADVANCING HEALTH EQUITY

In their seminal Robert Wood Johnson Foundation report defining health equity, Braveman and colleagues assert that “health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.” Thus, health equity interventions are those that are geared toward “reducing and eliminating disparities in health and its determinants that adversely affect excluded or marginalized groups.” Indeed, the extent and endurance of health inequities in Baltimore City require local solutions that are person- and family-centered, culturally relevant, and responsive to the needs of communities bearing a disproportionate brunt of disease morbidity and mortality. The use of community health workers (CHWs) has long been championed as a culturally sensitive vehicle to advance health equity and reduce intransigent disparities.

Since CHWs tend to come from the very communities they endeavor to support, it is thought that the shared ethnic, linguistic, socioeconomic, and/or experiential ties that bind them to historically marginalized, minoritized communities make them well suited to engage in health promotion activities geared toward ameliorating the impact of social determinants of health (SDOH).

There is a strong body of evidence linking exposure to CHW-delivered services with improved chronic disease self-management behaviors, health outcomes across a range of conditions, and health care utilization. There is also compelling evidence suggesting that CHW-delivered interventions are cost-effective and yield a high return on investment: Kangovi and colleagues found that every dollar invested in a randomized controlled trial featuring a CHW-delivered intervention that targeted unmet social needs yielded an annual return of $2.47 to an average Medicaid payer. Similarly, Gaskin et al.’s evaluation of Maryland’s Health Enterprise Zones suggests that the inclusion of CHWs within multidisciplinary care teams that facilitated care coordination and health education activities was associated with reduced inpatient admissions, and that the savings generated therein outweighed the cost of the initiative.

As CHWs, their advocates, and other key stakeholders grapple with CHWs’ professional identity formation, scope of work, and facets of workforce development, one issue that is widely acknowledged as a barrier to broader adoption of the CHW model is sustainable funding. The predominance of short-term grant funding for CHW-based initiatives threatens the health of those who are in greatest need of the forms of support proffered by CHWs, as well as the professional trajectories and development of CHWs. While CHWs’ lived experiences make them both uniquely qualified to support systematically disenfranchised communities, and central to any endeavor to reduce health disparities, unstable funding threatens to undermine a workforce whose focus on addressing SDOH is upheld by principles of health equity and community capacity building. Simply put, without a concerted effort to support systematically disenfranchised communities, and central to any endeavor to reduce health disparities, unstable funding threatens to undermine a workforce whose focus on addressing SDOH is upheld by principles of health equity and community capacity building. Simply put, without a concerted effort to support the CHW model through a combination of sustainable approaches, particularly Medicaid reimbursement, those who are in the greatest need of CHWs’ support will not have access to them.

It is an especially opportune time for the state of Maryland to pursue sustainable financing for CHWs, in view of current efforts underway to expand and strengthen Baltimore City’s CHW workforce. Thus, the primary goal of
According to the Community Health Worker Section of the American Public Health Association, “A community health worker (CHW) 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.”

this report is to support policy development and implementation of long-term funding mechanisms for Baltimore’s CHWs. We searched peer-reviewed and grey literature to uncover how different states approach creating robust funding sources for CHWs. To clarify the local context, we solicited insights from 14 key informants who represent five different stakeholder groups: 1) CHWs; 2) entities that train CHWs; 3) CHW employers; 4) members of the Maryland Department of Health; and 5) payors/financial administrators. This report was guided by the following objectives:

1. Identify strategies for CHW compensation across the country that are particularly relevant for CHWs working in Baltimore City.

2. Understand the ways in which statewide policies impact the financial underpinnings of the CHW model and their unique implications for Baltimore City.

3. Ascertain the contextual factors that influence the scale of the CHW workforce in Baltimore City, and their scope of practice.

4. Propose a strategic roadmap that will prepare the state of Maryland and Baltimore City to support the long-term financial viability of the CHW model in the city and state.

SOCIAL DETERMINANTS OF HEALTH AND THE CONTEXT OF BALTIMORE CITY

According to the Centers for Disease Control, health disparities are defined as “preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities.” Health disparities have endured for hundreds of years in the United States. Occurring across a multiplicity of
health conditions, their persistence is rooted in structural factors such as racism, classism, sexism, ageism, ableism, and homophobia. Their intersection shapes the social, political, economic, and environmental conditions that create and perpetuate social determinants of health. Braveman and colleagues define social determinants of health as the constellation of nonmedical factors that influence health, and they differentiate between upstream and downstream SDOH. Where the aforementioned structural factors constitute upstream SDOH, i.e., the root causes of health and health disparities, downstream SDOH are more conspicuous and, consequently, the target of most public health interventions. They may include individuals’ health-related knowledge, attitudes, beliefs, and behavior, or access to and receipt of recommended care. The complex causal pathways between upstream and downstream SDOH are such that neighborhood conditions, education, income and wealth, racism, and stress independently and conjointly function to affect the health and overall well-being of members of marginalized communities.22

Figure 1, adapted from the Centers for Disease Control’s delineation of social determinants of health for Healthy People 2030, encapsulates five overarching domains of upstream SDOH—health care access and quality, neighborhood and built environment, social and community context, economic stability,
and education access and quality—as well as their downstream correlates (summarized within their corresponding boxes).\textsuperscript{23,24} Although it is not explicitly included in this model, the criminal justice system is a critical social determinant of health that circumscribes the extent to which individuals and communities at large are able to achieve and sustain good health in all of its dimensions.\textsuperscript{25,26}

Interlocking upstream and downstream SDOH are at the heart of stark disparities in Baltimore City, and these disparities do not occur in a vacuum. Historically, a confluence of housing policies and practices have left an indelible mark on the sociodemographic, cultural, and economic landscape of Baltimore City’s neighborhoods. The city’s long record of creating and instituting measures to restrict racial/ethnic minorities, foreigners, and Jewish people to specific neighborhoods reached a dubious milestone in 1910, when Baltimore became the first city in the country to enact a municipal segregation ordinance prohibiting Blacks from moving to white residential blocks.\textsuperscript{27,28,29} The ordinance was repealed when the U.S. Supreme Court struck it down in 1917, only to be replaced by exclusionary practices that prevented Blacks from renting or purchasing properties in white neighborhoods, achieved through deed restrictions, restrictive covenants, and private agreements.

The resulting racial/ethnic segregation in Baltimore’s neighborhoods was further exacerbated by the federal government’s policy of refusing to insure mortgages in Black neighborhoods, a practice known as “redlining,” which deprived these neighborhoods of needed capital investments. Redlining was buttressed by predatory lending, blockbusting, and other policies and practices that segregated Black/African Americans residing in Baltimore to areas in the east, west, and portions of the south sections of the city. The amalgamation of racially driven policies and practices had the effect of concentrating poverty, disadvantage, and systemic disinvestment in predominantly Black neighborhoods in Baltimore City, and entrenching wealth both in the city’s predominantly white neighborhoods and its surrounding suburbs.\textsuperscript{30,31,32,33}

Lawrence T. Brown, Ph.D., implicates Baltimore’s hypersegregation as a fundamental root cause of long-standing health, civic, and economic inequities between the affluent, predominantly white neighborhoods that stretch from the Inner Harbor through the center of the city, which Dr. Brown refers to as the “White L,” and the predominantly Black, poorer neighborhoods flanking them, coined the “Black Butterfly.”\textsuperscript{34} Table 1 contains data collected by the Baltimore City Health Department for its 2017 Neighborhood Profiles and provides a snapshot of the realities of the intractable health disparities between these communities.\textsuperscript{35,36,37,38} This is also illuminated in Figures 2 and 3, maps of Baltimore City that depict the distribution of residents by race/ethnicity (Figure 2)\textsuperscript{39} and the proportion of households living below the poverty line (Figure 3).\textsuperscript{40} The striking differences between the White L neighborhoods and their Black Butterfly counterparts highlight the impact of programs, policies, laws, and practices that gave rise to structural racism and disinvestment and, with it, reduced quality of life, as well as poorer health and social outcomes, in Black neighborhoods.

**NATIONAL LANDSCAPE OF THE COMMUNITY HEALTH WORKER PROFESSION**

**Milestones in the Evolution of the CHW Workforce in the United States**

The use of CHWs for health promotion activities has increased significantly over the past 25 to 30 years in the United States.
Figure 2: Population Distribution of Non-Hispanic Black/African American Residents in Baltimore City, 2015-2019

Source: American Community Survey
Figure 3: Percent of Family Households Living Below the Poverty Line in Baltimore City, 2015-2019

Source: American Community Survey
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baltimore City</th>
<th>Greater Roland Park/Poplar Hill</th>
<th>Inner Harbor/Federal Hill</th>
<th>Madison/East End</th>
<th>Sandtown-Winchester/Harlem Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>622,454</td>
<td>7,620</td>
<td>13,332</td>
<td>7,204</td>
<td>15,518</td>
</tr>
<tr>
<td>Age distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% 0-17 years</td>
<td>21.2</td>
<td>20.4</td>
<td>11.6</td>
<td>29.5</td>
<td>26.0</td>
</tr>
<tr>
<td>% 18-24 years</td>
<td>11.3</td>
<td>9.1</td>
<td>9.4</td>
<td>14.6</td>
<td>10.7</td>
</tr>
<tr>
<td>% 25-44 years</td>
<td>30.1</td>
<td>20.1</td>
<td>48.8</td>
<td>25.0</td>
<td>22.1</td>
</tr>
<tr>
<td>% 45-64 years</td>
<td>25.3</td>
<td>29.8</td>
<td>18.7</td>
<td>24.4</td>
<td>29.7</td>
</tr>
<tr>
<td>% 65+ years</td>
<td>12.1</td>
<td>20.6</td>
<td>11.5</td>
<td>6.5</td>
<td>11.4</td>
</tr>
<tr>
<td>Sex/Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Male</td>
<td>47.1</td>
<td>49.7</td>
<td>48.9</td>
<td>48.4</td>
<td>44.8</td>
</tr>
<tr>
<td>% Female</td>
<td>52.9</td>
<td>50.3</td>
<td>51.1</td>
<td>51.6</td>
<td>55.2</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Black or African American</td>
<td>62.8</td>
<td>6.9</td>
<td>13.0</td>
<td>89.9</td>
<td>96.7</td>
</tr>
<tr>
<td>% White</td>
<td>30.3</td>
<td>82.6</td>
<td>79.2</td>
<td>5.2</td>
<td>0.8</td>
</tr>
<tr>
<td>% Asian</td>
<td>2.6</td>
<td>7.0</td>
<td>4.8</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>% Hispanic/Latino (ethnicity)</td>
<td>4.6</td>
<td>2.9</td>
<td>4.7</td>
<td>7.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Education access and quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of residents 25 years and older</td>
<td>47.2</td>
<td>6.9</td>
<td>20.3</td>
<td>72.0</td>
<td>69.8</td>
</tr>
<tr>
<td>% of residents 25 years and older with a high school degree or less</td>
<td>28.7</td>
<td>80.4</td>
<td>67.0</td>
<td>6.3</td>
<td>5.5</td>
</tr>
<tr>
<td>% of limited English-speaking proficiency</td>
<td>3.4</td>
<td>3.1</td>
<td>2.3</td>
<td>3.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Economic stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median household Income</td>
<td>$41,819</td>
<td>$104,482</td>
<td>$88,854</td>
<td>$27,454</td>
<td>$24,374</td>
</tr>
<tr>
<td>% of unemployment</td>
<td>13.1</td>
<td>2.3</td>
<td>5.4</td>
<td>26.4</td>
<td>20.7</td>
</tr>
<tr>
<td>% of families in poverty</td>
<td>28.8</td>
<td>4.9</td>
<td>17.0</td>
<td>45.2</td>
<td>50.3</td>
</tr>
<tr>
<td>% of land covered by food desert</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
<td>40.0</td>
<td>59.4</td>
</tr>
<tr>
<td>Neighborhood and built environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual lead paint violation rate (per 10,000 households per year)</td>
<td>9.8</td>
<td>1.5</td>
<td>0.9</td>
<td>81.6</td>
<td>34.1</td>
</tr>
<tr>
<td>Vacant building density (# of vacant buildings per 10,000 housing units)</td>
<td>562.4</td>
<td>5.4</td>
<td>36.2</td>
<td>1,794.4</td>
<td>2,560.4</td>
</tr>
<tr>
<td>Health care access and quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of children under 18 years with no health care insurance</td>
<td>4.4</td>
<td>0.5</td>
<td>3.8</td>
<td>6.0</td>
<td>1.5</td>
</tr>
<tr>
<td>% of adults 18 years or older with no health care insurance</td>
<td>11.7</td>
<td>3.2</td>
<td>4.9</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Health outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>73.6</td>
<td>83.9</td>
<td>79.2</td>
<td>68.9</td>
<td>70.0</td>
</tr>
<tr>
<td>Infant mortality rate per 1,000 live births (2011-2015)</td>
<td>10.4</td>
<td>3.6</td>
<td>3.3</td>
<td>12.1</td>
<td>10.1</td>
</tr>
<tr>
<td>Age-adjusted all-cause mortality rate (deaths per 10,000 residents)</td>
<td>99.5</td>
<td>54.5</td>
<td>75.9</td>
<td>130.0</td>
<td>116.0</td>
</tr>
<tr>
<td>Age-adjusted mortality rate (deaths per 100,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td>24.4</td>
<td>13.6</td>
<td>25.7</td>
<td>41.2</td>
<td>31.2</td>
</tr>
<tr>
<td>Cancer (all kinds)</td>
<td>21.2</td>
<td>17.6</td>
<td>27.4</td>
<td>44.7</td>
<td>25.2</td>
</tr>
<tr>
<td>Stroke</td>
<td>5.0</td>
<td>5.1</td>
<td>4.7</td>
<td>12.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3.0</td>
<td>2.3</td>
<td>2.8</td>
<td>4.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Homicide</td>
<td>3.3</td>
<td>0.0</td>
<td>1.0</td>
<td>6.4</td>
<td>7.3</td>
</tr>
</tbody>
</table>
Several milestones have occurred over that period that are responsible for advancing the CHW model. In 1998, Rosenthal and colleagues published the first study of CHWs, which was instrumental in explicating their range of activities and dimensions of their professional identity.\textsuperscript{45} Sponsored by the Annie E. Casey Foundation, Rosenthal and colleagues’ appraisal of the workforce served as the foundation for the current delineation of CHWs’ roles/scope of practice and skills/competencies, recently enumerated by members of the Community Health Worker Core Consensus (C3) Project and encapsulated in Tables 2 and 3, respectively.\textsuperscript{46} Another notable moment for the CHW profession took place in 2006, when members of the American Public Health Association’s Community Health Worker Special Primary Interest Group (CHW SPIG) developed what has become the prevailing definition of CHWs used across the country.\textsuperscript{47}

Perhaps the most transformative milestone for the workforce occurred in 2010 with the passage of the landmark Patient Protection and Affordable Care Act (ACA), which consisted of several policies centered on reducing hospital readmissions, and their attendant costs, through a combination of financial incentives and penalties. Payment reform was geared toward achieving a common goal across all of the ACA’s initiatives: to improve care coordination across the continuum of care, through innovative linkages between community-based organizations and hospitals; comprehensive, holistic care; and novel payment models that aligned penalties and reimbursement with reductions in all-cause readmissions.\textsuperscript{48} By encouraging the development, implementation, and evaluation of interventions featuring the inclusion of CHWs into interdisciplinary home-based and community-based health care teams for chronic disease management, and programs geared toward reducing hospital readmissions and improving care transitions, the ACA positioned CHWs as critical members of the health care workforce.\textsuperscript{49,50} It also authorized the issuance of grants to organizations proposing to use CHWs to improve health in underserved areas, thereby reinforcing the utility of CHWs for activities such as health insurance enrollment, health education and outreach, and referrals to health care and community-based resources.\textsuperscript{51,52,53}

Furthermore, statutes that governed the implementation of ACA requirements led to an important change in stipulations established by the Centers for Medicaid and Medicare Services (CMS) regarding preventive services. Preventive services were defined as those recommended by physicians or other licensed practitioners; however, as of January 1, 2014, CMS amended its regulation such that preventive services could be rendered by nonlicensed providers, including CHWs. This move created the opportunity for CHW services to be billable (through the auspices of clinicians’ referrals), which is central to the diversification of funding streams to support CHW activities and programs through Medicaid reimbursement.
Table 2: Summary of Community Health Workers’ Roles/Scope of Practice by the Community Health Worker Core Consensus Project, Expanded from the 1997 Community Health Worker Report

<table>
<thead>
<tr>
<th>ROLE</th>
<th>SUB-ROLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediating cultural differences among individuals, communities, and</td>
<td>• Educating individuals and communities about how to use health and social service systems (including understanding how systems operate)</td>
</tr>
<tr>
<td>health and social service systems</td>
<td>• Educating systems about community perspectives and cultural norms (including supporting implementation of Culturally and Linguistically Appropriate Services [CLAS] standards)</td>
</tr>
<tr>
<td></td>
<td>• Building health literacy and cross-cultural communication</td>
</tr>
<tr>
<td>Providing culturally appropriate health education and information</td>
<td>• Conducting health promotion and disease prevention education in a manner that matches linguistic and cultural needs of participants or community</td>
</tr>
<tr>
<td></td>
<td>• Providing necessary information to understand and prevent diseases, and to help people manage health conditions (including chronic disease)</td>
</tr>
<tr>
<td>Care coordination, care management, and system navigation</td>
<td>• Participating in care coordination and/or case management</td>
</tr>
<tr>
<td></td>
<td>• Making referrals and providing follow-up</td>
</tr>
<tr>
<td></td>
<td>• Facilitating transportation to services and helping address barriers to services</td>
</tr>
<tr>
<td></td>
<td>• Documenting and tracking individual- and population-level data</td>
</tr>
<tr>
<td></td>
<td>• Informing people and systems about community assets and challenges</td>
</tr>
<tr>
<td>Providing coaching and social support</td>
<td>• Providing individual support and coaching</td>
</tr>
<tr>
<td></td>
<td>• Motivating and encouraging people to obtain care and other services</td>
</tr>
<tr>
<td></td>
<td>• Supporting self-management of disease prevention and management of health conditions (including chronic disease)</td>
</tr>
<tr>
<td></td>
<td>• Planning and/or leading support groups</td>
</tr>
<tr>
<td>Advocating for individuals and communities</td>
<td>• Advocating for the needs and perspectives of communities</td>
</tr>
<tr>
<td></td>
<td>• Connecting to resources and advocating for basic needs (e.g., food and housing)</td>
</tr>
<tr>
<td></td>
<td>• Conducting policy advocacy</td>
</tr>
<tr>
<td>Building individual and community capacity</td>
<td>• Building individual capacity</td>
</tr>
<tr>
<td></td>
<td>• Building community capacity</td>
</tr>
<tr>
<td></td>
<td>• Training and building individual capacity with peers and among CHW groups</td>
</tr>
<tr>
<td>Providing direct service</td>
<td>• Providing basic screening tests (e.g., height, weight, blood pressure)</td>
</tr>
<tr>
<td></td>
<td>• Providing basic services (e.g., first aid, diabetic foot checks)</td>
</tr>
<tr>
<td></td>
<td>• Meeting basic needs (e.g., direct provision of food and other resources)</td>
</tr>
<tr>
<td>Implementing individual and community assessments</td>
<td>• Participating in design, implementation, and interpretation of individual-level assessments (e.g., home environmental assessment)</td>
</tr>
<tr>
<td></td>
<td>• Participating in design, implementation, and interpretation of community-level assessments (e.g., windshield survey of community assets and challenges, community asset mapping)</td>
</tr>
<tr>
<td>Conducting outreach</td>
<td>• Case-finding/recruitment of individuals, families, and community groups to services and systems</td>
</tr>
<tr>
<td></td>
<td>• Follow-up on health and social service encounters with individuals, families, and community groups</td>
</tr>
<tr>
<td></td>
<td>• Home visiting to provide education, assessment, and social support</td>
</tr>
<tr>
<td></td>
<td>• Presenting at local agencies and community events</td>
</tr>
<tr>
<td>Participating in evaluation and research</td>
<td>• Engaging in evaluating CHW services and programs</td>
</tr>
<tr>
<td></td>
<td>• Identifying and engaging community members as research partners, including community consent processes</td>
</tr>
<tr>
<td></td>
<td>• Participating in evaluation and research:</td>
</tr>
<tr>
<td></td>
<td>• Identification of priority issues and evaluation/research questions</td>
</tr>
<tr>
<td></td>
<td>• Development of evaluation/research design and methods</td>
</tr>
<tr>
<td></td>
<td>• Data collection and interpretation</td>
</tr>
<tr>
<td></td>
<td>• Sharing results and findings</td>
</tr>
<tr>
<td></td>
<td>• Engaging stakeholders to take action on findings</td>
</tr>
<tr>
<td>SKILL</td>
<td>SUB-SKILLS</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Communication skills                | • Ability to use language confidently  
• Ability to use language in ways that engage and motivate  
• Ability to communicate using plain and clear language  
• Ability to communicate with empathy  
• Ability to listen actively  
• Ability to prepare written communication including electronic communication (e.g., email, telecommunication device for the deaf)  
• Ability to document work  
• Ability to communicate with the community served (may not be fluent in language of all communities served) |
| Interpersonal and relationship-building skills | • Ability to provide coaching and social support  
• Ability to conduct self-management coaching  
• Ability to use interviewing techniques (e.g., motivational interviewing)  
• Ability to work as a team member  
• Ability to manage conflict  
• Ability to practice cultural humility |
| Service coordination and navigation skills | • Ability to coordinate care (including identifying and accessing resources and overcoming barriers)  
• Ability to make appropriate referrals  
• Ability to facilitate development of an individual and/or group action plan and goal attainment  
• Ability to coordinate CHW activities with clinical and other community services  
• Ability to follow-up and track care and referral outcomes |
| Capacity-building skills            | • Providing individual support and coaching  
• Motivating and encouraging people to obtain care and other services  
• Supporting self-management of disease prevention and management of health conditions (including chronic disease)  
• Planning and/or leading support groups |
| Advocacy skills                     | • Ability to contribute to policy development  
• Ability to advocate for policy change  
• Ability to speak up for individuals and communities |
| Education and facilitation skills   | • Ability to use empowering and learner-centered teaching strategies  
• Ability to use a range of appropriate and effective educational techniques  
• Ability to facilitate group discussions and decision-making  
• Ability to plan and conduct classes and presentations for a variety of groups  
• Ability to seek out appropriate information and respond to questions about pertinent topics  
• Ability to find and share requested information  
• Ability to collaborate with other educators  
• Ability to collect and use information from and with community members |
| Individual and community assessment skills | • Ability to participate in individual assessment through observation and active inquiry  
• Ability to participate in community assessment through observation and active inquiry |
### Table 3: Summary of Community Health Workers’ Skills Codified by the Community Health Worker Core Consensus Project, Expanded from the 1997 Community Health Worker Report (continued)

<table>
<thead>
<tr>
<th>SKILL</th>
<th>SUB-SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach skills</td>
<td>• Ability to conduct case-finding, recruitment, and follow-up</td>
</tr>
<tr>
<td></td>
<td>• Ability to prepare and disseminate materials</td>
</tr>
<tr>
<td></td>
<td>• Ability to build and maintain a current resource inventory</td>
</tr>
<tr>
<td>Professional skills and conduct</td>
<td>• Ability to set goals and to develop and follow a work plan</td>
</tr>
<tr>
<td></td>
<td>• Ability to balance priorities and to manage time</td>
</tr>
<tr>
<td></td>
<td>• Ability to apply critical thinking and problem solving techniques</td>
</tr>
<tr>
<td></td>
<td>• Ability to use pertinent technology</td>
</tr>
<tr>
<td></td>
<td>• Ability to pursue continuing education and life-long learning opportunities</td>
</tr>
<tr>
<td></td>
<td>• Ability to maximize personal safety while working in community and/or clinical settings</td>
</tr>
<tr>
<td></td>
<td>• Ability to observe ethical and legal standards (e.g., CHW Code of Ethics, Americans with Disabilities Act [ADA], Health Insurance Portability and Accountability Act [HIPAA])</td>
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<tr>
<td></td>
<td>• Ability to identify situations calling for mandatory reporting and carry out mandatory reporting requirements</td>
</tr>
<tr>
<td></td>
<td>• Ability to participate in professional development of peer CHWs and in networking among CHW groups</td>
</tr>
<tr>
<td></td>
<td>• Ability to set boundaries and practice self-care</td>
</tr>
<tr>
<td>Evaluation and research skills</td>
<td>• Ability to identify important concerns and conduct evaluation and research to better understand root causes</td>
</tr>
<tr>
<td></td>
<td>• Ability to apply the evidence-based practices of Community Based Participatory Research (CBPR) and Participatory Action Research (PAR)</td>
</tr>
<tr>
<td></td>
<td>• Ability to participate in evaluation and research processes including:</td>
</tr>
<tr>
<td></td>
<td>- Identifying priority issues and evaluation/research questions</td>
</tr>
<tr>
<td></td>
<td>- Developing evaluation/research design and methods</td>
</tr>
<tr>
<td></td>
<td>- Data collection and interpretation</td>
</tr>
<tr>
<td></td>
<td>- Sharing results and findings</td>
</tr>
<tr>
<td></td>
<td>- Engaging stakeholders to take action on findings</td>
</tr>
<tr>
<td>Knowledge base</td>
<td>• Knowledge about social determinants of health and related disparities</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about pertinent health issues</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about healthy lifestyles and self-care</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about mental/behavioral health issues and their connection to physical health</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about health behavior theories</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of basic public health principles</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about the community served</td>
</tr>
<tr>
<td></td>
<td>• Knowledge about United States health and social service systems</td>
</tr>
</tbody>
</table>
National Funding Environment for CHWs

There are four prevailing financing models to support CHW programs: 1) grants from charitable foundations and government agencies; 2) reimbursement through Medicaid; 3) general funds from federal, state, or local government; and 4) employment by private organizations. The primary characteristics of each funding model are summarized below. Funding provided by charitable foundations and government agencies has long been the most prevalent means of financing CHWs. Medicaid reimbursement is currently the least common.

Figure 5, developed by Carl Rush, principal of Community Resources, LLC, depicts the pathways for CHW financing and summarizes the models of care delivery across various settings, the roles that CHWs can fulfill within them, the range of payment mechanisms to support these models, and the potential options for third-party payers. The diagram underscores the reality that a constellation of diverse, coordinated funding arrangements is necessary to assure the financial viability of CHWs.

<table>
<thead>
<tr>
<th>SOURCES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| Grants from charitable foundations and government agencies | • Most common arrangement within US  
• Maintains strict requirements to receive ongoing funding  
• Grant sources include National Institutes of Health (NIH), Health Resources and Services Administration (HRSA), and Temporary Assistance for Needy Families (TANF)  
• State and locally administered programs typically disease-specific  
• Philanthropic funds allocated to CHW employers such as community-based organizations and community clinics to support CHWs’ salaries and operating costs associated with program administration |
| Medicaid reimbursement | • State Plan Amendments (SPAs) for reimbursing preventive services or broader Medicaid reimbursement, which allows for CHWs to be reimbursed for preventive services that are recommended by physicians or licensed practitioners; or a set of predefined services  
• Defined reimbursement through Section 1115 Waivers, which allows states to pay for the use of CHWs in models focusing on specific Medicaid populations  
• Managed care contracts, whereby states can require managed care organizations to directly hire CHWs or contract with groups that hire them as part of a care team; costs may be covered through flat fee or per-member, per-month payments |
| General funds from federal, state, or local government | • Government general funds with dedicated line items in budgets to support programs offering CHW services, covering CHW salaries and program operating costs  
• Supported by taxes |
| Employment via private organizations | • Consists of mainstream health care providers (i.e., hospitals and health systems), managed care organizations, insurance companies, and employers  
• May directly hire CHWs or contract for CHW services  
• For mainstream health care providers, hiring primarily driven by cost savings/cost avoidance approach (e.g., saving money by reducing ED utilization and/or readmissions) |
### Figure 5: Sustainable Financing of CHW Activities: Three Broad Pathways

<table>
<thead>
<tr>
<th>A Conventional Health Care</th>
<th>B Population/Community-based Public Health</th>
<th>C Patient-centered Care Systems (Emerging hybrid structures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergency room diversion</td>
<td>• Specific condition-focused initiatives</td>
<td>• Patient Centered Medical Homes</td>
</tr>
<tr>
<td>• “Hot-spotters” (high-cost users)</td>
<td>• Community development approach</td>
<td>• Accountable Care Organizations</td>
</tr>
<tr>
<td>• Prenatal/perinatal coaching</td>
<td>(social determinants)</td>
<td>• Health Homes</td>
</tr>
<tr>
<td>• Primary care-based chronic disease management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Care transitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Home/community-based long-term care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Promising Program Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Care coordination</td>
<td>• Basic outreach and education</td>
<td>• Combination of health care and population-based</td>
</tr>
<tr>
<td>• Self-management support for chronic conditions</td>
<td>• Community advocacy/organizing</td>
<td></td>
</tr>
<tr>
<td>• Referral and assistance with non-medical needs and barriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Medication management support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Patient/family advocacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Support and extension of health education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Patient navigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Specific CHW Roles in these Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fee-for-service</td>
<td>• Medicaid waivers</td>
<td>• Bundled/global/prospective payment</td>
</tr>
<tr>
<td>• Managed care organizations (admin/service dollars, duals)</td>
<td>• Block grants</td>
<td>• Supplemental capitation payment for specific services</td>
</tr>
<tr>
<td>• Medicaid 1115 waivers</td>
<td>• Prevention trust fund</td>
<td></td>
</tr>
<tr>
<td>• Internal financing</td>
<td>• Pooled funds from third-party healthcare payers</td>
<td></td>
</tr>
<tr>
<td>• Prospective payment (FQHCs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Payment Mechanisms for these Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CHWs directly employed by payer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Health care provider contracts/add-ons to hire CHWs</td>
<td></td>
<td></td>
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<tr>
<td>• CBO contracts to employ CHWs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CHWs as independent contractors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Options for Third-party Payers</td>
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</tr>
</tbody>
</table>

### Promising Program Models
- Emergency room diversion
- “Hot-spotters” (high-cost users)
- Prenatal/perinatal coaching
- Primary care-based chronic disease management
- Care transitions
- Home/community-based long-term care

### Specific CHW Roles in these Models
- Care coordination
- Self-management support for chronic conditions
- Referral and assistance with non-medical needs and barriers
- Medication management support
- Patient/family advocacy
- Support and extension of health education
- Patient navigation

### Payment Mechanisms for these Models
- Fee-for-service
- Managed care organizations (admin/service dollars, duals)
- Medicaid 1115 waivers
- Internal financing
- Prospective payment (FQHCs)
- Medicaid waivers
- Block grants
- Prevention trust fund
- Pooled funds from third-party healthcare payers
- Medicaid waivers
- Block grants
- Prevention trust fund
- Pooled funds from third-party healthcare payers
- Bundled/global/prospective payment
- Supplemental capitation payment for specific services

### Options for Third-party Payers
- CHWs directly employed by payer
- Health care provider contracts/add-ons to hire CHWs
- CBO contracts to employ CHWs
- CHWs as independent contractors
Indeed, Kiefer and colleagues note the drawbacks associated with relying on single sources of financing for CHW interventions, cautioning that doing so may constrain the populations served (based on a program’s parameters) and limit CHWs’ activities (for example, focusing on locating patients and referring them to resources, rather than the work that is at the crux of the CHW model: cultivating trusting relationships that boost individual and community empowerment, which may ultimately lower the cost of care over time).

Fee-for-service (FFS) arrangements, the dominant health care payment structures in the United States, have some potential drawbacks with respect to covering CHW services. States must have billing codes for CHWs in order for them to be reimbursed for their services. Also, FFS reimbursement tends to reward volume over value and does not account for the costs—such as travel and time needed to build trust, cultivate relationships, and provide social support—associated with the very activities that are central to the CHW role. In contrast, value-based payment systems, which incentivize the delivery of higher-quality care for individual patients and broader patient populations at a lower cost, offer higher payments to providers who are a part of value-based structures (such as Accountable Care Organizations or ACOs) than to those who use FFS models. ACO structures funnel payments through team-based care, rather than individual providers, or select members of a multidisciplinary team. For chronic disease management, which is best supported by multidisciplinary teams, CHW financing through ACOs is a possibility through CHWs’ inclusion into care teams.

**Approaches to State-level Medicaid Reimbursement**

Although solely relying on one financing mechanism to support CHWs is not advisable, the fact remains that any attempt to sustain the CHW workforce, nationally and within states, cannot occur without engaging the nation’s largest public insurer: Medicaid/Medicare. There are five approaches that states can use to pursue Medicare reimbursement of CHW services:

1. State Plan Amendments (SPAs) for reimbursing preventive services;
2. Defined reimbursement through Section 1115 Waivers;
3. State legislation and SPAs for broader Medicaid reimbursement;
4. Reimbursement through managed care contracts; and
5. Funding through health system transformation efforts.

Medicaid reimbursement for CHW services is, at present, the exception rather than the rule. It is possible that this is due to the fairly recent efforts to explicate CHWs’ scope of work and establish credentialing procedures. Notably, early 2021 brought about increased state-level efforts to enact legislation supporting Medicaid reimbursement of CHW services. The governor of Illinois signed the Illinois Health Care and Human Service Reform Act, which aims to address inequities in health care delivery in the state; the broader act includes the “Community Health Worker Certification and Reimbursement Act.” In addition to establishing parameters for training and certifying CHWs, the act makes provisions for implementing Medicaid reimbursement of CHW-delivered services, including care coordination and diagnosis-specific supports, through the state’s medical assistance program. Similarly, Nevada amended existing legislation endorsing the director of the state’s Department of Health and Human Services to create and submit a State Plan Amendment to the Centers for Medicare and Medicaid Services, in order to cover services provided by a CHW operating under the supervision of a health care provider.
Below, we highlight the Medicaid reimbursement approaches employed by Indiana, South Dakota, Minnesota, and New Mexico. Indiana and South Dakota reimburse select CHW services through the SPA mechanism for reimbursing preventive services. Minnesota’s reimbursement occurs through state legislation passed in 2007, via a SPA for broader Medicaid reimbursement. New Mexico uses the 1115 Waiver for defined reimbursement.

**Indiana**

In November 2018, Indiana became one of the first states to successfully acquire CHW reimbursement through the State Plan Amendment mechanism. Indiana’s Medicaid plan will reimburse CHW-delivered interventions for services rendered by those who fall into the approved CHW definition, possess defined competencies, and meet supervision and experience requirements. CHWs must work for an organization that accepts patients using Indiana Medicaid. They are required to be certified and must provide their services in person (two hours/day, 12 hours/month). Further, CHWs must deliver the service under the supervision of a physician or licensed clinician (e.g., physician assistants or chiropractors). The range of activities eligible for reimbursement is limited to patient education for managing health, serving as a translator (either due to language or socioeconomic status), health promotion of chronic diseases, and direct preventive services (i.e., medication management).

**South Dakota**

South Dakota’s state Medicaid program introduced CHW service reimbursement in April 2019 through a State Plan Amendment. CHW services eligible for coverage are limited to self-management education and training for those with mental health conditions, substance abuse disorder, cancer, diabetes, and heart disease. Covered services are also provided for those whose barriers to care hinder their capacity to access health care services (such as geographical distance) or to adhere to recommended treatments or therapeutic regimens. Reimbursement is contingent on CHW certification (specifically, that a CHW has completed the Indian Health Service Community Health Representative basic training, or a CHW training program approved by the South Dakota Board of Technical Education, the South Dakota Board of Regents, or a CHW training program approved by the state) and face-to-face delivery of services, which can be done via telemedicine, and must be under the order and supervision of a physician or licensed practitioner. CHW services can also be provided in group settings, limited to eight participants.77,78

**Minnesota**

Minnesota has one of the longest-running sustainable financing structures for CHWs in the country, having authorized Medicaid reimbursement through state legislation and State Plan Amendments passed in 2007. Minnesota’s Medicaid program covers face-to-face CHW visits to individuals and groups. In order for CHW services to be reimbursed, the CHW must be certified by an accredited postsecondary school offering the competency-based CHW curriculum and work under the supervision of a physician or licensed clinician. Notably, the reimbursement process has been hampered by a cumbersome enrollment and billing experience, leading some to cover CHWs through their operating budgets. CHW services are designated as diagnosis-related medical interventions, not a social service, which reveals a divergence between the full range of services CHWs are capable of providing and the actual set of activities deemed eligible for reimbursement.79,80,81

**New Mexico**

In 2014, New Mexico implemented reimbursement of CHWs’ services through
managed care contracts, mandating that all Medicaid managed care organizations (MCOs) directly hire or contract with CHWs. This was expanded through another state mandate passed in 2019, which authorized the provision of CHW services to at least 3% of Medicaid beneficiaries (which amounts to 20,000 members). CHWs are employed to perform several care coordination activities, including interpretation and translation, culturally competent health education, informal counseling on health behaviors, and linking enrollees with health care services and community resources.82,83

Medicaid Reimbursement and Certification

It is important to note that the Medicaid reimbursement regulations illuminate the link that several states have established between reimbursement and CHW certification. CHW certification has been positioned as a vehicle to increase the diffusion of the use of community health workers in health care systems.84,85,86,87 Indeed, all 14 of the key informants interviewed for this report support linking reimbursement to certification. However, there are significant gaps in our understanding of the impact of certification on patients’ outcomes, the quality of services provided by CHWs, and key facets of workforce development. These gaps are largely due to the fact that CHW certification is in its infancy.88 One potential drawback of certification is the possibility of creating hierarchies within the workforce, such that those who are not certified are less likely to be hired, and more likely to experience job instability, than those who are certified.89,90 On the other hand, certification may standardize training, support consistency in skill acquisition around CHWs’ scope of work, and stimulate funding streams for CHW programs.91,92,93,94

Summary of Key Takeaways from Other States and Potential Implications for Baltimore City and State Community Health Workers

There are important insights to glean from efforts that other states have undertaken to cultivate the infrastructure necessary for strengthening and sustaining their local CHW workforce and facilitate Medicaid reimbursement arrangements. Each state that has successfully achieved reimbursement for CHW services has had a clear articulation of the CHW identity (developed by CHWs themselves), a well-defined scope of practice, expectations for demonstrated capacity with core competencies, an established training and/or certification process, and multistakeholder engagement between CHWs, employers, and payers. The latter is key, in that sustained engagement also contributed to a shared understanding of the relationship between certification and reimbursement.

MARYLAND’S HEALTH CARE ENVIRONMENT AND EFFORTS TO STANDARDIZE THE CHW WORKFORCE

Currently, the majority of CHWs working in Maryland are supported through grant-funded projects. The state does not yet offer reimbursement for CHW services. The 14 key informants interviewed for this report were unequivocal in their support for its necessity in assuring sustainable financing for CHWs, and with good reason: Two converging forces in the state have created a unique environment supportive of sustaining the CHW workforce. The first is its innovative health care transformation initiatives, based on an all-payer hospital rate regulation system that allows for a reimagining of Maryland’s health care delivery system to a population health-based system underpinned by addressing SDOH. The second is the range of activities
undertaken to develop and standardize the workforce, efforts that have largely been led by CHWs and their champions, and have produced legislation that systematizes key facets of CHWs’ workforce development.

**Health Care Infrastructure and Transformation Initiatives Favorable to Supporting the CHW Model**

The state’s health care delivery infrastructure is distinguished by an all-payer model instituted through legislation passed in the 1970s. A key feature of this legislation was the establishment of the Health Services Cost Review Commission (HSCRC) in 1971, in response to several compelling factors. Chief among them were rising hospital costs per admission in Maryland compared to other states, financial instability for hospitals incurring financial losses from caring for uninsured patients, and the denial of health care coverage for patients who were uninsured or underinsured. The HSCRC was granted the authority to set rates prospectively each year such that all insurers (Medicare/Medicaid, commercial insurance, and self-pay) pay similar prices for services rendered at acute hospitals (hence, the “all-payer” designation ascribed to the state). While the HSCRC operates in close collaboration with the state’s leadership and several other stakeholders, its governance is at arm’s length from the state, with a group of commissioners appointed by the governor and confirmed by the state Senate. This serves to reduce the potential for undue influence from the state’s governor, members of their administration, and other state legislators.

Despite the all-payer rate regulation system organized and administered by the HSCRC, health care costs continued to rise more rapidly in Maryland than in other states. This prompted the expansion of a pilot program that applied global budgets for rural hospitals, to a statewide adoption of a novel global budget revenue (GBR) structure, which occurred in 2014. Essentially, a global budget is a value-based payment program that aims to provide fixed, predictable revenue. Whereas the FFS model incentivizes increasing patient volume to optimize revenue, the incentives in a GBR support achieving a fixed revenue target independent of patient volume or services: If revenue exceeds the annual budget more than 0.5%, the surplus is deducted from the hospital’s budget the following year. Similarly, if the hospital collects less than 0.5% of the target revenue, the global budget is adjusted down in subsequent years. Hospitals can adjust unit prices to meet the negotiated budgets.

When first established, the initial global budget is based on health care facilities’ historical expenditures, which include substantial costs arising from avoidable utilization. This means that a GBR structure rewards population health interventions that thwart avoidable admissions and readmissions. Because social determinants of health are an underlying cause of avoidable admissions and readmissions, the GBR structure creates an incentive to consider population-based and upstream interventions.

The all-payer annual global budget model operated under an agreement with CMS that exempted Maryland from Medicare’s Inpatient Prospective Payment System and Outpatient Prospective Payment System. Through this agreement, Maryland was expected to limit per capita total hospital cost growth for all payers, including Medicare, and generate $330 million in Medicare savings. By the time the initial GBR demonstration program ended in December 2018, the state generated $916 million in savings, and its hospitals successfully moved 100% of their revenue across all payers into population-based payments, improved the quality of care delivery, and shepherded a reduction in admissions for ambulatory care sensitive conditions and readmissions following discharge.
During the first GBR model, state commitments focused on hospital costs, with a secondary effort to limit all health care costs. In January 2019, Maryland entered into a new agreement with CMS for a “total cost of care model” (TCOC) that made commitments for all health care costs. Sapra and colleagues note that implementation of the TCOC model constitutes the first time that CMS will hold a state accountable for the total cost of care incurred by resident fee-for-service beneficiaries, and it will support these efforts through significant financial incentives to foster improvements in population health. The goal of the new model is to further incentivize care coordination across the continuum of care not only between primary care providers and specialists, but also between hospitals and nonhospital facilities. The adoption of a TCOC model represents an expansion of value-based payment models and requires changes in care delivery and modernization of the state’s health plan. It also presents an opportunity to foster stronger linkages between health care organizations and institutions whose services are geared toward tackling behavioral health conditions, substance use disorder, and social determinants of health.

In fact, one of the most promising care redesign initiatives within the TCOC model is the Maryland Primary Care Program (MDPCP), which aims to bring care coordination and support to approximately 500,000 Medicare beneficiaries and 4,000 physicians. The MDPCP began on January 1, 2019 and is slated to end on December 31, 2026. It envisions the creation of a new type of entity, a Care Transformation Organization (CTO). Health plans, ACOs, managed service organizations, clinically integrated networks, hospitals, and other practice support organizations can apply to be a CTO, defined as an entity that hires and manages an interdisciplinary care management team providing an array of care coordination services to Medicare beneficiaries. CTOs are conceived as including CHWs to provide referrals and linkages to social services.

This new model broadens the opportunity to develop sustainable funding streams for CHWs in Maryland. It also paves the way to consider the possibilities of using value-based payment structures to support Medicaid reimbursement of CHWs’ services. Conceivably, the underlying structure of the global budget invites the incorporation of CHWs into health care settings. For instance, since CHW-delivered interventions target the social determinants of health that contribute to unnecessary health care utilization and readmissions among “health care frequent flyers,” money saved from reduced utilization, and other internal costs, can be reinvested into employing CHWs.

State Legislation and Regulations Supporting the CHW Workforce

In 2013, the number of CHWs working in Maryland was estimated to be 1430, and the present figure is likely higher in view of recent employment-based initiatives geared toward hiring individuals for jobs as CHWs. CHWs are based in a variety of geographic locations throughout the state and work primarily in community-based organizations, inpatient hospital settings, and outpatient primary care teams. Although there is a long history of CHW utilization throughout the state, in recent years, state legislators, in concert with CHWs and their champions, have made important strides to support the incorporation of CHWs into public health and health care delivery systems. This has been achieved through a series of bills that have progressively enhanced CHWs’ professional development.

*House Bill 856/Senate Bill 592 – Establishment of a Workgroup on Workforce Development for Community Health Workers (2014)*

Formal legislation to support the broader workforce was introduced in 2014 through House Bill 856/Senate Bill 592. This bill mandated the creation of a multistakeholder group that would meet to develop
recommendations regarding CHWs’ scope of work; training curricular content; core competencies; credentialing criteria and processes; oversight and supervision; career trajectories, including the possibility of a tiered approach to differentiate between CHWs (CHW I and CHW II); and reimbursement strategies. At the time, members of the workgroup identified lack of standardization as the main obstacle hindering CHWs’ progress as a profession. Standardization was conceived as comprising several interrelated components; among them were 1) defining who CHWs are; 2) articulating what CHWs do (scope of practice); 3) establishing which areas CHWs should have mastery of (core competencies); and 4) determining the appropriate training and certification processes. Workgroup members were also tasked with proffering guidance on reimbursement and strategies for ongoing support for CHWs across the state.

To this end, members of this group met eight times over a seven-month period (September 2014 through March 2015), drawing from input received from local CHWs; reviews of national training and certification models; and their own experiences working as, employing, training, and/or supervising CHWs, or implementing and evaluating CHW programs. Of note, when this workgroup convened, it deemed recommendations concerning reimbursement to be premature, its importance to the CHW workforce notwithstanding. Rather, it was thought that shoring up the CHW workforce would assert its value and facilitate future advocacy efforts to create and implement reimbursement policies. The workgroup also proposed that CHW stakeholders meet and develop guidelines to support reimbursement from public and private payers.

The workgroup’s convenings initiated statewide efforts to delineate and uphold CHWs’ professional identity. However, regulatory measures have been an essential next step in cultivating the requisite infrastructure to support the CHW workforce.

Annotated Code of Maryland, Health-General Article, Title 13, Subtitle 37 – Establishment of the State Community Health Worker Advisory Committee, Certification Processes, and the Community Health Worker Fund (2018)

One of the main recommendations from the state’s workgroup on workforce development for CHWs was to create an oversight body that would govern Maryland’s CHW workforce, especially the complement of activities associated with the certification process. This recommendation came to fruition in May 2018, through the passing of Senate Bill 163 (Chapter 441). It established the State Community Health Worker Advisory Committee and affirmed its preeminent role in advising the Maryland Department of Health on instituting criteria for certifying CHWs and accrediting CHW certification training programs.

In accordance with the workgroup’s recommendations, half of the committee members are required by law to be CHWs. This is critical to ensuring that CHWs play a leadership role in shaping the progression of their profession. The remaining half are CHW stakeholders: the secretary of health or their designee; a registered nurse and a licensed social worker, both of whom must have experience in community health; and a representative from a CHW training organization, the Maryland Public Health Association, a community-based employer of CHWs, the Maryland Association of County Health Officers, the Maryland Hospital Association, and the Community Behavioral Health Association of Maryland. The committee must also include a member of the public who is familiar with CHWs and the services they provide. Each committee member is required to be a resident of the state and serve a four-year term (that is, unless they are removed from their appointment due to misconduct, incompetence, or negligence). The committee meets at least two times a year. The Maryland
Department of Health is mandated to provide staff support and technical assistance to the Advisory Committee, indicating institutional commitment to buttressing the infrastructure needed to support the CHW workforce within the state.

**Code of Maryland Regulations (COMAR) 10.68.01 and 10.68.02 (2019)**

Senate Bill 163 (Chapter 441) authorized the CHW Advisory Committee to advise the Maryland Health Department on the certification process and established the parameters undergirding the certification process at large. These were codified through regulations that went into effect on December 30, 2019. Under Subtitle 68, Community Health Workers, the state health department issued administrative regulations establishing the requirements to certify CHWs (COMAR 10.68.01)\(^\text{116}\) and accredit CHW certification programs (COMAR 10.68.02).\(^\text{117}\) COMAR 10.68.01 comprises administrative regulations governing application procedures and certification requirements, as well as the procedures associated with reviewing completed applications and the point at which one is designated a certified CHW. In addition, COMAR 10.68.01 delineates certificate expiration and renewal processes and the parameters around suspension or revocation of a certificate. The criteria for certification are:

- 18 years of age or older; **AND**
- **Either:** documentation confirming the successful completion of a state-accredited CHW certification training program, **OR** exemption from training program requirements due to experience as a CHW, which requires proof of a minimum of 2,000 hours of CHW paid or volunteer experience (minimum 5 years prior to October 1, 2018 or the application date); submission of a minimum of two letters of validation from a current or former Maryland's CHW Core Competencies

1. Advocacy and community capacity building skills
2. Effective oral and written communications skills
3. Cultural competency
4. Understanding of ethics and confidentiality issues
5. Knowledge of local resources and system navigation
6. Care coordination support skills
7. Teaching skills to promote healthy behavior change
8. Outreach methods and strategies
9. Understanding of public health concepts and health literacy
“I think we are the most needed, in some cases, to be that bridge, to assist with the language barriers or understanding, to assist with making sure that the medication is taken properly, to assist with, you know, all the other things. I always talk about how the doctors and others give CHWs all these leaves off of the tree. ‘They’re not taking their medicine and nonadherent. They don’t come to their appointments, they don’t do this. They don’t do that.’ And then CHWs take all the leaves and we go down to the root of the tree. We find out what is the root of the issue. It’s not that they don’t want to take the medicine. That medicine needs to be in a refrigerator. And they don’t have any BGE...These things aren’t necessarily taken into account... but we can go places and do things that no one else can do.”

– Key Informant, CHW
health centers, and community-based organizations alike have developed, implemented, and evaluated using CHWs to support diabetes self-management, blood pressure management, and community-centered health education and outreach. Demonstration projects have included CHWs as a part of health care teams in order to test their utility in facilitating continuity of care across the care continuum. Furthermore, CHWs were central to successful community-based efforts to target health inequities in the Health Enterprise Zones, a statewide pilot program targeting economically disadvantaged geographic areas—including, notably, West Baltimore—that ran from 2012-2016. This initiative aimed to reduce racial/ethnic and geographic health disparities; improve access to care; and reduce health care costs, hospital admissions, and readmissions.

Importantly, the state recently passed Senate Bill 172/House Bill 463, the Maryland Health Equity Resource Act, to establish a Pathways to Health Equity Program, which will support the development and implementation of a permanent Health Equity Resource Community Program. The Health Equity Resource Community Program, modeled after the Health Enterprise Zone Initiative, will require the Community Health Resources Commission to designate specific areas in the state as Health Equity Resource Communities, featuring the same intervention components that made the Health Enterprise Zone Initiative effective, namely, the inclusion of CHWs. The state will channel resources to Health Equity Resource Communities in order to reduce racial/ethnic and geographic health inequities, through the provision of grants, tax incentives, and health care provider loan repayment assistance, and will support the areas previously delineated as Health Enterprise Zones.

Common CHW Services in Baltimore City

According to our key informants, the tasks assumed by CHWs in Baltimore City fall well within the typical scope of practice. The range of services provided are responsive to the circumstances affecting residents’ health and well-being. CHWs support patients and families by connecting reentry populations to resources; providing substance abuse treatment referrals; and assisting with food insecurity, general literacy, housing issues, transportation, and state-issued identification. They also serve as a liaison between the community and health care system, and accompany patients to their visits with providers. Three of the key informants expressed that the city’s resources are not easily accessible for those encumbered with myriad health problems and/or social issues. Frequently cited by key informants as critical to the success of building enduring connections with those in need of help were CHWs’ empathy, as well as their familiarity with navigating the same issues they endeavored to assist patients and families with.

Perceptions of Certification and Sustainable Funding for Baltimore’s CHWs

Our key informants indicated that, while some CHWs are employed by hospitals, health care systems, payers, and clinic practices, the majority of CHWs are funded through grants. Medicaid reimbursement was regarded by most of the key informants as a vehicle for supporting long-term, sustainable financing for CHWs, with the caveat that it would not address unstable funding for those employed by community-based organizations or nonhealth care entities. There was broad support for certification as a vehicle for strengthening the workforce by establishing a baseline understanding of who CHWs are and what they do, amplifying their expertise, and confirming appropriate expectations of their capacity within health care teams. In addition, several key informants asserted that not only should certification be a part of the criteria for Medicaid reimbursement, but also, certified CHWs should earn more money than those who are not certified.
Novel CHW Initiatives in Baltimore City

As previously mentioned, CHWs have been employed by local entities for several years. However, there are two novel programs currently underway whose design and execution stand to significantly expand the CHW workforce in the city: the Baltimore Population Health Workforce Collaborative (BPHWC),\(^{127,128}\) and the Baltimore Health Corps (BHC).\(^ {129}\) Whereas the BPHWC aims to create permanent employed positions for those seeking to be CHWs as well as peer recovery specialists and home-based certified nursing assistants, BHC is a transitional jobs program that will go through September 2021. Once CHWs’ tenure in the BHC program ends, they will require assistance getting connected to other job opportunities.

The key components of these initiatives are outlined below.

### Baltimore Population Health Workforce Collaborative

- Funded by the HSCRC from hospital rates and 50% match from partnering hospitals
- Initiated in response to civil unrest following death of Freddie Gray, to address root causes of systemic poverty by targeting unemployment and underemployment
- Aims to hire approximately 200 residents from highest poverty areas surrounding the nine partnering hospitals in entry-level positions, as CHWs, peer recovery specialists, and CNAs/GNAs
- Three-year initial grant term that began in 2017; was renewed for a second consecutive three-year term
- Has three core objectives: 1) health education and self-management skills promotion; 2) provision of care management and care coordination services for high utilizers of hospital services due to SDOH; and 3) population health improvement activities

### Baltimore Health Corps

- Funded through a combination of federal and philanthropic sources
- Initiated in response to the economic and public health upheaval caused by the COVID-19 pandemic
- Aims to hire 300+ unemployed and underemployed residents to serve as contact tracers (240) and care coordinators (60)
- Pilot grant that began in 2020; tenure as CHW is for eight to 12 months
- Has three core objectives: 1) equitable job creation and skills training; 2) controlling the spread of COVID-19; and 3) serving the social needs of Baltimore’s most vulnerable
Baltimore Population Health Workforce Collaborative

The Baltimore Population Health Workforce Collaborative (BPHWC) is funded by the Population Health Workforce Support for Disadvantaged Areas (PHWSDA) Program, which is administered by the HSCRC. The HSCRC authorized up to $10 million in hospital rate increases for hospitals that committed to train and hire workers from geographic areas characterized by high economic disparities and unemployment. Given that the absence of reimbursement arrangements for CHW services prevents some hospitals from hiring CHWs, this program provides an opportunity to support CHWs’ integration into the health care delivery system by incentivizing their use to address patients’ SDOH. The BPHWC is a collaboration between a consortium of four major health systems (Johns Hopkins Medical Institutions, Medstar, University of Maryland, and Sinai Hospital) comprising nine hospitals in the Baltimore Metropolitan Area, and community-based organizations located throughout East and West Baltimore. Overarching workforce development coordination is spearheaded by the Baltimore Alliance for Careers in Healthcare (BACH). BACH collaborates with Turnaround Tuesday, an initiative of Baltimoreans United in Leadership Development (BUILD), which recruits, screens, and provides essential skills training to candidate CHWs. Turnaround Tuesday's recruitment processes are aided by its strong connections to roughly 40 institutions throughout the city that are entrenched in the 24 zip codes targeted for employment opportunities. Once people are selected, they are required to take the TABE, or the Tests of Adult Basic Education, which ascertain candidates’ skills and aptitudes in reading, math, and English. Those who achieve an eighth grade level for reading and math undergo a 30-hour central skills training that is geared toward acclimating them to working in professional environments. Turnaround Tuesday staff follows those who go through its program for two years, to provide additional professional navigation, advocacy, and support.

CHWs receive didactic, competency-based training from the Central Maryland Area Health Education Center, which has become an accredited certified CHW training program. Also, even after CHWs are hired by the partnering hospitals, BACH supports CHWs’ general professional development through a roving career coach. This serves to reinforce principles of workplace readiness, which is particularly relevant because the CHWs hired through this program are Baltimore City residents who are long-term unemployed or underemployed. Across the board, BPHWC CHWs provide care coordination, health education, health system navigation, and linkages to social services, although the specific tasks performed, populations served, and disease contexts may vary.

Baltimore Health Corps

The Baltimore Health Corps was formed as a result of the pandemic, in a desire to address the co-occurring public health and economic crises. It is run through a collaboration between Baltimore City Mayor’s Office of Employment Development and the Baltimore City Health Department (BCHD), in partnership with Health Care Access Maryland (HCAM), the Johns Hopkins Program for International Education in Gynecology and Obstetrics (Jhpiego), and Baltimore Corps. All CHWs receive a seven-day training that includes basic COVID disease education, elements of contact tracing, and role-playing practice prior to engaging with the public. Of its targeted 300 hires, approximately 190 CHWs are intended to provide contact tracing and call center support to reduce the spread of COVID-19, while approximately 60 CHWs focus on care coordination in the context of the novel coronavirus—namely, connecting individuals to services that will help them quarantine,
navigate challenges associated with the pandemic, and connect with other resources to address other social issues they may have. Contact tracers provide a warm hand-off to CHWs focused on care coordination, housed in the BCHD’s Division of Aging and HCAM. HCAM offers its own in-house training. The care coordination CHWs aim to equip CHWs facilitating care coordination with the tools required for addressing and mitigating the impact of SDOH on Baltimore City residents referred to them.

Much like the BPHWC, the Baltimore Health Corps attempts to provide strong training and onboarding for new entrants into the CHW workforce, in view of the fact that those recruited into the program come from a variety of backgrounds and may not have any experience in public health. Another similarity with the BPHWC is the effort made to provide comprehensive wraparound services for CHWs employed through the program. Baltimore Health Corps offers its CHWs legal services, behavioral health services, financial empowerment, coaching, and career navigation. Given the short-term nature of the position (eight to 12 months), the provision of these supports is designed to prepare Baltimore Health Corps CHWs with the requisite skills and capacity to enter (or reenter) the workforce as competitive job applicants. Some CHWs who do contact tracing received didactic training from the Central Maryland Area Health Education Center.

Presently, a comprehensive evaluation of the Baltimore Health Corps is underway. A key piece of the evaluation will ascertain the overall demographic composition of applicants and subsequent hires to the program, as well as the extent to which equity goals were met in terms of hiring from the neighborhoods hardest hit by COVID-19 (namely, the proportion of Baltimore Health Corps CHWs residing in the “Black Butterfly” neighborhoods, or in neighborhoods experiencing the highest rates of unemployment due to the COVID-19 pandemic). It will also assess the overall impact of the program on contact tracing efforts.

**CHW-Centered Training and Support**

One of the distinguishing features of both programs is that they provided funding for wraparound services, as a part of their overall job-readiness goals. Key informants involved with these initiatives expressed that the need to do so is based in the reality that these programs are, as one interviewee stated, “recruiting folks who are in the same communities facing the most glaring disparities, in terms of things like the socioeconomic kind of indicators of health.” Understanding the life circumstances shaping the context under which CHWs themselves live is critical to supporting the workforce.

**Challenges Faced by Baltimore’s CHW Workforce**

Despite the presence of various resources available to support Baltimore’s CHWs, our key informants, particularly those who are CHWs or train, oversee, and/or deploy them, identified a number of challenges that they confront as they carry out their work. These include not feeling a part of the broader health care team; concerns about safety; concerns about unstable funding; and a lack of access to up-to-date equipment to support job performance. Variability in the quality of supervision and low compensation (and its implications for limited career trajectories within the CHW profession) were the most frequently mentioned topics.

**Supervision**

CHWs entering the workforce through the auspices of the BPHWC, or Baltimore City Health Corps, receive wraparound support to buttress their overall professional development. This type of support is not available for every CHW. In fact, even BPHWC CHWs were reported to experience varying experiences with the level of supervision
“Again, I think the best supervisors are people who understand CHWs, understand the community. The majority of the time, supervisors are not from the community. They’re not even from the neighborhood. They’re not even from the city or the county, and they just drive to work, so they don’t understand the community, because they’re just driving in and driving out. So some of the things that you need to do in the community you can’t do, because they don’t understand the community.”

– Key Informant, CHW

“One of the biggest concerns that I have about community health workers’ supervision is that supervisors and managers often don’t understand what the community health worker role is, and because they don’t, they may not value it.”

– Key Informant, CHW Trainer

and support they receive at their place of employment. Several key informants noted that once CHWs are placed within the specific organizations they work in, the quality and nature of the supervision provided is dependent on the organization’s capacity to recognize the unique needs of CHWs, and the degree to which supervisors are aware of the range of duties CHWs are able to assume and their need for ongoing training, as opposed to a fundamental lack of understanding about the CHW role. This affects the extent of their integration into care teams and the operations of the organizations. As one key informant expressed, employers looking for “self-starters” may lack the will and/or resources to provide direct supervision and professional support. On the other hand, several key informants proposed that those with extensive personal and professional experience working in the community, particularly social workers and community health nurses, are well suited to supervise CHWs.

**CHW Compensation**

All of our key informants who were CHWs, or from entities that train, oversee, and employ them, expressed concern with CHWs’ compensation, linking low wages to an underappreciation of the role, and being incommensurate with the actual level of complexity associated with being a CHW. Low compensation was also cited as a contributor to correspondingly low job satisfaction, leading to high turnover. Some key informants explicitly
linked low salaries to CHWs’ willingness to remain in the profession, especially if they did not perceive a career ladder to aspire to on top of funding instability for their positions. The quote from one key informant found on p. 33 aptly captures the sentiments expressed among those interviewed.

GENERATING SUSTAINABLE FINANCING FOR BALTIMORE CITY CHWs

As Drs. Kangovi and Blackstock state in an op-ed published in the Washington Post, “we are concerned that our tendency to overlook community health workers stems from the same systemic racism that created many health disparities in the first place. We must not continue to ignore these often marginalized and underpaid heroes.” In a similar vein, the path toward sustainable financing mechanisms for Baltimore’s CHWs must be rooted in an appreciation for who CHWs are as individuals and as a workforce. This entails grasping the reality that, while CHWs’ empathy, resilience, and exceptional interpersonal skills are central to their effectiveness, the majority are from the same disinvested and disenfranchised communities they seek to help, which positions the workforce at large at the cusp of social and economic precarity. This understanding implies that the issue of sustainable funding is, itself, a matter of health equity, and that adopting CHW-centric strategies to support the workforce has implications for CHWs, the communities they reside in and endeavor to help, and, ultimately, the patients and families who receive their invaluable services.

Moreover, sustainable financing must also account for the diversity of settings CHWs work in; while Medicaid reimbursement may be on the horizon for those employed in hospitals and clinics, it may not be feasible for CHWs working for the City Health Department or community-based organizations with no linkages to the broader health care system. Consequently, differences in compensation between settings may inadvertently create disparities within the workforce.

On the face of it, the state of Maryland appears to have the ingredients in place to support sustainable funding for its CHW workforce and, by extension, Baltimore-based CHWs. Under the guidance of its robust Community Health Worker Advisory Committee, the state has delineated CHWs’ core competencies, instituted certification processes, and accredited CHW training programs. Maryland also has an active statewide CHW Association, which supports peer-learning, ongoing training, and advocacy. Indeed, much of what was originally proposed as essential to standardizing Maryland’s CHW workforce has been achieved.

Nonetheless, there is still much work to be done to generate sustainable funding for CHWs’ services. We have identified several actions, encapsulated within four recommended steps, whose execution is paramount to attain this goal:

1. Conducting a comprehensive, systematic appraisal of Baltimore City’s CHW workforce;
2. Building up city- and statewide institutional support for the CHW workforce;
3. Pursuing long-term financing strategies through statewide payment reform, Medicaid reimbursement, and philanthropic endeavors; and,
4. Convening key stakeholders to engage in continual advocacy for the CHW workforce.

CHWs must be at the helm of leading these efforts, working alongside other stakeholders to spearhead the conceptual and operational aspects needed to create sustainable funding mechanisms for their services.
Recommendations

1. **Conduct a comprehensive appraisal of the CHW workforce.** There are significant gaps in our grasp of the CHW workforce in Baltimore City, and the state at large, with respect to how many CHWs work in the city and state, the full complement of tasks they perform, and their wages/salaries, as well as employers’ perspectives about CHWs, the perceived and actual benefits of certification, the alignment between CHWs’ training and competencies with patients’/clients’ outcomes, and employers’ institutional capacity to sustain CHWs as employees. Louisiana and Minnesota are among a handful of states that have undertaken a comprehensive appraisal of their respective CHW workforces. We recommend that the city and state health departments do the same. Specifically, the city and state should enlist consultants with expertise in the CHW model and, in partnership with CHWs and their allies, commission a comprehensive assessment of the workforce. This assessment should employ mixed methods to fully characterize barriers and facilitators to support the CHW workforce across multiple domains.

A CHW workforce assessment is an essential first step to shoring up the workforce for a number of reasons. Chief among them is that explicating local CHWs’ roles, employment, the institutional elements related to CHW-delivered services, and training will shed light on how best to support CHWs. Furthermore, collaborating with CHWs and their allies will ensure that the collection of such information will amplify the stated needs, experiences, and preferences of CHWs. Table 4 draws from the aforementioned assessments performed in Louisiana and Minnesota, and captures six categories of information that must be collected to understand the landscape of the CHW workforce in Baltimore City. The CHW assessment should be repeated every three to five years, to maintain an up-to-date repository of data about CHWs that can be used to inform the development and implementation of local CHW policies.

2. **Increase the city- and statewide organizational capacity to support the CHW workforce.** Currently, Maryland's CHW initiatives reside in the state health department's Department of Population Health. A small but dedicated staff works closely with the members of the CHW Advisory Committee to support the certification and accreditation process, identify opportunities for supplementary training for CHWs, and collaborate with peers in neighboring states in an effort to cultivate regional partnerships. However, key informant interviews suggest that the low number of personnel supporting the statewide (and, by implication, citywide) CHW workforce poses a barrier to initiating efforts to partner with the state’s Medicaid office and initiate discussion around Medicaid reimbursement for CHWs.

a. **Allocate state and philanthropic funds to contract with consultants that will support CHW-related initiatives occurring through the auspices of the Department of Population Health.** Hiring additional staff, including former CHWs trained to focus on policy initiatives related to the workforce, to work for the Department of Population Health is an important long-term goal to strengthen the statewide infrastructure supporting the CHW workforce. In the short-term, hire consultants with experience and expertise working as, or with, CHWs, to support existing efforts underway within the Department of Population Health by identifying best practices for hiring, training, supervising, and paying CHWs; ascertaining emerging training and certification needs; and interfacing with the state's Medicaid office and philanthropic organizations.
“But at the same time, when we’re looking at the wages in the area and the classification of community health workers, primarily as frontline, very entry level positions, I have the perception that the jobs, when you look at how much a CHW is paid, are undervalued. That hourly wage is asking for a lot, because the community health workers, whether they’ve kind of switched up their model in light of the COVID pandemic and adapted very quickly to kind of remote service delivery primarily, or if they’re in the emergency room, they were previously going out in the community – there’s a lot of documentation, there’s a lot of kind of advanced thinking and decision-making that goes on for these roles. And for all that, we’re saying these are entry level positions. The fact that the people who sometimes do really well at their job, they’re getting paid not that much to do it. And the expectations from the employers are actually very high.”

– Key Informant, CHW Trainer
Table 4: Recommended Domains and Topics for Community Health Worker Assessment

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<tr>
<th>DOMAIN</th>
<th>TOPICS OF INTEREST</th>
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<td>CHWs demographic and professional characteristics</td>
<td>• Geographic/neighborhood data (to discern the degree to which CHWs are being hired in neighborhoods within the “Black Butterfly” in Baltimore)</td>
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<tr>
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<td>• Sociodemographic characteristics (race/ethnicity, age, educational attainment)</td>
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<td>• Employment status (part-time, full-time, volunteer, paid, etc.)</td>
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<td>• Place of employment (type of organization)</td>
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<td>• Length of time as CHW</td>
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<td>• Professional titles</td>
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<tr>
<td>CHW role</td>
<td>• Common roles and activities fulfilled and performed by community health workers, and the extent of their alliance with the state’s core competencies</td>
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<td></td>
<td>• Populations most commonly served by CHWs</td>
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<td>• Health conditions CHWs help to address</td>
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<td></td>
<td>• Annual earnings and perceptions of salaries</td>
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<td></td>
<td>• Job satisfaction and perceptions of professional trajectory within the field</td>
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<td></td>
<td>• Perceived best practices for CHW-supervisor relationships</td>
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<td></td>
<td>• Common successes and challenges associated with being a CHW</td>
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<td></td>
<td>• Resources provided to CHWs vs. those that are actually needed</td>
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<td></td>
<td>• Perceived connectedness with, and commitment to, communities being served</td>
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<td></td>
<td>• Health and safety concerns</td>
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<td>• Continuity within profession</td>
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<tr>
<td>CHW program administration (primarily for CHW employers)</td>
<td>• Desired qualifications for CHWs</td>
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<td></td>
<td>• Strategies for and barriers to hiring CHWs</td>
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<td></td>
<td>• Strategies for and barriers to supervising CHWs</td>
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<td></td>
<td>• Institutional funding to support CHWs (salary, benefits, ongoing training, etc.)</td>
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<td>• Common CHW models used within organization (if any)</td>
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<tr>
<td>Training</td>
<td>• Training components</td>
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<td>• Additional training topics (beyond those related to core competencies)</td>
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<td></td>
<td>• Desired training topics</td>
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<td></td>
<td>• Benefits and concerns regarding CHW training (from CHWs’ and employers’ perspectives)</td>
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<tr>
<td>Certification</td>
<td>• Benefits of certification for CHW</td>
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<td>• Concerns regarding certification</td>
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<td>• Barriers to certification</td>
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<td>• Perceived utility of certification</td>
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<td>• Perceptions of certification and Medicaid reimbursement</td>
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<tr>
<td>Sustainability</td>
<td>• Funding used by the organization to continue employing CHWs</td>
</tr>
</tbody>
</table>
b. **Create a Baltimore City CHW task force.** Baltimore City has a unique CHW landscape that has been shaped by enduring programs housed within its health department and the presence of community-based organizations that have propelled the CHW role as an avenue for workforce entry and ongoing professional development. Consequently, there is a need to convene a city-specific task force that can support the development, implementation, evaluation, and translation of successful CHW initiatives throughout the city, across a variety of organizational settings. Given their expertise in promoting a holistic, person-centered approach to recruiting, training, and supporting CHWs, the proposed task force must, at the very least, include representation from the Baltimore Alliance for Careers in Healthcare, Turnaround Tuesday, and the Central Maryland Area Health Education Center. CHWs who live and/or work in Baltimore City must also comprise the task force’s membership.

We suggest that the task force take the lead in identifying and executing context-specific, evidence-based strategies to 1) aid entry-level CHWs in acculturating to professional environments; 2) support seasoned CHWs interested in remaining in the field to identify opportunities for further career advancement; and 3) assist organizations in building their institutional capacity to incorporate CHWs into their programs through appropriate training and supervision. The task force could be either housed in the city’s health department or jointly led by the aforementioned organizations. To foster CHWs’ self-determination and advocacy, the task force’s membership should be predominated by CHWs and must also include CHW supervisors, representatives from employing entities, and those occupying positions that are most likely to interact with CHWs (e.g., social workers, nurses and/or nurse care managers, social service personnel, and health care providers).

3. **Cultivate, implement, sustain, and advocate for long-term financing strategies to support the CHW workforce.** One single source of funding to support CHWs is neither realistic nor advisable. A blend of grant mechanisms, philanthropic sources, and federal resources is necessary to support the CHW workforce:

   a. **Initiate and maintain statewide payment reform to expand existing funding mechanisms.** The program funding the HSCRC’s Baltimore-based project was recently approved for an extra three years and will end in 2022, which means that it will have been in operation for a total of six years. More time is needed to accomplish the ambitious goals of dually addressing systemic poverty and economic deprivation by hiring Baltimore City residents as CHWs, and promoting population health by attending to social determinants of health. We propose that the Population Health Workforce Support for Disadvantaged Areas Program continue to be funded past 2022, with longer terms (five to seven years) for each cycle of the program. This will require commitment from the partnering hospitals and community-based organizations to work together to identify and scale up best practices for hiring, training, employing, and supervising CHWs. Extending the length of the program cycle will allow for a shared learning collaborative that can yield best practices to support the CHW workforce, not only in Baltimore City, but also across the state.
The HSCRC recently launched a Regional Partnership Catalyst Program, which began on January 1, 2021, and will conclude on December 31, 2026. The Regional Partnership Catalyst Program aims to foster collaborations between hospitals and community partners, and to establish the requisite infrastructure to disseminate evidence-based interventions. Six of the Regional Partnerships focus on diabetes prevention and management, while three target the development of behavioral health crisis programs. Notably, some of the projects funded through this initiative include the delivery of CHW services. If proven effective, we endorse the renewal of this program and adoption of longer funding cycles (seven years). This recommendation holds for the Health Equity Resource Communities, too.

b. **Pursue Medicaid reimbursement.** Given health care transformation initiatives currently underway and those recently implemented, the state of Maryland has levers in place to increase flexibility and incentives for Medicaid MCOs to expand CHWs in their multidisciplinary care teams. Maryland has the capacity to institute Medicaid reimbursement for its CHWs. The question is, does the state have the will to do so? We believe that it does, but there are two important factors to consider. The first, as noted by a few key informants, is the lack of agreement is the lack of agreement, among those at the state level (particularly, the Maryland Board of Nursing), as to the utility of Medicaid reimbursement for CHWs. The second is the lack of consensus around the link between certification and reimbursement; although the key informants in this report were unanimous in their assertion of coupling certification with reimbursement, this belief is far from being universally held. Anecdotally, a considerable number of CHWs and CHW allies believe that reimbursement should not be confined to those who have been certified, and they regard certification as a process that undermines the grassroots, community-based orientation of the CHW model.

Bearing these considerations in mind, Medicaid reimbursement remains the most stable means of financing CHWs. Pursuing Medicaid reimbursement demands the coordinated and sustained engagement of CHWs, CHW champions, CHW employers, and the state’s Medicaid leaders. All relevant stakeholders must become and remain ideologically and operationally aligned with respect to the necessity of Medicaid reimbursement, the

“I mean, we’re providing a service, we’re educating and we’re trained to provide a service. If we’re trained and we’re certified to provide a service, then why can’t we be able to bill for our time that is spent with the population that we’re working with?”

– Key Informant, CHW
strategies they will employ to secure Medicaid reimbursement, and the parameters for reimbursement. Stakeholders must decide if they will pursue reimbursement through a 1115 Waiver or through the submission of a State Plan Amendment (SPA). Notably, the SPA offers broader coverage than Medicaid waivers. Furthermore, all parties involved must have consensus on the parameters of reimbursement. They must determine if reimbursement will be constrained to those who have been certified and which services should be reimbursed. They should also heed the experiences of other states, whose challenges enumerating which services are eligible for reimbursement have led to a narrow range of services actually deemed eligible for reimbursement; and of analogous professions such as home health aides, whose misclassification as independent contractors hinders Medicaid reimbursement. It is imperative that stakeholders work in close collaboration to properly configure Medicaid reimbursement so that service coverage is congruent with CHWs’ scope of practice, the specific suite of tasks associated with their work (e.g., travel to work with patients/clients), and patients’/clients’ social determinants of health. It is possible that analyses ascertaining CHWs’ cost effectiveness and return on investment are needed to generate buy-in for Medicaid reimbursement. If this is the case, the Maryland Department of Health should work with internal and external entities, including academic institutions and/or other consultants, to conduct comprehensive process and impact appraisals of innovative CHW programs occurring in Baltimore City or in the state of Maryland.

c. **Encourage philanthropic organizations to fund CHW programs.** As has been previously stated, CHWs in Baltimore City work within a variety of settings. Many CHWs are employed by and based in the city’s health department or other community-based organizations, which require other types of funding avenues to sustain their work. Encouraging sustained financial engagement from local philanthropic organizations is essential to composing a suite of financing strategies that will support the long-term viability of the CHW workforce. Importantly, philanthropic entities may have the flexibility to fund CHW-delivered services that are not easily amenable to funding from governmental organizations, in particular, interventions that focus primarily on ameliorating social determinants of health, irrespective of the health conditions an individual or family may be grappling with.

4. **Convene key stakeholders throughout the city and state to advocate for long-term financing mechanisms for CHWs.** Any efforts to strengthen the city’s CHW workforce by developing sustainable funding for the CHW model must incorporate coordinated and sustained multisectoral stakeholder engagement. Leaders within the city and state health departments, in partnership with the CHW Advisory Committee and the Maryland CHW Association, must convene CHWs, philanthropic organizations, insurers, CHW employers, and CHW supervisors and come to consensus on an appropriate set of long-term funding strategies to pursue.
CONCLUSIONS

The pandemic has illuminated the stark fissures in society that drive inequities in health outcomes, access to health care, and social service navigation. Yet, racial/ethnic health disparities are not a new phenomenon. The realities of attending to the needs of a diverse population, including a deepening understanding of social determinants of health, demand a reimagining of community-based health care delivery.

CHWs are a critical part of the solution to addressing pressing health issues. Their use has been implicated in improved health outcomes, improved health care delivery, and lower health care costs. Despite their promise, there are significant threats to the viability of this workforce. Chief among them is short-term, unstable funding to support their work. The state of Maryland at large and Baltimore City in particular are primed to serve as a model for the United States with respect to supporting the CHW workforce. Doing so will entail shoring up key aspects of their individual and collective professional development and creating sustainable financing arrangements. This has ramifications for reducing health disparities by ameliorating the adverse impact of social determinants of health, improving employment rates, and, ultimately, promoting equity for members of marginalized communities.

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Endnotes


2 Ibid.


21 Ibid.

22 Ibid.


40


46 The Community Health Worker Core Consensus (C3) Project. 2018. “A Report of the C3 Project – Phase 1 and 2: Together Leaning Toward the Sky.” Retrieved from https://0d6c00fe-eae1-492b-8e7d-80acecb3a3c8.filesusr.com/d/7ec423_2b0893b9c93a422396c744be8c1d54d1.pdf, Pgs. 9 – 12


49 Ibid.


54 The Community Health Worker Core Consensus (C3) Project. 2018. “A Report of the C3 Project – Phase 1 and 2: Together Leaning Toward the Sky.” Retrieved from https://0d6c00fe-eae1-492b-8e7d-80acecb3a3c8.filesusr.com/d/7ec423_2b0893b9c93a422396c744be8c1d54d1.pdf, Pgs. 9 – 12


Ibid.

65


Illinois Health Care and Human Service Reform Act, IL HB0158, 102nd General Assembly, S 5 (IL 2021)


AB 191, Assembly Committee on Health and Human Services, Session 81 (NV 2021)


https://doi.org/10.1056/NEJMp1815382

https://familiesusa.org/resources/


Ibid.


Ibid.


Ibid.


Ibid.


Ibid.


133 Melvin A. Wilson, Executive Director, Turnaround Tuesday, telephone conversation with lead author, July 14, 2021.


135 Dylan H. Roby, Ph.D., M. Phil, telephone conversation with lead author, February 4, 2021.


About the Abell Foundation

The Abell Foundation is dedicated to the enhancement of the quality of life in Maryland, with a particular focus on Baltimore. The Foundation places a strong emphasis on opening the doors of opportunity to the disenfranchised, believing that no community can thrive if those who live on the margins of it are not included.

Inherent in the working philosophy of the Abell Foundation is the strong belief that a community faced with complicated, seemingly intractable challenges is well-served by thought-provoking, research-based information. To that end, the Foundation publishes background studies of selected issues on the public agenda for the benefit of government officials; leaders in business, industry and academia; and the general public.

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